CHAPTER – I

INTRODUCTION

"There is no word which can not be transformed into Mantra
There is no root which can not be transformed into Medicine
There is no human being who has no worth."

- Indian Philosophy

HRD has become a movement in our country. Ten years before hardly any organization had HRD departments. Today it is difficult to find organizations that employ large number of people that do not talk about HRD. Several of them even have HRD departments or HRD managers. A few years ago HRD meant a new name for training. Today most organizations talk in terms of HRD climate, Performance Appraisals, Potential Development, Organization Development and the like. Thus HRD has come to stay and has become an important dimension of modern management language as well as technology. In spite of this popularization of HRD in the last few years, success experience of HRD is limited to a few organizations and many others are yet to experience it. HRD is limited to a few organization and a many others are yet to translate their goodwill into action. Organizations in the small scale sector have not even thought about it and those in the service sector continue to neglect it.

Concern for developing employees and their competencies existed in several organizations and their top management much before the HRD Departments got started and the term HRD got popularized. However, top management of each organization found their own ways of developing employee competencies. Most organizations in the past focused on Developing and maintaining the motivation of the employee through Welfare Schemes, Salary and perks, promotions and punishments. Nowadays Organizations and their top management have recognized that HRD cannot be limited to a few employees in coverage. It is also recognized that HRD too is important and it should be left for informal process to take care of and that it should be a well planned activity.

In the survey conducted by Rao and Abraham (1985) it was found that 32% of organizations did not have separate HRD Departments or functionaries and only 11% did not emphasize HRD in their personnel policies. The situation may be even better now. The earlier units have given details of experience of some public and private sector organizations in introducing HRD.

HRD approach, that stresses the need for developing the company's own people to suit the updated technology, modernization of machinery and equipments and the changing trends in attitudes and approaches, necessitates to develop individual employee in accordance with his aspirations and potentialities on the one hand and the company's requirement on the other hand. HRD intervention primarily seek to know what the individual seek to have and then try to match it with the organizational needs. As a result of the fundamental changes in attitudes, approaches, outlook, philosophy, perspective and practices emerged in the personnel area in the form of human resource management (HRM) strategy, it has become necessary for every organization to develop skills talents, potentialities, capabilities and attitudes of company's own people to meet the emerging challenges. Hence, HRD policies have been adopted by many companies. It is now-a-days spreading to many others. HRD strategies are supposed to bring forth necessary changes in skills, capabilities and attitudes of people who are required to cope with the emerging changes. Thus, HRD has become an integral part of human resource management.

HRD is the process of helping people to acquire competencies. In an organizational context HRD "is a process by which the employees of an organization are helped in a continuous and planned way to :

- Acquire and sharpen capabilities required to perform various functions associated with their present or expected future roles.
- Develop their general capabilities as individuals and discover and exploit their inner potential for their own and /or organizational development purposes.
- Develop an organizational culture in which superior subordinate relationships, team work and collaboration among sub units are strong and contribute to the professional well being, motivation and pride of employees.

Review of Development:
Macroeconomic Overview for 2001-2002:

The Indian economy is passing through a difficult phase caused by several unfavorable domestic and external developments. Domestic output and demand conditions were adversely affected by poor performance in agriculture in the previous two years. The global economy experienced an overall deceleration and is estimated to record an output growth of 2.4 per cent during the past year. These tendencies were exacerbated in the aftermath of the terrorist attacks in United States in September 2001. Consequently export growth has suffered and industrial profitability has also been affected by the prevailing low commodity and product prices globally. Despite these constraints, growth in real GDP in 2001-02 is expected to be 5.4 per cent as estimated by the Central Statistical Organization. This growth rate marks some recovery over the low growth of 4 per cent in 2000-01. It will also be one of the highest growth rates in the world in the current year.

The average annual growth rate during the Ninth Five Year Plan (1997-2002) is now estimated at 5.4 per cent, which is lower than the plan target of 6.5 per cent. Although this raises new challenges for reinvigorating growth in the Tenth Five Year Plan, the Indian growth record is one of the highest among the major economies in the world in recent years. The Indian economy has been resilient in the face of several external shocks during this period such as the East Asian crisis of 1997-98, the oil price increase of 2000-01, and the most recent world economic slowdown. Domestic shocks in the shape of an adverse security environment, natural disasters like the Orissa cyclone and Gujarat earthquake, and two consecutive years of poor agricultural performance, have also been faced successfully by the economy.

The overall growth of 5.4 percent in 2001-02 is supported by a growth rate of 5.7 percent in agriculture and allied sectors, 3.3 percent in industry and 6.5 percent in services. The acceleration of the overall GDP growth rate is basically due to a significant improvement in value added in the agriculture and allied sectors from a negative growth rate of (-) 0.2 percent in 2000-01 to 5.7 percent in 2001-2002. There has been significant deceleration in the growth rate of industry. However, the performance of the services sector has improved moderately.

Real GDP growth rate from mining and quarrying is estimated to have declined from 3.3 per cent in 2000-01 to 1.4 per cent in 2001-02. The growth of manufacturing has reduced from 6.7 to 3.3 per cent, while that of electricity, gas and water supply has fallen from 6.2 to 5.2 per cent and that of construction from 6.8 to 2.9 per cent over the same period. The deceleration in industrial growth may be attributable to various factors such as normal business and investment cycles, inherent adjustment lags of corporate restructuring and lack of both consumer and investment demand. Continued high real interest rates, infrastructure constraints in power and transport and delays in establishing credible institutional and regulatory framework for private participation in some key sectors might have also dampened private investment and industrial production.

Prospects of agricultural production in 2001-02 are considered to be bright as a result of normal monsoon and relatively favourable distribution of rainfall over time and regions. Overall agricultural output is estimated to increase by nearly 7 per cent in 2001-02. Food grains production is expected to rise to 209 million tones compared with 196 million tones in 2000-01.

The average annual rate of inflation in terms of the Wholesale Price Index (WPI) increased significantly from 3.3 per cent in 1999-2000 to 7.1 per cent in 2000-01 due to a substantial rise in administered prices of petroleum products. During 2001-02, the inflation rate declined in terms of the WPI. The 52 week average inflation rate declined from 7 per cent at the beginning of 2001-02 to 4.7 per cent for the week ended January 19, 2002. The point – to- point inflation rate reached a low of 1.3 per cent by the end of January, 2002 which was the lowest in over two decades.

The inflation rate in terms of the Consumer Price Index for Industrial Workers (CPI-IW) remained below 4 per cent until July 2001 and increased to 5.2 per cent in August 2001. The Index displayed a downward trend during September-October, 2001. However, it increased again to 4.9 per cent in November and further to 5.2 per cent in December 2001.

The Union Budget envisaged a reduction of gross fiscal deficit as a proportion of GDP from 5.1 per cent in 2000-01 (RE) to 4.7 per cent in 2001-02 (BE). With the availability of quick estimates of national income and provisional accounts for 2000-01 and advance estimates of national income for 2001-02, revised estimates of fiscal deficit for 2000-01 and budget estimates for 2001-02 have undergone change. The gross fiscal deficit as a proportion of GDP is new estimated at 5.5 per cent for 2000-01 and 5.1 per cent for 2001-02. As regards revenues, there are significant shortfalls in indirect taxes due to slowdown in industrial production and significant deceleration of both oil and non-oil imports. Direct tax collections are likely to be below target for the current year. There is also a shortfall in revenues from disinvestments. Disinvestments proceeds are now expected to pick up in the coming months due to a much smoother working of the disinvestments process. Various economy measures taken by the government for reducing non-plan and non-capital expenditure have helped to keep the overall expenditure under control. Despite these measures, the gross fiscal deficit of the Central government at the end of the year is likely to exceed the budget target.

India's balance of payments remained reasonably comfortable in both 2000-01 and 2001-02. The current account deficit as a percentage of GDP declined from 1.1 per cent in 1999-2000 to about 0.5 per cent in 2000-01 due to a dynamic export performance and sustained buoyancy in invisible receipts. However, in the current year, exports have been almost stagnant and have recorded a growth of only 0.6 per cent in April-December 2001. An assessment of the Balance of Payments (BOP) outlook conducted jointly by the Reserve Bank of India (RBI) and the Ministry of Finance for the current year indicates that the current account deficit as percentage of GDP may widen to some extent, though it will remain within 1 per cent of GDP, which is quite manageable.

India's external debt situation has improved significantly in recent years as a result of effective external debt management by the Government. The external debt-GDP ratio decreased from 28.7 per cent at the end of March 1991 to 22.3 per cent at end-March 2001 and further to 21 per cent at the end of September 2001. The debt service ratio declined from a peak level of 35.3 per cent of current receipts in 1990-91 to 16.3 per cent in 2000-01. It is particularly noteworthy that for the first time, the World Bank has classified India as a less-indebted country.

Trends in GDP:

According to the Quick Estimates of National income for 2000-01 provided by the Central Statistical Organization on January 31, 2002, the overall GDP growth rate decelerated significantly from 6.1 per cent in 1999-2000 to 4 per cent in 2000-01. The gross value added in agriculture and allied sectors declined by 0.2 per cent in 2000-01 compared with an increase of 1.3 per cent in 1999-2000.

The GDP from agriculture alone declined by 0.4 per cent in 2000-01 compared with an increase of 1 per cent in 1999-2000. The negative growth rate of agriculture in 2000-01 was primarily due to a decline in rice production by 5.4 per cent, wheat by 10 per cent, pulses by 20.4 per cent, oilseeds by 11.2 per cent and cotton by 16.3 per cent. However, livestock, which accounts for over 26 per cent of the total value of agriculture sector, increased by 3.5 per cent and coarse cereals by 4.2 per cent in 2000-01.

Within the industry sector, while construction showed a lower growth in 2000-01, there was marked improvement in the growth rates of manufacturing (from 4.2 per cent in 1999-00 to 6.7 per cent 2000-01) and mining and quarrying (from 2 per cent to 3.3 per cent during the same period). The growth rate of electricity, gas and water supply remained almost invariant at around 6.2 per cent for both 1999-2000 and 2000-01.

Box 1
Economic reforms in 2001-02

Structural reform initiatives

- Interest rates on small savings reduced.
- Government equity disinvested in select public sector undertakings like VSNL,IBP,CMC,HTL, PPL,BALCO and certain ITDC hotels.
- VRS introduced for Government employees in the surplus pool.
- Full decontrol of sugar announced during 2002-03 (conditional on commencement of futures trading).
- Items covered under the essential Commodities Act reduced from 29 to 17.
- Licensing requirements and restrictions on storage and movement of wheat, rice, sugar, edible oilseeds and edible oils removed.
- New Pharmaceuticals Policy announced reducing the span of price control rigors on several bulk drugs and formulations.
- Fourteen items dereserved from the list of items reserved for exclusive manufacture by the small scale sector.
- Bill for abolition of the Sick Industrial Companies (Special Provision) Act introduced in Parliament.
- Bill for setting up of a National Companies Law Tribunal by amending Companies Act introduced in Parliament.
- The Union Budget (2001-02) proposed amendments in the Industrial Disputes Act and Contract Labour Act for removing the existing structural rigidities in the labour market.

Fiscal Reforms

- Various economy measures introduced including Downsizing some of the departments.
- Excise duty structure was rationalized to a single rate of 16 per cent CENVAT (Central Value Added Tax) in 2000-01. The Budget for 2001-02 replaced earlier three special rates of 8 per cent, 16 per cent and 24 per cent by a single rate of 16 per cent.
- Peak level of customs duty reduced from 38.5 per Cent to 35 per cent with abolition of surcharge on customs duty. Customs duty reduced on specified textile machines, information technology, telecommunications and entertainment industry.
- Goods imported by 100 per cent EOUs and units in FTZs and SEZs exempted from antidumping and safeguard duties.
- All surcharges abolished on personal and corporate income tax rates except the Gujarat earthquake surcharge of 2 per cent leviable on all non-corporate and corporate assesses except foreign companies.

Source : Indian Economic Survey 2001-2002, Akalank Publications, New Delhi

Box 1 (Continued)
Economic reforms in 2001-02

- Weighted deduction of 150 per cent of expenditure on in-house R&D extended to biotechnology.
- Five-year Tax holiday and 30 per cent deduction of profits for the next five years extended to enterprises engaged in integrated handling, transportation and storage of food grains.
- Incentive Fund created for incentivising fiscal reforms in states.

Infrastructure

- Initial period for availing of ten-year tax-holidays for infrastructure projects rationalized and extended to 15 to 20 years.
- The five-year tax holiday and 30 percent deduction of profits for the next five years for telecommunications extended to internet service providers and broadband networks.
- Electricity Bill 2001 and Communication Convergence Bill 2001 introduced in Parliament.
- Accelerated Power Development Programme started for incentivising power sector reforms in states.
- Budgetary allocation enhanced for the Pradhan Mantri Gram Sadak Yojana (PMGSY) for speeding up connectivity of rural roads. PMGY scheme extended to cover rural electrification.
- Special Railway Safety Fund created, which is to be funded by surcharge on passenger fares and budgetary support.
- National Highway Development Project launched.

Capital and Money Markets

- Clearing Corporation of India Ltd. (CCIL) set up. The Negotiated Dealing System (NDS) is being introduced.
- Floating rate Government bonds reintroduced.
- Badla banned and rolling settlement introduced.

Source : Indian Economic Survey 2001-2002, Akalank Publications, New Delhi

Box 1 (Continued)
Economic reforms in 2001-02

- Corporationalisation of stock exchanges and involving segregation of ownership, management and trading membership from each other.

- Trading in index options, options on individual securities and stock futures introduced.

- Aggregate limit for FII portfolio investment enhanced to 49 per cent and subsequently up to sectoral ceiling.

External Sector

Trade

- Quantitative Restrictions (QRs) on BOP grounds removed by dismantling restrictions on the remaining 715 items.

- Partial back loading of withdrawal of tax benefits offered to exporters under Section 80-HHC of the Income Tax Act.

- Agri-Economic Zones set up for promoting agricultural exports on the basis of specific products and geographical areas.

- *Market Access Initiative* (MAI) scheme introduced to boost exports.

- Interest rates on export credit rationalized by indicating interest rates on export credits as PLR linked ceiling rates.

- Special financial package introduced for large value exports (annual exports of over Rs.100 crore) of selected products.

- Duty drawback rates for more than 300 Export products and value caps abolished under DEPB on about 400 export items from October 2001.

- Medium term export strategy formulated to Achieve a quantum jump in exports in the next five years.

Capital account

- FDI up to 49 per cent from all sources permitted in the private banking sector.

- 100 per cent FDI permitted for B to Be-commerce, courier services, oil refining, hotel and tourism sector, drugs and pharmaceuticals, Mass Rapid Transport Systems including associated commercial development of real estate.

- Non-Banking Financial Companies (NBFCs) permitted to hold foreign equity up to 100 per cent in holding companies.

- Foreign investors permitted to set up 100 per cent operating subsidiaries without the condition of disinvesting a minimum of 25 per cent equity to Indian entities.

- Joint venture NBFCs having 75 per cent or less than 75 per cent foreign investment permitted to set up subsidiaries for undertaking other NBFC activities.

- Dividend balancing conditions withdrawn from 22 consumer items.

- Offshore Venture Capital funds/Companies allowed to invest in domestic venture capital undertakings.

- FDI up to 100 per cent permitted with prior approval of the Government for development of integrated township.

- The defence industry opened up to 100 per cent private sector participation by Indian companies with FDI permitted up to 26 per cent, both subject to licensing.

- International Financial Institutions like ADB, IFC,CDC, DEG, etc. allowed to invest in domestic companies through the automatic route, subject to SEBI/RBI guidelines and sector specific caps on FDI.

Source : Indian Economic Survey 2001-2002, Akalank Publications, New Delhi

Industrial Policy:
Saga of paradigm shifts:

Given the historical developments the world over, it is not surprising that growth was identified with industrialization in all the development economies. The Indian planners went a step further and talked of Industrialization with an emphasis on heavy industries. It was, no doubt, recognized that for the process of industrialization to start, there has to be a transfer of resources from agriculture. That inadequate agricultural growth and insufficient availability of wage goods including food grains could act as a restraint on industrial growth was realized only later. The industry-agriculture relationship was mainly seen in terms of agriculture making available the required raw materials. Once again, the recognition of the importance of agricultural growth and rural incomes as a source of demand for industrial goods thereby fuelling industrial growth came later.

Pre-reform industrialization:

The process of industrialization in India in the first four decades was governed by two considerations - import substitution and industrial licensing. Import substitution constituted a major plank of India's foreign trade policy and, therefore, of industrialization, the planners, more or less, chose to ignore the option of foreign trade as an engine of economic growth. This was primarily due to the highly pessimistic view taken on the potential for export earnings. A further impetus to the inward orientation was provided by the existence of a vast domestic market. In retrospect, it is clear that the policymakers not only under-estimated the export possibilities but also the import intensity of the import substitution process itself.

As a consequence, India's share of total world exports declined from 1.91 per cent in 1950 to about 0.53 per cent in 1992. The inward looking industrialization process did result in high rates of industrial growth between 1956 and 1966. However, several weaknesses of such a process of industrialization soon became evident, as inefficiencies crept into the system and the economy turned into an increasingly "high-cost" one. Over a period of time, this led to a "technological lag" and also resulted in poor export performance.

Foreign trade policy issues became the subject of intensive discussion in the early 1980s. It came to be realized that a scheme of import licensing under which imports were permitted only to the extent that domestic production fell short of domestic demand irrespective of differences in cost and prices, could only lead to inefficiency. The view gained ground that a more liberal policy of imports of capital goods and technology would enable India to reap the benefits of international division of labour. The attempt, therefore, was to move away from import substitution, so that considerations relating to cost and efficiency were incorporated in the overall policy framework. It also became increasingly clear that production for export could not be isolated from production for the home market.

New economic Policy:

The year 1991 is an important landmark in the economic history of post-Independence India. The country went through a severe economic crisis triggered by a serious balance of payments situation. The crisis was converted into an opportunity to introduce some fundamental changes in the content and approach to economic policy. The response to the crisis was to put in place a set of policies aimed at stabilization and structural reform. While the stabilization policies were aimed at correcting the weakness that had developed on the fiscal and balance of payments fronts, the structural reforms sought to remove the rigidities that had entered various segments of the Indian economy.

The structural reforms introduced in the early 1990s broadly covered the areas of industrial licensing, foreign trade, foreign investment, exchange rate management and the financial sector. From the point of view of industrialisation, changes in the areas of licensing and foreign trade and investment had important implications. Even before the onset of reforms the problems associated with industrial licensing were well recognized.

The common thread running through the various policy measures introduced since 1991 has been the improvement of efficiency of the system. The thrust of New Economic Policy has been towards creating a more competitive environment in the economy as a means to improving the productivity and efficiency of the system. This is to be achieved by removing the barriers to entry and the restrictions on the growth of firms. While the Industrial Policy seeks to bring about a more competitive environment domestically, the Trade Policy seeks to improve the international competitiveness subject to the degree of protection offered by the tariffs.

The private sector is being given a larger space to operate in so that some of the areas reserved exclusively earlier for the public sector are now allowed to the private sector. In these areas, the public sector will have to compete with the private sector, even though it may continue to play a dominant role. What is sought to be achieved is an improvement in the functioning of the various entities, whether they are in the private or public sector.

Economic performance since 1991:

Judged by the standard criteria of growth rates in national income and per capita income, the Indian economy has done well since liberalization. Between 1992-93 and 1999-2000 the average annual growth rate was 6.55 per cent. This is even higher than the previous high of 6.04 per cent achieved between 1985-86 and 1989-90. Between 1992-93 and 1999-2000, there is no year in which the growth rate has been less than five per cent. The co-efficient of variation of growth rate has been lower than in the 1980s. The average annual per capita income growth rate between 1992-93 and 1999-2000 has been 4.7 per cent as compared with a growth rate of 3.4 per cent in the Eighties.

The average growth rate of industrial production since 1992-93 has been 6.4 per cent. This is lower than the growth rate of 7.5 per cent in the 1980s. However, in terms of value added in industry, the growth rate in the 1990s works out to 6.62 per cent is a shade higher than the 6.55 per cent in the 1980s. The distinctively higher growth rate in GDP in the 1990s has been because of the sharp increase in the growth rate of services. The share of the services sector in the gross domestic product has increased by 7 percentage points in the 1990s to reach 47.10 per cent in 1999-2000.

New Challenges:

Changes in the foreign trade and foreign policies have altered the environment in which Indian industries have to operate. The path of transition is, no doubt, difficult. A greater integration of the Indian economy with the rest of the world is unavoidable. One must recognize that there are many countries that are knocking on the doors of the World Trade Organisation to enter. It is important that Indian industry be forward looking and get organized to compete with the rest of the world at levels of tariff comparable to those of other developing countries. Obviously, the Government should be alert to ensure that Indian Industries are not the victims of unfair trade practices. The safeguards available in the WTO agreement must be fully utilized to protect the interests of Indian Industries. India must take a proactive stand in the next round of trade negotiations and articulate its own demands, focusing on what it wants from the global trading system, such as prohibition of unilateral trade action, establishing symmetry between the movement of capital and natural persons and zero tariffs in industrialized countries on labour intensive exports of developing countries.

Indian industry has a right to demand that the macro economic policy environment is conductive to rapid economic growth. The configuration of policy decisions in the recent period has been attempting to do that. It is, however, time for Indian industrial units to recognize that the challenges of the new century demand greater action at the enterprise level. They have to learn to swim in the tempestuous waters of competition away from the sheltered waters of the swimming pools. India is no longer a country producing goods and services for the domestic market alone.

Indian firms are becoming and have to become global players. At the minimum, they must be able to meet global competition. The search for identifying new competitive advantages must begin earnestly. India's ascendancy in IT is only partly by design. However, it must be said to the credit of policy makers that once the potential in this area was discovered, the policy environment became strongly industry friendly.

How do India and Indian firms maintain a competitive edge? Analysing India's comparative advantage in engineering vis-à-vis China, a leading Indian industrialist had commented that in products that involved flexible manufacturing with a high level of product and industrial engineering, multi-vendor coordination and continuous improvement, the Chinese fared badly. They are good at marketing simple things in large batch sizes. The commentator adds that what India lacks in mass manufacturing capacities can be made up by its capabilities for design innovations and by moving up the value chain. It is worth pondering over this comment. Experts from the various industries' must judge the validity of this statement.

In today's environment, the primary focus has to be on the strategy and quality of micro-economic business management and the global must be to achieve higher levels of efficiency and productivity. A new productivity culture must emerge and with it an organisational structure and incentive system that promote productivity. In this context, it is worth noting the turnaround in productivity that the U.S. has achieved in the last decade.

Second Generation reforms:

With stock markets in a state of flux and stagnating industrial output, Indian industry is looking to the Government for rapid implementation of second-generation economic reforms. These are considered critical in the areas of labour, infrastructure, financial services and agriculture as well as privatisation of the public sector. A push in these sectors is expected to help boost economic growth from the present level of 5-6 per cent to 8-9 per cent annually over the next few years.

The apex chambers in the country are also upbeat about the current fiscal during which a 6 per cent GDP growth is expected despite the global economic slowdown. But they caution that the country cannot remain impervious to the developments in the industrialized world, especially the U.S. and Japan.

1. Second Generation Reforms:

The broad wish list:

a. Policy reforms that increase competitiveness
b. Infrastructure and regulatory reform
c. Financial sector reforms
d. Governance, privatisation and labour reform.

2. Pace of reforms, Impact on economic growth:

The pace of reforms over the past decade has not been as consistent as we would have liked it to be. The periods of political uncertainty and instability did create gaps, leading to the stalling of the reforms process. What is heartening, however, is that the recent phase of political uncertainty did not impact the reforms process and the government continued with policy reforms on several fronts. We believe that this reveals a certain level of political maturity within the political class cutting across party lines. The impact on economic growth has been dramatic. We have witnessed an average growth of over 6.5 per cent during the 90's. When compared w the rest of the world, the growth rate during 2000-01 is, along with Chin one of the highest.

3. Measures to give a push to industrial growth:

According to CII the manufacturing sector has a key role to play contributing to a sustained economic growth. CII has outlined i prescriptions for the revival of India's traditional manufacturing sector, whic is witnessing a slowdown in fiscal 2001-02. It feels that uneconomic cost (capital; high cost and low quality of power, lack of flexibility in use of labou and poor infrastructure facilities have been crippling domesti competitiveness.

CII has also identified some of the other factors responsible for the dip i performance of the manufacturing sector. First, there was a distinc compression in overall demand leading to over-capacity and second, fresl investment subsequently started declining and most major business houses substantially scaled down their investments.

The action plan to achieve this would include:

1. There is a need to step up implementation of policies and procedures as well as projects especially in the infrastructure sector. One method could be by rewarding action and timely implementation.
2. Decision-making needs to be decentralized and more decisions need to be taken at the State and local levels.
3. Labour and industrial relation law need to be revamped to accord the necessary flexibility to both corporate and labour.
4. Laws relating to bankruptcy restructuring also need to be revamped.
5. There is a need to create Business Advisory Council comprising foreign and domestic companies, which would focus on identifying barriers to growth and suggesting remedial action.
6. There is a need to push ahead with privatisation process.

7. There is a need to develop a modern judicial and legal system by reducing delays in the legal set-up as well as repealing outdated laws.
8. On the WTO front, India should seek greater market access in other countries.
9. Quickly get a few infrastructure projects off the ground. This would revive demand in a host of other industries including cement, steel and capital goods. In order to bring about more accountability, a monthly monitoring of projects should be undertaken and the progress published.

Industrial Policy and Development:

The industrial slowdown (measured by the Index of Industrial Production) witnessed in 2000-01 continued with greater intensity during the current year (2001-02) with a significant deceleration in all major sectors. Overall industrial growth during April-December 2001-02 at 2.3 per cent is substantially lower than the 5.8 per cent achieved during the corresponding period of last year. In fact the growth rate of the industrial sector during the first nine months of the current year is the lowest during the last ten years.

TABLE 1

Annual growth rates of Industrial Production in major sectors of industry

(Base:1993-94=100)

(Per cent)

Period (Weight)	Mining (10.4) (11.5)*	Manufacturing (79.4) (77.1)*	Electricity (10.2) (11.4)*	General (100.0) (100.0)*
1992-93	0.5	2.2	5.0	2.3
1993-94	3.5	6.1	7.4	6.0
1994-95	9.8	9.1	8.5	9.1
1995-96	9.7	14.1	8.1	13.0
1996-97	-1.9	7.3	4.0	6.1
1997-98	6.9	6.7	6.6	6.7
1998-99	-0.8	4.4	6.5	4.1
1999-00	1.0	7.1	7.3	6.7
2000-01	3.7	5.3	4.0	5.0

Apr-Dec.				
1992-93	0.2	4.9	4.7	4.3
1993-94	3.6	5.2	7.4	5.3
1994-95	5.3	5.0	6.3	5.2
1995-96	10.5	13.8	8.9	12.9
1996-97	-1.3	9.1	3.8	7.5
1997-98	6.4	6.9	6.0	6.8
1998-99	0.5	4.1	6.8	4.0
1999-00	0.5	7.0	7.7	6.4
2000-01	4.4	6.0	4.8	5.8
2001-02	1.1	2.4	2.7	2.3
Notes: Growth rates from 1994-95 onwards are based on IIP Base: 1993-94=100 and those for earlier years are based on IIP Base: 1980-81=100. *Relates to weights for IIP Base: 1980-81=100				

Source : Indian economic survey 2001-02, Akalank publications, New Delhi.

The industrial deceleration was due to a number of structural and cyclical factors such as normal business and investment cycles, a lack of both domestic and external demand, continuing high real interest rates, infrastructure bottlenecks in power and transport, lack of reforms in land and labour markets, inherent adjustment lags resulting from industrial restructuring through merger and acquisitions, and delays in establishing appropriate institutional and regulatory frameworks in some key sectors.

Industrial slowdown is widespread covering all broad sectors such as manufacturing, electricity and mining and all end use based groups such as capital goods, intermediate goods, consumer goods both durables and non-durables. The slowdown in domestic and global demand appears to be the major factors constraining industrial growth. This is reflected by low level of prices for manufactured goods in 2001-02. However, given the relatively low level of external sector for the Indian economy, domestic demand and supply side factors have played the key roles for industrial slowdown.

Box 2
Widespread Industrial Slowdown

The Slowdown

Industrial slowdown is widespread covering all broad sectors such as manufacturing, electricity and mining and all end use based groups such as capital goods, intermediate goods, consumer goods both durables and non-durables. The slowdown in domestic and global demand appears to be the major factors constraining industrial growth. This is reflected by low level of prices for manufactured goods in 2001-02. However, given the relatively low level of external sector for the Indian economy, domestic demand and supply side factors have played the key roles for industrial slowdown.

Causes of Slowdown

The slowdown in Industrial growth in 2000-01 and 2001-02 is due to a number of Structural and Cyclical factors.

Structural factors:

- The adjustment process of industry in response to increased competition in the form of Mergers and Acquisitions is taking longer time than expected.
- Infrastructural bottlenecks and high costs and inadequate and unreliable supply of services in support, communications and the power sector.
- Low levels of productivity in the industry because of low volumes and inability to reap economies of scale, outdated technology and restricted labour laws.
- Lower speculative demand for sectors like automobiles and real estate due to expectation of lower prices and reduction of taxes and duties in the short and medium term.
- High real interest rates.

Cyclical factors:

- Periodic investment cycles, reinforced by government's decision to reduce customs duties to levels in East Asian countries by 2004, which might have deferred investment decisions.
- Business cycles affecting demand of some cyclical industries like cement, automobiles and steel.
- There is no pent up demand for consumer durables. The above cycles have been reinforced by reduction in inventory levels resulting from the introduction of e-commerce and better management of supply and demand by industry to cut costs.

Remedial Measures:

- 100 per cent FDI has been permitted in many of the sectors such as B to B commerce, manufacturing activity in Special Economic Zones with some exceptions, many activities of the telecom sector, airports, courier services, for development of integrated townships, drugs and pharmaceuticals, hotel and tourism sector.
- Defence industry sector has been opened up for private sector participation with FDI permitted up to 26 per cent.
- Foreign equity up to 100 per cent will be allowed in non-Bank Financial Companies (NBFCs).
- Excise duty rationalized to a single rate of 16 per cent CENVAT.
- Central Excise Rules 1944 were simplified and a drastic reduction of rules made.
- Peak duty of customs reduced from 38.5 per cent to 35 per cent with the abolition of 10 per cent surcharge.
- Interest rates have been reduced.

Source : Indian economic survey 2001-02, Akalank publications, New Delhi.

SUB-SYSTEMS OF HRD

⇒ **Performance appraisal**

Has been practiced in past performance has already been evaluated before its implementation. It is unilateral evaluation of subordinate by the superior.

⇒ **Potential appraisal and development**

This process is being carried out by the superior in order to know the potentials which are inherent within the individual and the individual also comes to know about his potentials.

⇒ **Career planning**

A person under HRD is seen as constantly growing entity. The organization grows with the people. Here it develops career of one own self and of the organization also. Different career paths are identified / created in which a person can grow. These paths are made known to the people in the organization.

⇒ **Feedback and performance coaching**

Letting the employee know that he is not doing well, why not doing well and a feedback is given regarding his performance in the organization and also to know his strengths and weaknesses.

⇒ **Training and development**

Training as a sub-system of developing people has been in practice from time immemorial, the focus earlier was on developing a person to perform his job better, the efforts were directed to develop the competencies of people as to how certain attitudes which are necessary are also achieved. There is a systematic approach to develop people rather than it to become isolated.

⇒ **Rewards and punishment**

Rewards are given for the work they do. A person was constantly seen and was given threat that if not works properly his increment was held up. Rewards are given in order to boost the morale of the employees.

⇒ **Organization development**

Has also emerged as one of the process mechanisms. Many organization over a period of time becomes stagnant or face difficulties in terms of inter / intra dept. conflicts. O.D. looks into and promotes organization health-they identify factors which hinders its performance. i.e. adopt to the changing environment with the help of external as well as internal consultants.

⇒ **Employee welfare and quality of work life**

Organization which adapt the welfare programmes for well being of people. Encouraging participation of the people in job, giving freedom as the way they like within permissive limits and as a result improves the quality of work life.

⇒ **Human resource information system**

Information the organization has about the employee and is stored in a systematic matter for a different purpose. In traditional form it is in the form of workers card, biographical sketch etc. The objective here is to input data for several other processes and is stored in a structured form.

HRD THROUGH SELF DEVELOPMENT - A HARD LOOK :

Amongst the many variables that go into the making of an organization the "PEOPLE" factor is very important and crucial. The success of any organizations is determined by the 'team' its people, their caliber and their attitude to succeed and out-perform. Employees are the only resource which are capable of self-propulsion and value addition. Unlike any machinery that gets devalued or depreciated with time and age, the human resource i.e, 'People' get appreciated with age and experience. So they are very special. But there is a big question-mark to this otherwise truthful statement. Unless the people are developed and kept satisfied, it is unlikely that any improvements can be made in terms of production, productivity, quality or customer service. So Corporations would need to address their working environment so as to ensure full involvement and commitment of employees in their jobs. But, basically the initiative at self-development has to come from the person himself.

Work is at the centre life in modern industrial society. People spend as long as 20 years or even more, preparing to enter the world of work. During the middle 30 to 40 years of life they devote as much as half of each working day to work. They spend an additional two or more hours daily, commuting to and from work.

Success in life, a sense of well-being and accomplishment. security and prestige all are tied to a man's work. Work usually determines one's standard of living and economic well-being relative to others in the same group or community. A man's merit is no longer measured by his family connections but by his accomplishments on the job.

Despite such "Work intoxicated" nature of the world in which we live, study of 'People' at work has not been such as a fundamental part of a liberal education. Rather it has been regarded as an applied subject.

THE COMPLEXITY OF HUMAN BEHAVIOUR :

In the day-to-day industrial working the human factor exhibits a variety of traits and characteristics and there is no uniform pattern of behaviour amongst all the individuals working to-gather . It is unfortunate that we get disturbed and pained not so much by our own problems or troubles as we do out of our jealousy and enviousness to see other person's prosperity. An employee may be happy with his lot. But the other person's growth haunts him. When we seek to sympathies or shed so called crocodile tears on seeing other's sufferings, we do in the process of that, feel relieved that we are better off than the person with whom we are pretending to sympathies.

Every person working in an organization is an independent entity having his own ideas and sense of values. Every person in the organization has his own sense of ego urge for survival desire for self-improvement and fulfillment. In pursuing the objectives of the organization he is also pursuing his own individual objectives. It would not be wrong to state that basically people come to work to achieve and materialize their own individual needs and objectives and in the process of that the organization's work gets done. And various persons simultaneously doing this do not necessarily make a homogeneous group. Expectations and aspirations of one person may stand in the way of ambitions of another.

Similarly, satisfaction of an expectation of one person might create frustration and disappointment in another and vice-versa. Therefore, in spite of their allegiance to the common objectives of the organization the mutual relationships of employees may become ambiguous and in certain cases abrasive. Interpersonal conflict situations are thus evident. The working as a joint team for achieving organizational goals, therefore gets difficult and complicated. Persons unable to manage themselves have not come to terms with their own aspirations and frustrations and are unable to trust others and have problems in participation and delegation, which are most vital aspects of man management. Certain numbness in work relationship, therefore, creeps in and by and by it results in a strange kind of obsolescence in human activity.

SELF DEVELOPMENT :

Ordinarily we are looking at everything else except our own self. We look at the people, other things but we never seem to look at ourselves. This state of mind brings in only jealousy, enviousness, bias, hatred, heart-burning and so on and so forth. Then we start feeling depressed and if one thinks of oneself as being depressed, he will ever remain depressed. If one thinks of oneself as unhappy he will for sure remain unhappy. An old man who was always seen very happy and cheerful was asked by some one : "How is it that you are always so happy and cheerful ? "He replied : "I have understood that there are only two options; either be happy or unhappy so each morning when I get up from may bed. I remember my God; stretch my limbs; have a hearty laugh to stretch my lungs for higher in-take of oxygen and then choose to be happy and cheerful" through out the day. How is it that most of us usually choose to be unhappy ? How is it that we don't feel aware of the choice ?

If instead of looking at others - their success their prosperity their position; their status - we learn to first look at our own self and start turning in our thoughts and actions for self-development - we can feel happy and remain happy. Osho in this book : "The Zero Experience" has elaborately talked about self-development. What is this Zero Experience? It is nothing at all say they who have known and experienced it. It is closer to non-being because to encounter yourself as you truly are is to encounter pure consciousness. He has said that a person should practice "ANUBODHI" Anubodhi means a one hundred and eighty degree turn into one's own being; one turns upon oneself. The exact word is CONVERSION. It is incredibly exciting and scary too this search to really be, for first you, as you are need not to be but to dissolve and die and be reborn. Overcoming inhibitions is essential pre-requisite of to discovering one's true self.

Therefore, all development starts with self development and hence self development is the essence of human resource development (HRD). Only if an individual is convinced of the need for self-development and has full and complete awareness of his own strengths and weaknesses will he be involved in the human resource development process in the organization and help facilitate its implementation. If an individuals is not basically interested in developing himself, no efforts made by the organization to develop the individual himself to take the initiative aimed at self-development and the responsibility for this lies primarily with the individual concerned.

HRD A MEANS, NOT AN END :

If we can effectively manage human resources a major constraint to increased productivity and improved performance would be largely taken care of one must remember that human resource unlike most other resources is volatile and therefore requires a very high degree of skill and sensitivity to handle this very volatile substance. We should stop looking at HRD from a very narrow point of view HRD is just a means to an end and not an end in itself. What is this end ? This end is nothing but creating and developing an organizational working culture and environment where working is extremely enjoyable and satisfying where maximum satisfaction of not only one's basic needs but higher order needs of recognition, achievement, self-esteem and self-actualization are met. An old rather rustic 'Munim Ji' who had worked almost life-long in a Marwari Company asked surprisingly as to what was this all fan-fare about HRD to-day. In yester-years paternalistic approach to HRD worked wonders for the organizations Seth Ji would very informally enquire from his Munim Ji as to how many daughters he had and ask him not to bother himself as far as their marriage was concerned or would ask him whether he needed any financial help to build his house back in his village etc. He would thus make him forget his worries altogether and instead get him committed / devoted whole heartedly to his job in the service of the Seth Ji. It was total commitment instantly. "What else could be the intent and purpose of modern HRD".

HRD AND VALUE MANAGEMENT :

1. Social Change & Values

With the passage of time, the cultural values of India which were once considered unique in the globe have slowly and gradually deteriorated. The ancient culture was in conformity with the better quality of working life and as a result happiness, sense of responsibility, discipline, work culture were the common phenomenon with the Indian society at large.

With the advent of the industrialization in the West, the pattern of the society had to face a great challenge. The subcontinent was also subjected to the pressure coming from foreign rule. New ethos of industrialization brought about tremendous social change dividing the people into two blocks so called haves and have nots. It is believed that science and technology has contributed much for the benefit of mankind and a new culture of consumerism had made inroad. Material value of the consumerism contributed towards the quality of life. On the other hand the very essence of invention has lost its charm as this posed threat to civilization and at time to its severest form of annihilation.

Leader, of the social change, caused by the industrialization are none but our engineers, doctors, administrators, teachers who are responsible to give proper shape for a better tomorrow. However, what we find that all out indiscipline prevails over ethical values. The little material gain caused threat to independent thinking rational attitude. People from neoclassical society which is the core group of middle class society is actually responsible for forcing the younger generations towards an objective which is unknown to all of them. A type of rat race is continuing just to grab a seat in the Engineering and Medical Colleges, only few of them could ultimately make it and the rest make an avenue towards general education, management education, vocational training just to make them marketable in the new age of consumerism and the large contingent left behind with hazy future. The essence of human values has been lost in oblivion and become a most precious item of Indian Society today.

2. Adjustment

Against many non values such as egotism, arrogance, domination, corruption resorting to illegal practices by the people at top money power in Society today, there is still hopes of ray in striving for a new society based on our ancient value system. Justice, equality and common fellowship. Since time immemorial teachers have been carrying out this daunting task to influence conduct and shape moral character and therefore they are still considered the best suited for the purpose. Society expects them not only to develop and transfer knowledge but also ethical values among students thus creating and environment that would foster fraternity amongst youth in future.

Indian urban culture is leading towards contaminated value system. It is paying to achieve its goal by restructuring school curriculum according to the demand of times specially to suit the Herculean competitive examinations. All these has put tremendous pressure on learning style and personality development of a child. He finds a gap between the traditional value system and new emerging values of social interaction. Hence generation gap is mainly accounted for diverse value system. How to check this is a problem with us.

3. <u>The Social Gap</u>

Urge for development is pushing the world towards new culture where depending on human endeavor is absent and as a result interpersonal relations suffered a setback.

Dr. G. Padmanaban, Director, Indian Institute of Science, Bangalore said "If the process of economic liberalization is taken to its logical end such opportunities could be available within the country and a greater mobility of people can ensure and one would hope that narrow considerations of language, region, religion etc. would give way to consideration of merit and competence without denying opportunities of sections of the community deprived of education and social status for centuries. A balanced approach to keep pace with the demand of economic progress and social commitment while retaining the pride of being Indian has to be evolved. At the moment these demands are being looked upon as conflicting.

Future leaders of liberalization must remember that India is in a rather unenviable situation. We have the latest limousines playing along with hand pulled carts. We have five star hotels next to abominable slums. We have costliest nursing homes, when rural dispensaries have no medicines or doctors.

4. <u>Inter Personnel Relations</u>

It is therefore felt that right from the inception students must adhere to certain norms which shall help them to build up their personality. In terms of transactional analysis these norms shall help in molding Adult Ego amongst the students. Adult Ego confirms rational attitude effective leadership. Interpersonal relationship is the most important factor to motivate towards achievement of objective be it any type of organization, however in case of industrial productivity this has direct bearing. Engineers of tomorrow shall have to face challenge from working groups. One must remember that in no case human element is going to be replaced by any machine at least this is true in a country like ours, where productivity of human generation is always in surplus. A sense of mutual respect for all the employees in the organization shall only ensure better performance. Let the disparities remain only in terms of salaries / perks but not in inter-personal relationships.

POSITIVE SELF REGARD AS AN INSTRUMENT OF HRD :

Thus spake the legends

Napolean observed "They are able because they think they are able". In the Indian context, Swami Vivekananda has repeatedly emphasized the importance of self esteem. He has said "Throughout the history of mankind, if any motive power has been more potent than another in the lives of all great men and women. It is that of faith in themselves. Born of the consciousness that they are to be great, they become great". The impatience of Vivekananda for low self esteem of common men can be gauged from his saying : "Man the infinite dreamer, dreaming finite dreams". In fact, the Indian renaissance from 18th century onwards was in a way, built around regaining "self esteem" by the Indian society. In the corporate world of today more and more Indian companies are striving hard to become truly "world class companies". Preeminence of an increasing number of Indian Companies in international arena will enhance the "self esteem" of Indian Managers while increased self esteem of Indian managers will indeed spur the Indian corporate to scale greater heights. We believe, achievement produces self-esteem, and self-esteem stimulates achievement. It is, indeed, an 'auspicious circle'.

Concept of Self Esteem

"Self Esteem" which can also be called "Positive Self Regard", emerges from self-concept which is an important dimension of personality. It means, we regard ourselves highly. Experience suggests that our individual potential is related to our self concept and self esteem. If we regard ourselves more highly, we expect more of ourselves. It is a process which often results in more impressive achievements arising out of greater expectations of ourselves. It is in this sense that it becomes a kind of auspicious circle of "expectations" to "achievements". and "achievements" to further expectations". Irwin Federman quoted by Warren Bennis & Burt Nanus in their book "Leaders - the strategies for taking charge". observes :

"Our individual potential is a direct derivative of our self esteem which means we feel good about ourselves. If we come to regard ourselves more highly, then we come to expect more of ourselves. This growth process results in more aggressive goals greater expectations and hence more impressive achievements. If you believe what I'm saying you cannot help but come to the conclusions that those you have made you feel like 'somebody'. It was not merely because they had the job, or the power..... it somehow made you feel terrific to be around them".

Self Esteem and the Indian Ethos

Humility and universal love (Vasudhaiva Kutumbakam) are the hallmarks of our spiritual and cultural heritage. The Gita talks of three kinds of characteristics of humans character, viz. Tamas, Rajas and Sattva, Rajsik and Sattvik stages are congruent with a high self esteem (humility must not be misconstrued as low self esteem), while Tamsik state is born out of ignorance. for vigorous economic reforms in India - inculcation of Rajas is a must, Sattvik state which is the highest state cannot be attained easily and low self esteem cannot lead to Sattva as a Sattvik individual is approaching realization of his true self. Real Self of any individual is the grandest of all and therefore, even in the spiritual matters pertaining to self realization a high self esteem is an enabling factor.

Raising Self-Esteem of Employees

In the corporate context, measures to raise the Self-Esteem of employees can pay rich dividends. It can lead to higher achievements which in turn can further enhance the self esteem of people thereby creating an auspicious circle. Some of the measures that may be taken in the corporate context to raise the self esteem of employees in general are :

1. Recognizing the contribution of outstanding achievers will raise their self esteem. It will also induce others to try hard for winning recognition. It may be cautioned here that the criteria for selecting outstanding achievers should be transparent as otherwise the recognition of some individuals may demotivate others in particular, those persons who feel that they too deserve the reward.
2. Effective HRD measures in the form of Training Career growth etc. not only equip the workforce better on the professional front, it increases their self esteem, self confidence, morale and motivation.
3. Supportive leadership tolerance of failure can go a long way in raising the level of self esteem. Encouragement must be given for experimentation and innovation by the top management. It must not be forgotten that consistent innovations may be more effective in combating the competition than sheer aggression in the market place.
4. Job rotation should be practiced for real career development of employees. It should be planned with commitment and should not be coincidental. Proper job rotation provides better exposure which in turn leads to professional development. And eventually this helps enhance self worth and self esteem of employees.
5. Multi-skilling is another concept which if done intelligently may create win-win situations for employees as well as the organization. Multi-skilling makes employees more capable on professional front which helps both the organization and the individual it helps individuals by equipping them with

the skills for which there is greater demand in the economy and also it equips them with requisite skills for being more productive in their contribution to the organization. These measures obviously facilitate the promotion of self regard of individuals.

6. Counseling is an effective means of boosting sagging morale and low self esteem of employees in the organization. It is being increasingly recognized as an effective instrument of HRD. Industrial psychologists have an important role to play in this regard.
7. Kaizen which seeks to bring about continuous small improvements in different areas, can boost the self-esteem at the level of workmen.

HRD starts will 3Hs :

The first 'H' relates to HEAD which unleashes ideas and thereby the route of creativity and innovation. We have seen in our HRD workshop through various exercises, how individuals from workers to very senior level managers, who have not tapped their brain power can be creative, following their participation in such HRD workshops. When people get a clue as to how to exercise their imagination to get new ideas they becomes so absorbed to work on new ideas and work on problems that it was not only enjoyable for the people who worked in those workshops but also for their superiors.

The second 'H' relates to 'HEART' - it has been our experience that individually people may be good, work hard, but interpersonal or interdepartmental relations bear conflict situations as issues are perceived by different department. This leads to competition and acts as tremendous hindrance for mobilizing human resources to work for a common goal. The emphasis of 'HEART' is therefore to integrate different individuals working in different departments building cross functional teams. HRD workshops helped building constructive relationship amongst managers of different departments based on mutuality, understanding and acceptance with a 'win win' thrust. This has produced a cementing effect in bringing people closer together, irrespective of levels, to work as a team removing the barriers and distances, emotional or perceptual.

The third 'H' relates to two 'HANDS' that we have. It is a common complaint that people shun work which retards effective performance. The managerial people as well are shy of applying their hands to reach the machines or any other activities which need the use of hands. Equally the workers or supervisors avoid physical movement or use of hands and prefer to leisurely way of working. It is, therefore, the development of that consciousness through HRD which builds a spirit of enthusiasm processes, resource productivity for continuous improvement through a determined bid to bring desired changes resulting in financial and non-financial gains.

Value orientation :

Value education is another important plank of our HRD programme. We work on ten core values, viz. right thinking, discipline, loyalty, sincerity, humanity, dignity, integrity, temperamance, spirit of co-operation, team work.

Focus on result and success orientation :

Plans and strategies by higher authorities by themselves cannot lead to success without review and control. HRD focus is to prepare and encourage teams to review implementation processes as per action plan, check progress or gaps and arrange for timely re-enforcement when people work with lot of clarity business knowledge, with a goal direction, armed with strategically sound steps with a focused view. What else can be result other than 'SUCCESS' ?

Strong vibrant team :

The whole HRD focus is on building strong vibrant teams which is developing people to move a mountain'.

Building learning organization :

HRD is not a one time 'gunshot'. The people must be charged to look at themselves about their strength and capabilities. They must feel as part contributing to achievement. As they work with new ideas, on a new role and a dynamic job profile, they learn where the business are and where they would go. As they learn, they work and enjoy and as they enjoy learn more.

Managing changes :

In fact today's is greatly reeling under the influences of changes. New adjustments are called for, first response is the need of the hour. Those who are proactive, benefit significantly, one who does not shall retreat. HRD focus is to gear people to such a changing scenario, scan the environment and take effective steps in a planned manner to remain ahead of competition.

Flat organization with less layers :

HRD role, therefore, is to prepare each and every individual in an organization which should be flat with as less layers as possible, smoothening the process of bringing people together to a common goal and a shared vision to achieve excellence. This is an aim - there has to be a good beginning.

The new paradigm :

Our industries have spent long time in deep slumber. The signals of warning have been ignored. This has proved too costly staking existence. A survival strategy is the need of the hour and calls for an action plan. We have got to run faster to make up for the lost time. We need to be contemporary in respect of :

- Technology geared to value creation.
- Manufacturing processes and system of world standard.
- Product profile and value addition.
- Market driven strategy with customer focus.
- Management process to compete in the world trade.
- World class people.

We await a dawn to see a turn around of our economy through industrial growth and rejuvenation.

Globalisation and its Implications for Corporate HRD:

Many globalisation trends – the development of trading blocs, the opening up of national boundaries for trade, and the increasing instances of international strategic alliances – have a significant implications to the theory and practice of Human Resource Development. However, HRD literature in the context of globalisation is far from adequate and is often restricted to an analysis of expatriate recruitment, training, appraisal and reward systems. Occasionally, passing attention is given to HRD problems in strategic alliances and joint ventures. (i) Extent of globalisation from industrial perspective and the challenges it poses to organizations, (ii) implications of globalisation to the theory and practice of HRD, and (iii) reorientation of HRD Systems in the context of globalisation.

Globalisation:

Globalisation is surely one of the most powerful and pervasive influences on nations, businesses, work places, communities, and lives at the beginning of the new millennium. The traditional concept of economic sovereignty, which seemed to have ruled the roost till recently, is fast becoming obsolete and the world has become integrated and interdependent as never before. World Development Report (1996) estimated that some 23 per cent of world GDP consists of industries that are fully globalises whereas 15 per cent is under accelerated globalisation and another 50 per cent is in the early stages of globalisation.

Table - 2 Globalisation of Industries

	Category – Industries	Size of industry based on world GDP, 1995, US$ trillion	Extent of Globalisation
1.	Physical commodities Petroleum, mineral ores, timber	2.0	23 per cent (Globalized)
2.	Scale-driven business goods and services Aircraft engines, construction equipment, semiconductors, airframes, shipping, refineries, machine tools	1.0	
3.	Manufactured commodities Refined petroleum products, aluminium, specialty steel, bulk pharmaceuticals, pulp, specialty chemicals	2.8	
4.	Labour skill-productivity-driven consumer goods Consumer electronics, personal computers, cameras, automobiles, televisions	0.9	15 per cent (Accelerated globalisation)
5.	'Brand able', largely deregulated consumer goods soft drinks, shoes, luxury goods, pharmaceuticals, movie production	0.5	
6.	Professional business services Investment banking, legal services, Accounting services, consulting services.	2.5	
7.	'Hard to brand' globally, largely regulated consumer goods and services Food, personal financial services, television Production, retail distribution channels.	6.3	50 per cent (Early globalisation)
8.	Local (unbranded) goods and services Construction materials, real estate, funeral homes, education, house hold services, medical care, utilities	6.4	
	Total	**25.3**	

Source : World Bank (1996) World Development Report, McGraw-Hill

Moran and Riesenberger (1994) state that organizations need to undergo a paradigm shift to adapt themselves successfully to the new globalise world.

Box - 3 Evolving Paradigm for the Globalise Organisations

Old Paradigm	New Paradigm
• Firms were primarily 'domestic'-oriented.	• Firms are evolving to a 'global' orientation for growth and survival.
• Demand exceeded supply in many industries, resulting in economies of scale as a critical competitive advantage.	• There is greater emphasis on quality, custom design, speed and small-lot size.
• The large national concern whose origin was easily identified dominated the market.	• Multiple, smaller entrepreneurial businesses are created within the global umbrella.
• Companies competed through increasing he size and number of employees.	• The complexities of global commerce are forcing companies to grow through alliances with other firms with expertise in R&D or local markets.
• The focus was on strategic planning and continuous improvement of present processes.	• The focus is on strategic thinking and development of a global strategic vision of future direction.
• Concerns for the physical environment remained low with limited knowledge of potential damage.	• Corporations are placing significant emphasis on being 'good corporate citizens' in waste management.
• Strategy was product-driven	• Strategy is market-driven
• The need to improve efficiency was stressed.	• The need to improve effectiveness is stressed.

Source : Globalization and its implication for Corporate HRD, S.R. kandula & B. Hari Bapuji Tata Mc-Graw-Hill

HRD in the New Millennium

The primary goal of human development including human resource development is to release and enhance the capability of people. In the realm of socio-economic development, such capability would consist of skills and motivation for accessing the existing infrastructure amenities and would also benefit the ongoing development programmes. At the workplace, it could mean members' readiness to seek, undertake and carry out challenging work-assignments. Capability development is grounded in self-efficacy and such other self-related phenomena. In the Indian context, because of various socio-historical reasons, positive changes in self-concepts emerge as the goals of human development. These would include development and training efforts for building "elementary capabilities as the abilities to avoid under-nourishment, morbidity and mortality, to more sophisticated social capabilities such as taking part in life of the community and achieving self-respect" (Dreze and Sen 1989: 12). Our people have been subjected and conditioned for a long time to dependency behaviour. Human development programmes in general and human resource development in particular should, therefore, aim at enabling people to move away from being mere recipients of favours and doles; and client of patrons to being actors on their own in various life situations. Development is thus equated with the processes of empowerment of the people. People need to be helped to acquire ability, initiative, hope, success, readiness for taking calculated risk, sense of self-esteem and motivation for being challenged by quality performance.

Strategies for Meeting the HRD Challenges in the 21st Century:

India is a large country with a population of more than 970 million and only 62% of our people are literate. We have, therefore, a large number of illiterate people. This is a great shame and a burden for our country, especially, as we enter the 21st century; which is, bound to be even more technology oriented than at present. Technology, after all, is congealed knowledge and knowledge is in the brains of the people. Human resource is, therefore, the most important element in the age of technology and a lot of importance is now being accorded to the intellectual property rights. We can see that India faces a catch 22 situations in this context. It is rich in human resources, but at least 40% of those resources are lying totally unutilized in the sense we know today. The illiterate 40% of 388 million people may have conventional wisdom but what we need today in the age of technology is literacy and that is what we are lacking. Making our country 100% literate and making our people fit for the highly technology oriented economy that is emerging, is our first challenge.

Prof. Amartya Sen, the Nobel Laureate has also been emphasizing, for more than two decades, the importance of education. At last, perhaps globally, the time has come where education may be given its due importance.

The second important problem area relates to the issue of intellectual poverty rights. After all, technology develops by creativity and creativity leads to inventions; but, if the intellectual property rights are not protected, then, we are likely to not encourage lot of inventions. We must have a re-look at the way we have handled technology in the permit license 'raj'.

The third important aspect of the HRD in the 21st century is that in the age of technology and global competition, nobody can ensure lifetime employment. What is important is to have lifetime employability. This means that education and skill development do not stop once and for all when one leaves the portals of an educational institution. There must be opportunities for continuous self and skill improvement for every individual. This means that we will have to look at our entire training and education system to provide opportunities for every person to continuously improve his skills throughout his life. Learning should become a life long activity.

We, today, have three streams of education. These are the formal education system of schools, colleges and universities; the second stream of private commercially run self-financing institutions; and, a third stream of in company training. A fourth stream should be added. This should be the coming together of industry, banks and if possible, government, to come up with professional courses, which are industry focused and where the latest skills will be commercially determined, banks should be able to give loans to the students, so that, because of the acquired market value, after the course is completed and their employability; the loans can be repaid. A conscious development of the fourth stream of education is a challenge and opportunity in the HRD front so far as the 21st century is concerned.

A fourth important dimension of HRD challenge in the 21st century is the effectiveness of public services has to change. These days there is a lot of debate about better governance and also simple, motivated and technologically responsive governments. This would call for a change in the mindset of the people at large. In Andhra Pradesh, efforts are being made to bring in greater electronic governance. Use of IT may empower the public also because, there will be greater transparency in administration and it would give easy access to the public; of the government decisions and policy documents. It should also improve the velocity of transactions in government substantially.

The fifth are of problem and challenge in the 21st century would be gender issues. The women's reservation bill has been introduced. If this bill is passed, it is going to provide greater opportunities for empowerment of women. Already, thanks to 73rd and 74th amendments of the constitution; 30% representation of women has been introduced in Panchayats and municipalities. If this is further extended, the political empowerment of women may also turn out to be the starting point for empowerment of women in terms of better education, employment and economic independence.

The challenges before our country on the HRD front as we enter the 21st century are enormous. We will be able to use the old technique of *Rig Veda* and the *Taitreya Upnishad* to develop solutions. The *Rig-Veda* advises that we should be open to all ideas. *Aano bhadrah kritavo yantu vishwatah.* The *Taitreya Upnishad* says how we should come together, enjoy together, let the strengths of our minds come together, let our intellect shine and remove the poison of misunderstanding or hatred. That way lies progress.

Integrated HRD Approach for a World Class Organization:

In the context of the sea changes in the organizations triggered by a new economic policy, technology up gradation and globalization, the emphasis is moving from traditional subsystems to newer areas like quality management, organizations right sizing, strategic business partnership, business process re-engineering, etc. Some of the emerging questions and challenges faced by HR to cope with the changes are:

- What are the people implications of the organizations' strategic objectives?
- In what way does HR directly impact on the organization's customers and suppliers?
- How can HR contribute directly to business improvement?
- What are the obstacles inhibiting HR from improving its contribution to the business?
- What is the biggest challenge for HR?

In India, the situation in the industry as we are approaching the Year 2000 is not particularly optimistic. Growth is expected to fall short of the expected levels of 6% by 1 to 1.5%. Fiscal deficit in the year 1998-99 is estimated at 6% and the trade deficit is estimated to go up from $7 billion in 1997-98 to $8 billion in 1998-99. These are mere figures but in reality, the industry is not performing as well as it was expected. Consumption has not grown to the extent we believed it would. The government is frantically trying to mobilize funds to meet its current expenditures such as salaries of government employees and to finance the much needed infrastructure projects. The industry is reeling under a low demand growth, trying to keep its head above water with cost reduction measures including manpower rationalization. Only a few industries such as software, housing finance, pharmaceuticals, etc. are doing well but most of them do not offer substantial employment opportunities and in any case, not to the neediest. We must remember that in a developing economy the occupational structure of the population drives people to the secondary sector rather than dispersing it to the tertiary sector. We must also remember that we are discussing about only 25% of the population in the working age group of 18 to 58 years who are employed in the organized sector. The balance is either employed in agriculture or in the unorganized sector. Thus the 21st century is fraught with uncertainties and challenges for the industry:

- Resources such as water, power, electricity, etc. are becoming scare and costlier.
- Stiff measures and which are necessary to be imposed cannot be enforced because of want of popular support.
- There is much more concern for the environment and ecology, but little action.
- All round competition, both from domestic and international companies.
- Customers are becoming more demanding, more quality conscious and price sensitive.
- Communication is becoming speedier and there is an equivalent pressure on organizations.

All the above are driving the industry to adapt and progress in certain new directions. These directions are:

- Productivity, rather than production *per se*, is becoming the concern.
- We are moving from efficiency to effectiveness.
- It is becoming necessary to add value not only to product and business but also to employees.
- Softer sides of HR Management such as community relations and safety in the workplace are assuming greater significance; and
- Finally, as a result of all these, demands on functions such as Human Resources Management are also increasing. These functions are being asked to *enable* the business to fulfill its objectives and if they cannot do so, they are *liable to be discarded.*

Empowerment of people : An HRD Challenge in the 21st Century:

The national agenda for Human Resource Development (HRD) is vital for nation building. Human Resource Development is either understood as an approach, a perspective or a programme (planned and systematic way of developing human resources) with definite expected outcome. T.V.Rao (1990:8) defines HRD as "a continuous process to ensure the development of employee competencies, dynamism, motivation and effectiveness in a systematic and planned way".

In the context of this perspective, we may say that to enhance people's capabilities and capacities is part of HRD. The process of HRD is comparatively easier among those who 'have' (at least the basic) - health, wealth and shelter, than those who 'have-not". The challenge for HRD in the 21st Century is to develop the human resources at the grass roots. These resources consist of the unorganized landless farm labourers, the daily wage earners in the slums, rural areas, industrial labour, the marginalized, the oppressed and the women across these groups/communities. "HRD in organizational setting is a phenomenon of the last one or two decades" (Rao 1990:4) especially in public and private sectors. One tends to think of HRD only in terms of HRD Department, HRD manager, HRD Programmes, HRD organizations and that too in the profit-making sector.

The not-for-profit sector (Voluntary Organizations and NGOs), which is involved in 'HRD' in their work of development of the marginalized and the oppressed communities. A number of these organizations are involved in enabling them to acquire liberty, equality and fraternity which Dr. Ambedkar believed are "essential for full blossom of the personality of every person - socially, intellectually and politically - to integrate the people in united Bharat" (Ramaswamy 1998:45). The word HRD may be unknown to a good number of NGOs and Voluntary Organizations (Vos). These organization shows that the nature of most their work is either human resource development or related to it.

Human resource development as seen in a wider perspective and in the context of the nature of work the NGOs and VOs do with various communities may be broadly defined as empowerment. In the voluntary and NGO circles the word 'empowerment of people' is constantly used. Empowerment of people is now understood as a new approach to development, different from the charity/ welfare and community development approaches. To some extent it has become a cliché - to attract funds and/ or justify NGOs' existence. The usage of the term 'empowerment' as a mere jargon dilutes the meaning of the term and discredits those Voluntary Organizations / NGOs who are genuinely committed to empowerment of the powerless, the marginalized, the tribals, the *dalits* and women.

Changes for the Millennium:

The next millennium will present a picture, where we will talk of a global market rather than national market; and mass customization rather than mass market. We will see an economy where there will be a relatively higher contribution of the services industry than manufacturing industry, which in turn will be higher than agriculture industry. We have already seen the change in technology from atoms to bits. We will probably see more growth in technology on human engineering. This will have implications on HR Management. Some of these implications being:

1. Workplace will have more percentage of knowledge workers, who will have global market for their knowledge.
2. Cost of talent will be decided by the global market.
3. Talent and not capital, will be a scare resource.
4. Mobility of talent will increase.

Organizations will have to understand, use, develop and stretch talent to be able to succeed in the global context. This will be hard work and offer a real challenge to HR professionals, as current HR policies, which have been based on the assumption of easy availability of talent, will become outdated. Shortage of talent will make it obligatory for companies to spot talent in the organization; and spend time and money to develop such talent. One will have to continuously provide growth, to be able to retain talent. In spite of all this, there will be issues of having quick replacements and HR professionals will not find answer to these issues, based on their learning of yesterday. They will have to evolve a new understanding.

Re-engineering HRD for competitive Advantage:
(The HRD Scorecard Approach)

Human Resources Development has come to focus, both at the corporate level and national level, now more than ever before. Earlier research studies, at national level also, have demonstrated that investments in Human Resources Development is linked to economic development of nations (see Rao, 1996 for a review of the linkages between Human Resources and Economic Development). Yet, in spite of the realization, the stock value of the HRD professionals in India has not gone up at the same rate, at which it has gone up five years ago and immediately after the liberalization of Indian Economy are two fold: India did not have competent HR professionals, who can orchestrate, align HRM and HRD practices to the business goals of corporations. Most of the good HR professionals are busy implementing HR systems, irrespective of their relevance or contribution to business goals. A few others are simply not competent, either because they did not have the adequate professional preparation, or because their corporation did not know how to use them. In any case there is a great opportunity for HR to influence corporate success, now more than ever before. Simply, because, the chance factors that can influence the economic success of any company are increasingly getting reduced in India and the effort and ability factors are on the increase. The Indian corporate sector will be left with no alternative, but to invest on competence building and building of human capital.

Corporations cannot afford to begin all over again. Some of them are loaded with HR staff, sizeable HR departments and a number of HRD systems and practices. There are three alternatives left for the Indian corporate sector, viz.:

1. Downsize the HR departments and outsource a number of HR services.
2. Redefine, Realign and Reorient HR Role, HRD systems and practices to suit business goals.
3. Continue with status quo.

The HRD Scorecard Approach:

The HRD Scorecard approach is intended to measure the HRD maturity level of an organization and enhance the sensitivity of an organization, as indicated by the following factors:

- HRD Systems Maturity
- HRD competencies of the Employees including the HR Department
- HRD Culture of the Organization
- HRD influence on the Business Goals or Business Linkages of HRD

The HRD scorecard approach is based on the following assumptions:

- Competent and motivated employees are needed to provide quality products and services at competitive rates and in ways that enhance customer satisfaction.
- Competencies and commitment are be developed through appropriate HRD mechanisms (tools and systems). In a HRD mature organization there will be well developed HRD systems and the maturity of HRD systems can be measured through HRD audit (HRD Systems Maturity Score SMS).
- HRD competencies of HRD department and the line managers play a significant role in implementing the systems and processes in ways that could ensure employee satisfaction, competence building and customer satisfaction linkages. The competencies of the HRD staff and other

employees can be measured in terms of an index. (HRD Competence Score CYS).

- The HRD culture, values and processes created by the HRD tools, staff and their styles also play a crucial role in building sustainable competencies in the organization. These need to be measured and monitored. It is possible in some corporations (for example small corporations) to have very little of HR systems and yet have a high level of HR competencies and HR culture. Traditional, family owned organizations, in those years where there were no systems approaches, used to have a good degree of HRD culture, which has resulted in effective functioning and business. The HRD culture needs to be measured and valued (HRD Culture and Values Score - CVS).
- Business linkages of HRD are a very crucial component of HRD effectiveness. HRD systems, competencies and the culture must be aligned with the business goals of the corporation. The alignment could be ensured through direct linkages with customer satisfaction and employee motivation indices (Business Linkage Score - BLS).

These four indices consist of the four pillars of HRD effectiveness. All the four dimensions are assessed using a 10 - point rating system.

The 10-point rating scale has been represented below:

A* Highest Score and Highest Maturity Level

A Very High Maturity Level

B* High Maturity Level

B Moderately High Maturity Level

C* Moderate Maturity Level

C Moderately Low Maturity Level

D* Low Maturity Level

D Very Low Maturity Level

F Not at all Present

U Ungraded

The rationale of scoring is explained in the subsequent sections of this paper. The scorecard may read like the following:

Illustrative Scorecard				
Name of Organization		XYZ		
HRD systems Maturity Grade	HRD Competence Score	HRD Culture Grade	Business Linkage Grade	Overall HRD Maturity rating
A*	A*	B*	C	A*A*B*C

HRD Systems Maturity:

The letters represent the four critical dimensions of HRD that contribute to business performance or organizational performance (for non-profit organizations). These four dimensions include:

- HRD System Maturity
- HRD Competencies in the Company
- HRD Culture and Values
- Business Linkages with HRD

The HRD system's maturity assesses the extent to which various HRD subsystems and tools are well designed and are being implemented.

- First the systems should be appropriate and relevant to business goals or organizational goals.
- Second they should focus on, as well as balance between current and future needs of the corporation.
- Third the HRD strategies and systems should flow from the corporate strategies.
- Fourth the systems should be well designed and should have a structural maturity.
- Fifth the systems should be implemented well. The employees should be taking them seriously and follow meticulously what has been envisaged in each system. The overheads of implements should be

low. That is, the monitoring requirements should be less, arising out of the employees taking them seriously.

- Sixth the subsystems should be well integrated and should have internal synergy.
- Seventh they should be adequate and should take care of the HRD requirements of the organization.

The following subsystems are assessed on the above criteria and depending upon the extent to which they meet the requirements a score is assigned.

- Manpower planning and recruitment
- Performance management systems
- Feedback and coaching mechanisms
- Training
- Career development and succession planning
- Job-rotation
- OD interventions
- HR information systems
- Worker development methods and systems
- Potential appraisal and development
- Other subsystems, if any.

The variables studied are

KNOWLEDGE OF EMPLOYEES :

If thought generate knowledge, the evedo of tomorrow' s corpoun is clear. It knows and therefore, it is. But knowledge of today's and tomorrow's business enterprise is not the understanding of the unchanging, as Plato thought it was. It is not the perception of agreement and disagreement between 2 ideas. It is actually a combination of know-what, know-why and know-how as embedded in the consciousness of the only entity capable of producing and processing it.

According to Ducker "knowledge is the only meaningful resource today". Crucially the people who will bring knowledge into the country's corporation will be representation of the new individualism now becoming conspicuous in India as it has done in different global economics over the last decade.

Knowledge = competitive edge, just where then can a corporation hope to get an edge over its rivals. The answers are innovations in the market, originality in the services and a deep understanding of customer needs that goes beyond the articulated wishes. Increasingly the real value addition is knowledge, as we move towards a knowledge based society, organizations that have a varied class ambitions will need to nurture knowledge workers. The knowledge pool of each of these people will play a momentous role in an organization making them more important for you than they have ever been. In terms of HRD one should have knowledge about HRD philosophy policies, practices and systems, performance appraisal systems, and practices, potential appraisals, career planning, developing systems and practices, organizational diagnosis, learning theories and training methods and systems.

Besides this one should also have the knowledge to understand the organizations, how they are structured and how they function, understanding of group dynamics and group functioning and link between organizational goals, plans, policies, strategies, structure, technology systems, people management systems, styles etc.

Should also have the knowledge to know the power dynamics, networks in the organizations, organizational plans, manpower and competency requirements, social science research methods, job-analysis, job-enrichment, job-redesign, job-evaluation, role analysis techniques, rewards , behaviour modifications and attitude change methods, quality circles, recent development in management systems, personality theories and measurement.

In the knowledge economy of tomorrow the learning organizations alone will survive. For only is abilities to learn, create, codify and utilize knowledge faster than its rivals and quicker than the environment changes will provide tomorrow's organization a competitive advantage that is eternally sustainable. Since the core competence of any organization is nothing but the individual and collective learning of all its people and the value chain it creates. Preview therefore the postmodern organization that must now be redefined as a complex economic institution in which thinking, learning and knowledge creation takes place, constantly generating ideas that will permit the transformation of knowledge by its people.

Knowledge Management Architecture:

Organisations across the globe have invested considerably in collecting and using information. Due to the information revolution, this has failed to provide and competitive advantage, forcing firms to shift to managing knowledge rather than just information. For an organisation to derive competitive advantage from this knowledge residing in individuals through its systems and procedures, institutionalise individual knowledge into organizational knowledge, and use this organizational knowledge into adding value in its business propositions.

In the current business context across the globe, organizational knowledge is recognized as a significant source of competitive advantage. Information about products and services, vendors and suppliers, customers and competitors did exit within organizations both in explicit and tacit forms for a long time. Organizations have interested considerable effort and energy to collect and use information. Due to the information revolution, the possession of such information has ceased to provide the requisite competitive advantage as it used to in the not-so-far past. What significantly adds value and contributes competitive advantage in the information and technology age is the ability to manage "knowledge" within the organization.

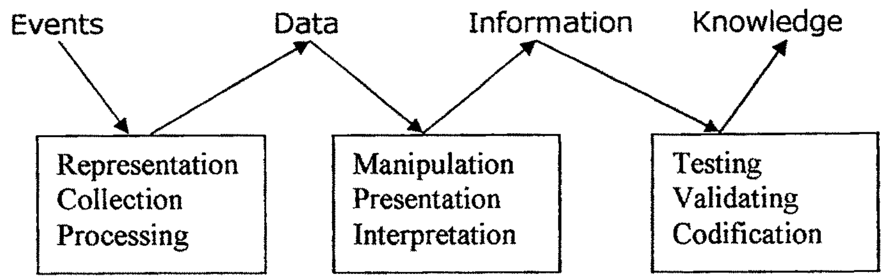


Fig. 1 Towards Conceptualising Knowledge (Source : Earl 1997:7)

One of the main concerns in the conceptualisation of knowledge is the definition of knowledge, and how it is differentiated from data and information, experience and expertise. "Data is a set of discrete, objective facts about events. In an organizational context, data is .... Describe as structured records of transactions" (Davenport and Prusak, 1998: 2). When this data is manipulated, interpreted, and presented in a form that aids decision-making and operations, it becomes information. Knowledge is differentiated from information in the same way information is differentiated from data: Organizational knowledge is defined as "processed information embedded in routines and processes which enable action" (Myers, 1996: 2). The progression from events to knowledge is represented in Fig.1. Experience on the other hand, refers to the past. It might be just a collection of events. This experience added with the application of knowledge for value creation creates expertise.

Types of Knowledge:

Nonaka and Takeuchi (1995) differentiate two types of knowledge, i.e. tacit and explicit knowledge. Tacit knowledge is "something not easily visible and expressible. Tacit knowledge is highly personal and is difficult to formalize, making it difficult to communicate or to share with others. Subjective insights, intuitions, and hunches fall into this category of knowledge. Furthermore, tacit knowledge is deeply rooted in an individuals' action and experience, as well as in the ideals, values, or emotionic he or she embraces" (Nonaka and Takeuchi, 1995:8). Further, they identify two dimensions of tacit knowledge – technical dimension, consisting of informal skills and crafts that are hard to document, and the cognitive dimension, that encompasses schemata, mental models, beliefs, and perceptions that are so ingrained in people that they are actually taken for granted.

Polanyi (1966) recognizes three dimensions of tacit knowledge- functional, phenomenal, and semantic. The functional dimension deals with issues like generating decision-making and inference rules. The decisions and inferences are drawn without an explicit awareness of the underlying logic and process of these decisions. Kolb (1984) has identified four stages of a learning cycle (see figure 2). The cycle consists of concrete experience, reflective observation, abstract conceptualisation, and active experiment.

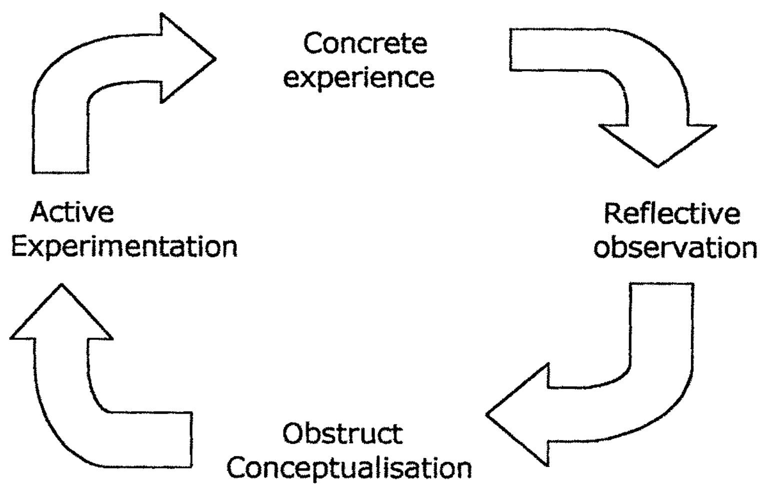


Fig. 2 Kolb's Cycle (Source : Knowledge Management Architecture, A.Shukla & R. Shrinivasan)

The progression from events to data, information, and knowledge (as described in Figure1) bears a similar transition. This knowledge leads to another set of concrete experiences, and the cycle moves on. This cycle is what we call the 'knowledge cycle" (refer Fig. 3)

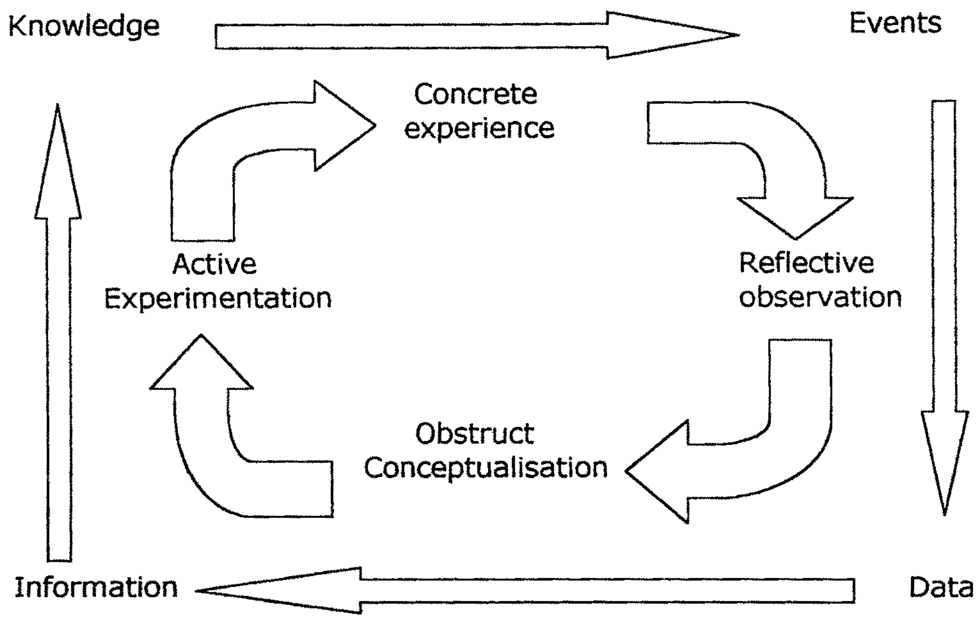


Fig. 3 Knowledge Cycle (Source : Knowledge Management Architecture, A.Shukla & R. Shrinivasan)

The similarity in the way the four dimensions of tacit knowledge is represented and the knowledge cycle can be seen. Fig. 4 presents the "tacit knowledge cycle".

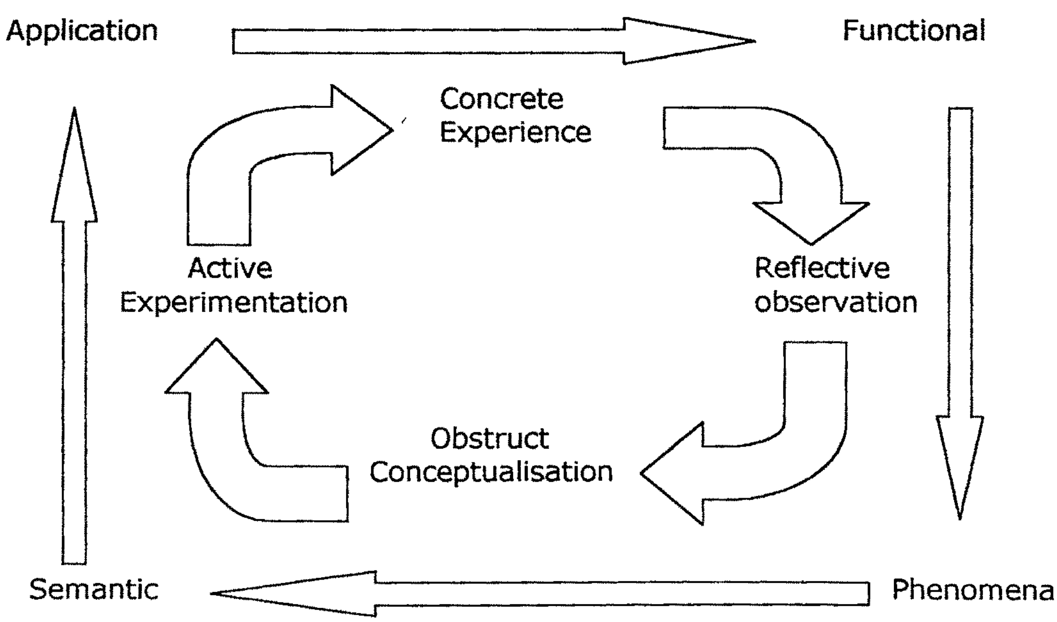


Fig. 4 Tacit Knowledge Cycle (Source : Knowledge Management Architecture, A.Shukla & R. Shrinivasan)

We need to recognize that tacit and explicit forms of knowledge are not two ends of a continuum. The spectrum of knowledge management across tacit and explicit dimensions is drawn in the Fig. 5.

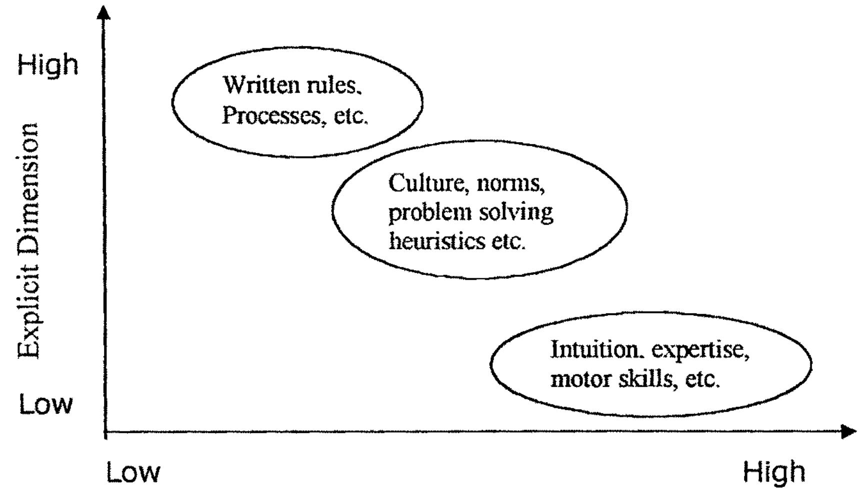


Fig. 5 Knowledge Spectrum Cycle (Source : Knowledge Management Architecture, A.Shukla & R. Shrinivasan)

Modes of Knowledge Conversion:

Nonaka and Takeuchi (1995) have identified four modes of knowledge conversion within organizations - from tacit to tacit, tacit to explicitly, explicit to tacit, and from explicit to explicit knowledge (see fig.6)

	To Tacit knowledge	explicit knowledge
From Tacit knowledge	Socialization	Externalization
Explicit knowledge	Internalization	Combination

Fig. 6 Four modes of knowledge conversion (Source : Nonaka and Takeuchi (1995 : 62)

Sharing of tacit knowledge across individuals in an organization occurs through a process of socialization, where new individuals to the organizational context learn from their peers who are more experienced in the system. The experience sharing is more implicit, where there is learning by observation. Whereas explicit knowledge within an organization is shared through published documentation, rules, procedures, and the like. The most important is the conversion of tacit knowledge to explicit knowledge and vice versa. The processes of externalisation and internalisation describe these knowledge transfers from tacit to explicit and explicit to tacit knowledge.

The Field of Knowledge Management:

Knowledge management is the explicit and systematic management of vital knowledge in the organization and the associated processes of creating, gathering, organization, diffusion, use and exploitation. It requires turning personal knowledge into organizational knowledge that can be widely shared throughout the organization and appropriately applied. The basic premise on which knowledge management is built is the recognition that organizational knowledge resides in the minds of individuals, both within and outside the organization. And it requires explicit and systematic measures to extract this knowledge for organization use.

The specific steps in a knowledge management programme are:

1. Specifying knowledge goals – defining why we need this knowledge?
2. Knowledge identification – what is this knowledge that we are seeking?
3. Knowledge acquisition – collecting the knowledge that we seek, including sources of knowledge.
4. Knowledge development – processing and representation of the acquired knowledge.
5. Knowledge transfer – across individuals, from individuals to organization, from organization to individuals, and across organizations.
6. Knowledge application – the utilization of this knowledge generated for value addition.
7. Knowledge preservation – the shortage of knowledge within the organization.
8. Knowledge assessment – the evaluation of the implementation for feedback.

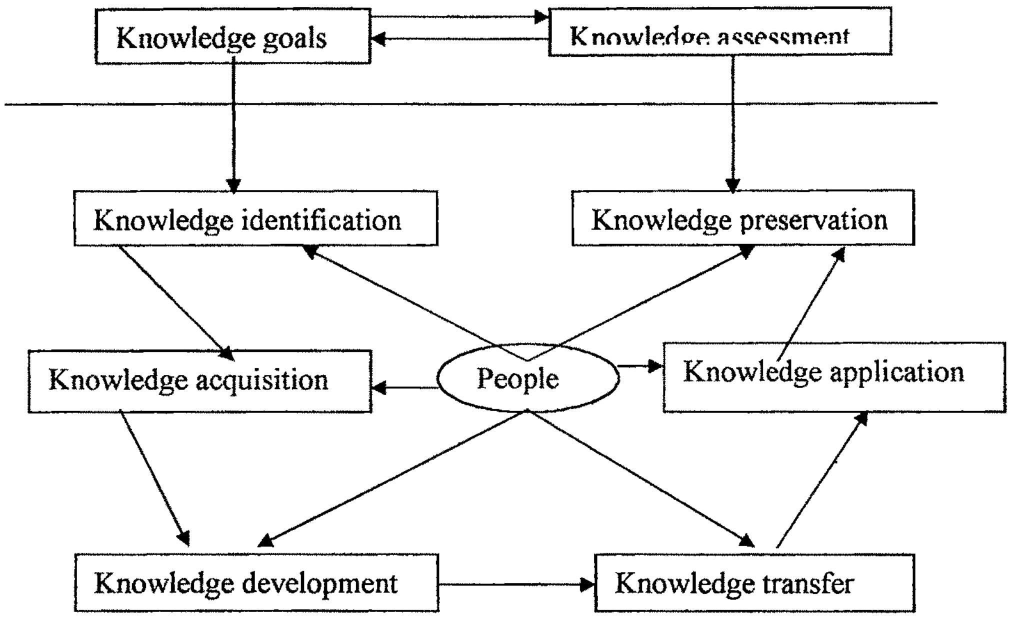


Fig. 7 Knowledge Management Functions (Source : Knowledge Management Architecture, A.Shukla & R. Shrinivasan)

Role of HRD in Knowledge Management:

Almost anything that a firm does in managing knowledge will be a step forward.

Thomas H. Davenport, 1997

Knowledge has been defined by many in many ways, from 'what is known' to 'what provides insight'. It can be categorized in many ways. Popular taxonomies include tacit and explicit knowledge, general and specific knowledge, individual and collective knowledge. They also include declarative (knowledge about), procedural (know-how), causal (know-why), conditional (know-when) and relational (know-with) (Zack, 1999).

Knowledge management (KM) is defined as the process of identifying/creating, and applying knowledge to enhance organizational performance (Bassi, 1997; Lank, 1997).
Explicit Knowledge is the knowledge that can be expressed in words and numbers and shared in the forms of data, formulae, specifications, manuals, and the like; while Tacit Knowledge includes subjective insights, intuitions, and hunches. Tacit knowledge is highly personal and hard to formalize, thus, difficult to communicate or share with others. It is deeply rooted in an individual's actions and experience as well as the ideals, values, or emotions of the individual. Tacit knowledge has two dimensions, (i) the Technical Dimension, such as personal skills, crafts etc. largely known as the know-how and (ii) Cognitive Dimension, consisting of beliefs, values, ideals, schemata, and mental models which are deeply ingrained in us and are often taken for granted (Nonaka, 1991).

Role of HRD in Knowledge Management:

The role of HRD in knowledge management is two-fold. At one level, HRD has a key role in promoting a knowledge-friendly culture in the organization to facilitate the effective implementation of knowledge management initiatives. This role calls for reorientation of HRD systems, creating human systems for knowledge management, etc. At another level, it has to perform various activities in consonance with the steps in implementing knowledge management initiatives. This role envisages HRD to play the role of team players supporting the knowledge management efforts.

HRD for Knowledge Management:

HRD activities that must be performed for facilitating effective implementation of knowledge management can be broadly grouped and categorized into (a) creation of knowledge roles, (b) creation of human systems for knowledge management, (c) promoting knowledge-friendly culture, and (d) reorienting HRD systems to facilitate knowledge management.

Creating Knowledge Roles:

Knowledge management requires knowledge managers to perform activities such as collecting and categorizing knowledge, establishing the use of knowledge (Devenport, 1997). HRD function must create the roles that are needed to implement and support knowledge management initiatives.

Box 4 Knowledge Roles

Activity	Indicative Roles
Knowledge Creation/Capture/Refining	Knowledge Reporters (HP) Knowledge Editors (HP/Monsanto) Knowledge Integration Manager (KPMG) Practice Co-ordinators (McKinsey) Knowledge Master (KPMG) Knowledge Managers (Arthur Anderson)
Knowledge Storage/ Retrieval	Web Librarian (KPMG) Web Master (KPMG) Knowledge Network Coordinators (E&Y) Database Content Manager (E&Y)
Knowledge Dissemination	Knowledge Champion (KPMG) Knowledge Steward (Teltech/Monsanto/E&Y) Knowledge Cross-Pollinator (Monsanto)

Source : Role of HRD in Knowledge Management, S.R. Kandula & Haribapuji, Tata Mc-Graw-Hill

Role of HRD in Implementing Knowledge:

Management Initiatives:

Implementation of knowledge management initiatives requires the participation of technical experts, functional experts, HRD, and more importantly, knowledge managers who must lead them. McDermott (1999) states that heart of the knowledge revolution is not the electronic links common in every office. Although knowledge revolution is inspired by new information systems, it takes human systems to realize it, because knowledge involves thinking with information. Effective management of knowledge requires hybrid solutions of technology and people, says Davenport (1997) while Ruggels (1998) emphasizes the importance of getting the approximately 50/25/25 people / process / technology right for succeeding in knowledge management efforts. It is, therefore, important that HRD plays its role in consonance with various steps in knowledge management.

Box 5 Role of HRD in Knowledge Management

Steps in Knowledge Management	Role of HRD Function
Understand the context of organization Drivers and constraints (both internal and external	
	Inputs on the context, both internal and External
Develop a Knowledge Strategy Makes knowledge-based SWOT Analysis by mapping the knowledge capabilities against strategic opportunities and threats.	
	Inputs on knowledge capabilities of the organization.
Define knowledge and decide what Knowledge is relevant Identify the knowledge relevant to the knowledge strategy. Identify the sources of Knowledge internal and external sources of relevant knowledge.	Inputs for defining knowledge and relevant knowledge.
	Inputs on knowledge sources, i.e. subject Experts.
Develop Organizational Architecture Systems, roles and infrastructure needed to implement and support KM initiatives.	Involve insetting up teams/ centers for KM Create KM roles (CKO, Knowledge Champions, etc.)

Develop Technical Architecture Technical Infrastructure, (intranet, shareware, etc.) And technical roles (intranet administrators, Database administrators, etc.)	
	Inputs on human dimension of technology, Such as information sharing behaviour.
Create technical roles (Database Administrators, Intranet Administrators, etc.) Set up Systems for Knowledge Management - for knowledge creation/capture, storage/ retrieval, and dissemination Systems (both human and technical) to capture, store/ retrieve, and disseminate knowledge.	
	Create context for knowledge creation (communities of practice, interest groups, project debriefings) Create roles for knowledge creation (Captors, Refiners, Editors) Create systems for knowledge retrieval (On- line help, call center, etc.) Create roles for knowledge storage/ retrieval (Librarians)

Source : Role of HRD in Knowledge Management, S.R. Kandula & Haribapuji, TataMc-Graw-Hill

SKILLS OF THE EMPLOYEES :

The ability to influence (communication, persuasive, assertive, inspirational and such other skills needed to influence) the top management and line managers and to articulate the HRD philosophy, values, and design HRD systems, have a flair for communication, for instance the ability to communicate views, opinions, observations and suggestions clearly to make the impact. Skills to monitor, the implementation of HRD systems (designing questionnaires, gathering data, getting feedback and persuasion) have the interpersonal sensitivity, an ability to give and receive feedback, should be good at counseling interviewing, building rapport, probing and exploring and be equally deft at sorting out the conflicts, to rouse the latent skills of the employees' by coming up with new ideas and alternatives, have an excellent problem solving skills and design human resource information system appraisal systems, manpower inventory etc.) and be good at task analysis, job analysis and organizational diagnosis.

ATTITUDES AND VALUES OF THE EMPLOYEES :

Some of the our attitudes are based on first hand information, this fact is so obvious that we may be led to believe that information provides the basis of all of our attitudes. The attitudes adopted are likely to be those to which the person is exposed. "An attitude is a mental and newal state of readiness, exerting a directive or dynamic influence upon the individuals response to all objects and situation with which it is related". The attitude behaviour always involve feelings and emotions. The values we attach to things and ideas influence our attitudes with respect to those things and ideas. Values concern preferences for life goals and ways of life in contrast to interest which concern preferences for the particular activities.

Value is defined as "which is desirable to a person when a value arrives in interaction with others and is socially conditioned it is called a want". An individual's set of values of his value scheme refers to the presuppositions by which he lives and the intentions which direct his actions along one dimensions of behaviour rather than another. Value has a strong motivational character since they resemble wants and needs. Such as empathy and understanding; positive and helpful attitudes towards others, faith in people and their competencies, introspective nature (a tendency to reflect upon one's strength, and weakness): openness (open to other's suggestions) interpersonal trust and trust worthiness, respect for others; responsibility; sense of fairness (constant desire for objectivity); self-discipline (a desire to set an example); honesty; the desire to experiment and eagerness to learn; tendency to treat every experience as an opportunity to learn perseverance (not giving up easily in the event of difficulties); work motivation (a desire to work hard for the organization); super ordination and an empowering attitudes (a tendency to respect others and willingness to empower them and not being egocentric).

Reorienting HR to high added-value:

There is an apparent paradox, which prevents some HR functions from making strategic contributions. If the basic HR processes such as administrative activities are not in good order, especially on sensitive issues such as executive pay, no strategic contribution is likely to be considered of value until the administrative problem has been fixed. If the problems recur, the credibility of HR teams can be at stake. It is understandable then that many HR teams concentrate on delivering the core processes right without attempting to be proactive with regard to strategy. Perversely, HR teams, which concentrate on administration tend to be criticized as being 'reactive' and are regarded as a cost. Processing paperwork, addressing employee concerns and administering personnel policies are time-consuming and energy-hungry. Since a key aim of HR teams must be to improve cost efficiency, business competitiveness and customer service (Ulrich et al., 1995) the paradox must be resolved. One way of resolving the paradox is by taking good care of routine HR responsibilities through information technology so that HR departments can concentrate on high value-added activities. This means reorienting the HR team to a more strategic approach.

What HR can be valued for and should build on:

The skills of the HR specialists are key to the effective development and implementation of people strategies. Similarly, HR practitioners can and do adopt a range of roles, variously described as strategist, mentor, talent scout, architect, builder, facilitator, coordinator, champion of change. The art is to have the flexibility and awareness of what is needed in different situations. Many is the HR strategist who takes up a new role in an organization which is apparently ripe for change but has deeply embedded practices which are difficult to shift.

The pragmatist works within this context to make change happen at the pace, which is likely to lead to the embedding of new approaches, rather than seeking to bring about widespread initiatives in order to make their mark.

First and foremost, professionals need to be credible, understanding the business of their organization and able to take appropriate risks. They need to be knowledgeable about HR processes and to monitor and measure effectiveness. More importantly, they need to be able to manage culture, recognizing what needs to be maintained, strengthened or changed, as well as to manage change.

Certain drivers for change are already starting to transform the employment landscape, reversing previous power balances between employers and employees. Globalization is highlighting the need for organizations to manage the development of talent as well as to manage knowledge in complex international networks. Technology and the rapid changes in working practices and skills requirements are enabling employees who are truly employable to command their price and dictate terms to their employers. While line management is responsible for the growth and survival of the business and its employees, HR as a function has potentially a key role to play in partnering the line to prepare their organizations for future challenges. This is where operational effectiveness has to be balanced by a strategic perspective.

This need for balance is demonstrated through one of the major thrusts of strategic thinking in recent years. Hamel and Prahalad's (1994) notion of the core competence of a firm suggests that firms should build their strategies to what they do best. Wayne Brockbank (1997), however, points out that this condemns a firm's strategic thinking to a short-term perspective given that the life span of knowledge is rapidly shrinking Brockbank argues that what counts are not the core technical competencies but the core cultural competencies:

The key core competence, however, is not what a firm does based on what is known, but is, rather, a firm having a culture which encourages flexibility, change, learning, creativity and adaptability to customers.

HR practitioners need to identify the future organization's needs through addressing questions such as:

- What will the competitive marketplace for the company's products, services and labour look like over the next five to ten years?
- What is the company's core competence, especially over the next three to five years?
- What kind of human resources will the organization need in order to compete successfully, or to continue to develop and provide high-quality services?
- What types of HR practices are relevant to building the organization needed for the future?

Adding value:

- Would you manage HR differently if your personal circumstances were impacted upon directly by bottom-line performance?
- What current organizational or managerial issues, if resolved, could result in substantial business improvement?
- Where do we add value? Proportionately how much time do we spend on value adding activities?
- What is the relationship between cost and value of the work we perform?
- What does our organization need from HR currently – and in the next few years?
- What changes could we make to increase the effectiveness of HR in our organization?

- How will we measure the success of reengineering efforts?
- How will we let people know?
- How should we structure HR to add value?
- What should be the ratio of HR to the line?

LEADERSHIP :

The successful organization has one major attribute that it sets apart from unsuccessful organizations is dynamic and effective leadership. Peter F. Drucker points out that managers are basic and scarest resource of any business enterprise. On all sides there is a continual search for persons who have the necessary ability to enable them to lead effectively. The shortage of effective leadership is not confined to business, but also in good education, foundation and churches and every other form of organization

According to Terry "leadership is the activity of influencing people to strive willingly for group objectives".

Tannenbaum, R. Weschler, and Massarik define leadership as "interpersonal influence exercised in a situation and directed through the communication process towards the attainment of a specialized goal or goals."

Koontz and O' Donnel has defined leadership as "influencing people to follow in the achievement of a common goal."

or

"is the process of influencing the activities of an individual or group in efforts towards goal achievement in a given situation."

For many years the most common approach to the study of leadership concentrated on leadership traits per se suggesting that there were certain characteristics such as physical energy or friend liners that were essential for effective leadership. These inherent personal qualities like intelligence were felt to be transferable from one situation to another. Since all *indi-*

vidual do not have these qualities as a result of which this approach seemed to question the value of training individual to assume leadership positions. Empirical studies suggest that leadership is a dynamic process, varying from situation to situation with changes in leaders followers and situations. The situational approach focuses on leadership is an observed behaviour and not on any hypothetical inborn or acquired ability or potential for leadership. The emphasis is on the behaviour of leaders and their group members and various situations. Therefore it is believed that most people can increase their effectiveness in leadership roles through education, training and development.

Leadership involves accomplishing goals with and through people. A leader must be concerned about tasks and human relationships. Chester I. Barnard identified these same leadership concerns in his classic work. The function of the executive in late 1930s. This leadership concerns seem to be a reflection of say the earliest schools of thought in organizational theory of scientific management and human relations.

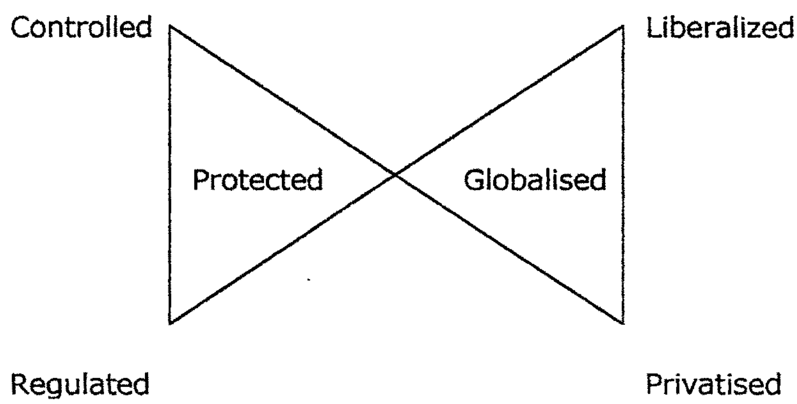
INDUSTRIAL RELATIONS

THE BACKGROUND :

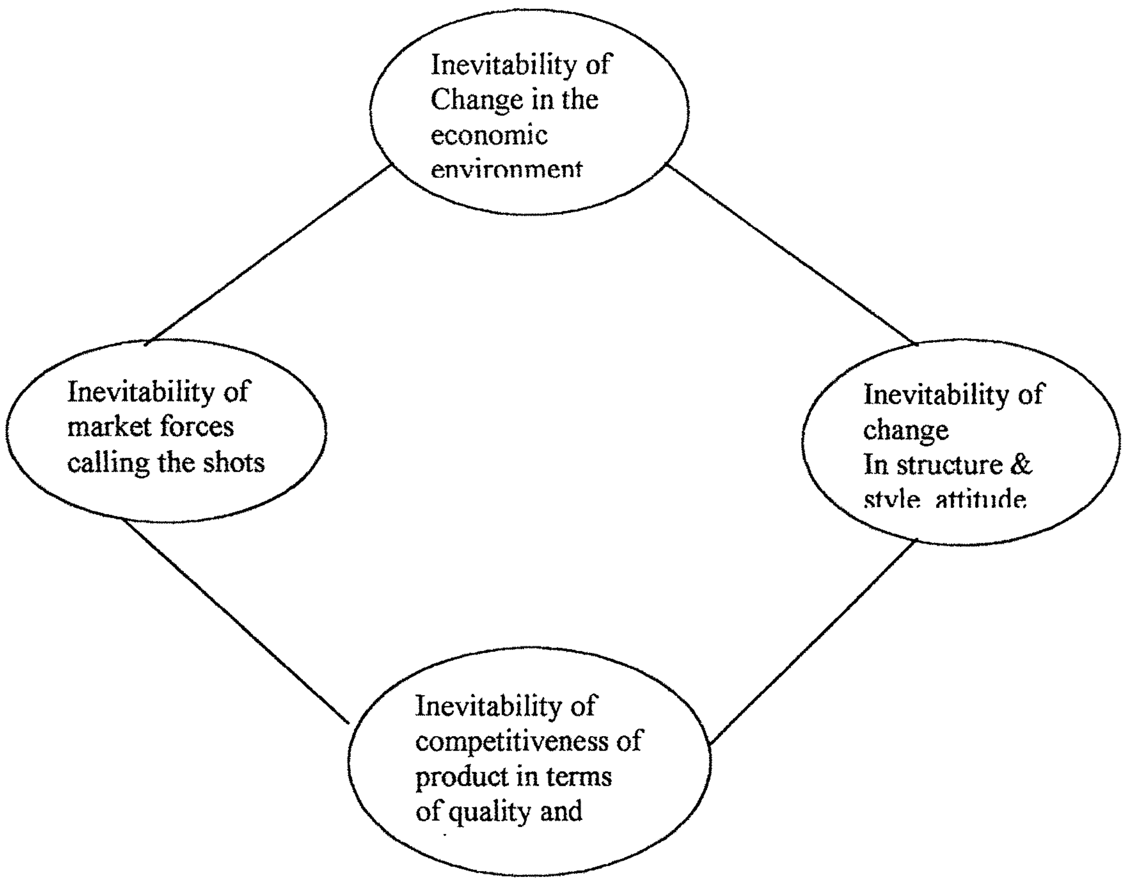
The year 1991 heralded for the entire Indian sub-continent changes that were unprecedented and unheard of the post independent India. To many crucial economic decisions were pushed through the Government by too few and too fast. Decisions that had the greatest ever impact on the social, economic, industrial, political, and even on the day-to-day life of the average Indian. There was the GREAT PARADIGM SHIFT as depicted in Figure -8. From a CRP-controlled, regulated & protected economy, India made a shift to the LPG liberal, privatized and global economy.

This paradigm shift had its greatest and most urgent impact on the Indian industry. All of a sudden it was shaken into wakefulness to face four hard realities of this shift.

THE GREAT PARADIGM SHIFT (FIGURE - 8)



THE VICIOUS CIRCLE OF HOBSON'S CHOICE (FIGURE -9)



Also there is no escape from the present state as illustrated by the vicious circle of Hobson's Choice Fig. 9.

They were :-

1. First generation competition
2. Second generation systems & procedures
3. Third generation technologies and technical know-how
4. Fourth generation mindset.

For long had the Indian industry enjoyed the parental affection of the Government under various pleas of socialism, welfare state, economic &

industrial development, etc. Now it had to fight for itself for its very survival against the global giants on its very own.

THE SIGNIFICANCE OF THE TOPIC :

Against this backdrop we can proceed to analyze the significance of this topic. Certainly, at the first glance the topic sounds as if the same thing has been told twice. However, it is not so with the winds of change sweeping across the length and breadth of our country, the IR situation cannot possibly remain a mute spectator to such nation wide transition. As Shakespeare writes in The Tempest,

"Nothing of him that doth fade,
But doth suffer a sea-change
Into something rich and strange,"

so it is but essential that the IR situation must adopt to the new industrial scenario. Here it is important to mention that "All approaches of analyzing Industrial Relations stem from the fact that there are two sections of people having divergent interests working for a common goal." The interaction of these two sections - Management and Trade Union - is better know as Industrial Relations. To resolve the conflict between these two parties, the third party - the Government - comes on the scene. Essentially, Industrial Relations is not the study of the presence or absence of conflict or co-operation, but the study of the parameters of conflict and co-operation. If the parameters of conflict and co-operation veer towards the ultimate goal of the organization then IR situation can be said to be healthy. The first half of the topic addresses itself to the question as to how far the IR partners have read the writings on the wall and how far they are prepared to give up their earlier stand in terms of the parameters of agreeability and disagreeability ? What does the current situation indicate on the future of IR in India ? If, by the current happenings in the IR scenario we discern that the IR partners are indeed in a process of making a departure from the past and are gradually gravitating towards a change in the role models played by them then what would be the form and content of the IR situation in the years to come ?

INDUSTRIAL RELATIONS IN FUTURE :

Dr. Amartya Sen and Dr. Jean Dreze in the last line of their recently published book "India Economic Development and Social opportunity" write, "The terms of debate must change." Now that the IR partners are in the vicious circle of Hobson's choice the change in the terms of debate is a forgone conclusion. This means the future of IR in India will necessarily be one of change and not stagnation. If that is so then, what could be the direction towards which IR in India will be heading ? Here, it is important to reiterate that when we talk of Industrial Relation in future, we do not mean the presence or absence of conflict and co-operation. What will be attempted is to identify the change in the terms of debate for the IR partners. What will be the issues that will arrest the attention of the IR partners ? This analysis is important because these issues will become the pivots on which the twin pillars of IR - co-operation and conflict - will revolve thus determining the course of IR in future. Figure 4 tries to do a predictive exercise in this direction. As is evident in the figure the LPG economy is a global economy wherein the customer has the right to choose between the alternative sources of product right through the globe. The CRP economy in which the producer made the laws of the market no longer exists. This forms the fundamental premise for the predictive exercise on the changing terms of debate for the IR partners.

At the outset there will be a marginalization of the role of the Government as an IR protagonist. Voluntarism will replace state intervention and control. The Government's main role in the IR front will be restricted to legislation and how to police the same technology will be replaced by an aggressive attitude to go high-tech. So as to lower the cost of production and gain the competitive edge - both in price and quality. This shift will certainly affect the long-service award syndrome that has its premises on the Bipartite talks and agreements will replaced tripartite talks and agreement. The role of government as mediator will be minimized. For the Management the focus of attention will shift from quantity of product to quality of product, least there is piling up in the stockyard. For this the importance of the production target will be replaced by the process of production. Today we are already hearing a lot about the ISO 9000 series of certifications. Another shift in the terms of debate will be in the price-profit front. Management will tailor the price of their product to the size of the pockets of their potential customers. The obsession with the concept of abnormal profits and windfall gains will be shown the backdoor. The habit of pushing the cost of production on to the customers will be no longer profitable for the producer. The producer will rather make an all out attempt to cut on the cost so as price the products at the most competitive rates. To properly price the product the technological maturity of the Managements will displace the compromise with technological up-gradation. The shyness to invest in loyalty of the employee Managements will prefer a skilled employee rather than a loyal one who is on the eve of skill obsolescence. The trade unions on their part will turn their focus of attention from the working conditions at the work place to the terms of employment. They will hammer more on the clauses of the appointment offer and may even advocate for the part-time concept of employment. With the specter of obsolescence on the horizon the attention of the trade unions will be more to secure appropriate training and empowerment techniques from the Management than to strive for the short term benefits of wages and welfare. The trade unions will be more concerned with the amount of opportunity available with the workers to upgrade their existing skill together with acquiring new ones. Consequently, the trade unions will find themselves fighting against obsolescence of their the industry's technological base, least the competitors take away the market from them. The fight against managerial mismanagement will be replaced by fight against technological obsolescence. Further, the unions will be more concerned with the survival of the business, because on it will depend their own survival. This may lead to single union concept and de-affiliation from the central Trade Unions. This will obviously lead to the shift from bargaining with employers to a situation where both the Management and the Trade Unions will jointly have to devise strategies to successfully bargain with the market forces. Efficiency and productivity will become the new and mutually agreed upon parameters in all bargaining between the parties.

The variables are :

- Indiscipline & action
- Labour Unrest
- Strikes & Lockouts
- Collective Bargaining
- Commitment to Production
- Union- Management Relationship
- Trust & Transparency
- External Forces

PRODUCTIVITY :

Productivity is a universal concept which reflects the relationship between output and input. It is doing the right things and also doing things rightly. It is a form of efficiency; effective utilization of resources; a ratio; a measure of some kind and a rate of return. Productivity is an on-going continuous process which seeks improvements in the way products and services are designed, manufactured, sold, used and maintained. Productivity is finding better ways to do the most with the resources an organization has. It is the process of creating conditions in which every employee - chief executive to peon-contributes towards improvements. Productivity becomes a way of life. Employee becomes a source of improvement rather than a mere resource for management. It emphasizes organizational productivity, long term gains and synergetic aspects. In the liberalized economy, several productivity agreements were concluded in Indian organizations. In India, industrial relations scenario shows a steady improvement in the last few years following economic reforms. Man-days lost due to strikes and lockouts declined significantly from 34.57 million in 1991-92 to 19.20 million in 1994-95 (Satya Raju, 1996).

COMPETITIVE ENVIRONMENT

Porter states, "The principal goal of a nation is to produce a higher and raising standard of living for its citizens. The ability to do so depends upon the productivity with which a nation's labour and capital are employed. The productivity of human resources determines employee wages; the productivity with which capital is employed determines the return it earns for its holders. A nation's standard of living depends on the capacity of its companies to achieve higher levels of productivity and to increase productivity overtime" (Porter, 1980).

The essence of formulating competitive strategy is relating to company and its environment. The five competitive forces - entry, threat of substitution, bargaining power of buyers, bargaining power of suppliers, and rivalry among current competitors - reflects the fact that competition in an industry goes well beyond the established players (Porter M.E., 1980). In coping with these competitive forces, there are three potentially successful generic strategic approaches to outperforming other firms in an industry; overall cost leadership; differentiation and focus. ILO reckons the role of productivity in socio-economic development as follows : First, productivity growth is essential for socio-economic development; Second productivity growth is a leading factor in raising the standard of living of workers; Third, productivity growth must generate additional resources for additional employment opportunities; Fourth, productivity growth is a common concern of government, the employer and the trade unions. As companies design strategies to meet the new realities of global competition, unions need to jettison their traditional passivity and start contributing to productivity, quality and flexibility. The four factors to be considered are training, work redesign, employee ownership and the new work force.

PRODUCTIVITY IMPROVEMENT FACTORS:

Productivity improvement is not just doing things better; more importantly, it is doing the right things better. Productivity improvement depends upon how successfully we identify and use the main factors of the socio-production system. It is important, in connection with this, to distinguish three main productivity factor groups:

- job-related;
- resource-related;
- environment-related.

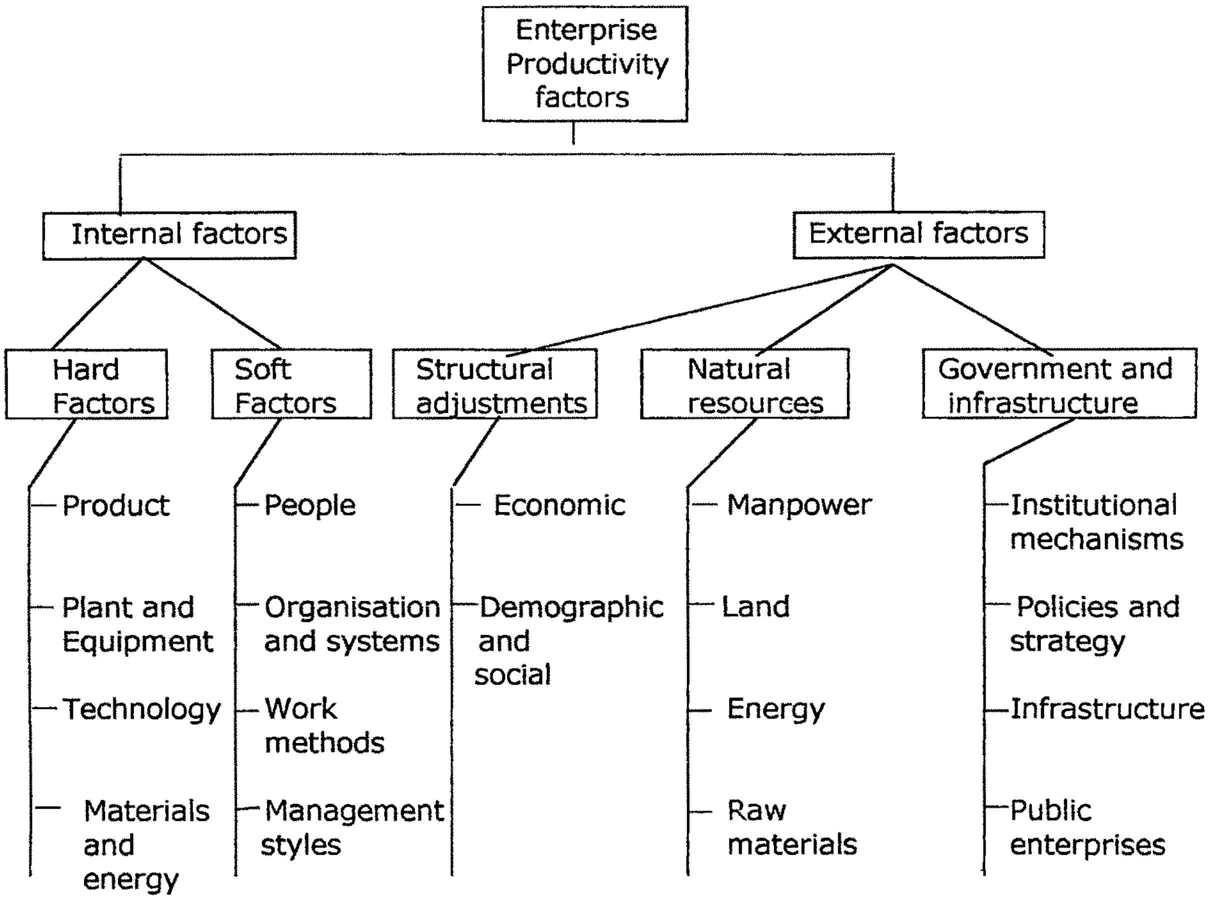
Since our main concern here is the economic analysis of managerial factors rather than productivity factors as such, we suggest a classification, which will help managers, distinguish those factors, which they can control. In this way, the number of factors to be analysed and influenced decreases dramatically. The classification suggested here is based on a paper by Mukherjee and Singh. Fig. 10.

There are two major categories of productivity factor:

- External (not controllable)
- Internal (Controllable).

The external factors are those, which are beyond the control of the individual enterprise, and the internal factors are those within its control.
Factors, which are external and not controllable for one institution, are often internal to another.

Figure: 10 An Integrated model of enterprise productivity factors.



Source : Adapted from S.K. Mukherjee and D. Singh, 1975, p. 93.

Internal factors of enterprise productivity:

Since some internal factors are more easily changed than others, it is useful to classify them into two groups: hard (not easily changed) and soft (easily changed). The hard factors include products, technology, equipment and raw materials, while the soft factors include the labour force, organizational systems and procedures, management styles and work methods. This classification helps us build priorities – which factors can easily be dealt with and which factors require stronger financial and organizational interventions.

Hard Factors:

Product:

Product factor productivity means the extent to which the product meets output requirements. "Use value" is the amount that the customer is prepared to pay for a product of given quality. "Use value" can be improved by better design and specifications.

Product "place value", "time value" and "price value" refer to the availability of the product at the right place, at the right time and at a reasonable price. The "volume factor" in particular gives us a better notion of the economies of scale through increased volume of production. Finally, the cost-benefit factor can be enhanced by increasing the benefit for the same cost or by reducing the cost for the same benefit.

Plant and equipment:

These play a central role in a productivity improvement programme through:

- good maintenance;
- operating the plant and equipment in optimum process conditions;
- increasing plant capacity by eliminating bottle-necks and by corrective measures;
- reducing idle time and making more effective use of available machines and plant capacities.

Plant and equipment productivity can be improved by attention to utilization, age, modernization, cost, investment, internally produced equipment, capacity maintenance and expansion, inventory control, production planning and control and so on.

Technology:

Technological innovation constitutes an important source of higher productivity. Increased volume of goods and services, quality improvement, new marketing methods, etc., can be achieved through increased automation and information technology. Automation can also improve materials handling, storage, communication systems and quality control.

During the past 25 years, considerable, productivity increases have been realized through the use of automation and current developments in information technology suggest great improvements to come. New technology is normally introduced as a result of such productivity improvement programmes as fighting obsolescence, process design, R & D and the training of scientists and engineers.

Materials and energy:

Even small efforts to reduce materials and energy consumption can bring remarkable results. These vital sources of productivity include raw materials and indirect materials, (process chemicals, lubricants, fuels, spare parts, engineering materials, packing materials). Important aspects of materials productivity include:

- material yield; output of useful product or energy per unit of material used. This is dependent upon selection of the right material, its quality, process control and control of rejects;
- use and control of wastage and scraping;
- upgrading of materials by initial processing to improve utilization in the main process;
- use of lower grade and cheaper materials;
- import substitution;
- improving inventory turnover ratio to release funds tied up in inventories for more productive uses;
- improved inventory management to avoid holding excessive stock;
- developing sources of supply.

Soft factors

People:

As the principal resource and the central factor in productivity improvement drives, the people in an organization all have a role to play – as workers, engineers, managers, entrepreneurs and trade union members. Each role has two aspects; application and effectiveness.

A set of values conducive to higher productivity should be developed in order to bring about changes in the attitude of managers, engineers and workers. Motivation is basic to all human behaviour and thus to efforts in productivity improvement. Material needs are still predominant, but this does not mean that non-financial incentives are not effective or have no place. Workers' success in increasing productivity should be reinforced immediately by rewards, not only in the form of money, but also by improving recognition, involvement and learning opportunities, and finally, by the complete elimination of negative rewards.

It is also possible to improve productivity by eliciting co-operation and participation from workers. Labour participation in goal setting, for example, has been quite successful in many countries. Human relations can be further improved by reducing the complexity of communications procedures and by minimizing conflicts. Labour productivity can be tapped only if management encourages workers to apply their creative talents by taking a special interest in their problems and by promoting a favourable social climate.

The second factor in the role played by the people involved in a productivity drive is effectiveness. Effectiveness is the extent to which the application of human effort brings the desired results in output and quality. It is a function of method, technique, personal skill, knowledge, attitude and aptitude – the "ability to do".

Organisation and systems:

The well-known principles of good organization such as unity of command, delegation and span of control are intended to provide for specialization and division of work and co-ordination within the enterprise. An organization needs to be dynamically operated and led towards objectives and must be maintained, serviced and recognized from time to time to meet new objectives.

One reason for low productivity of many organizations is their rigidity. They fail to anticipate and respond to market changes, ignore new capacities in the labour force, new developments in technology and other external (environmental) factors. Rigid organizations lack good horizontal communication. This slows down decision-making and inhibits delegation of authority close to the point of action, encouraging inefficiency and bureaucracy.

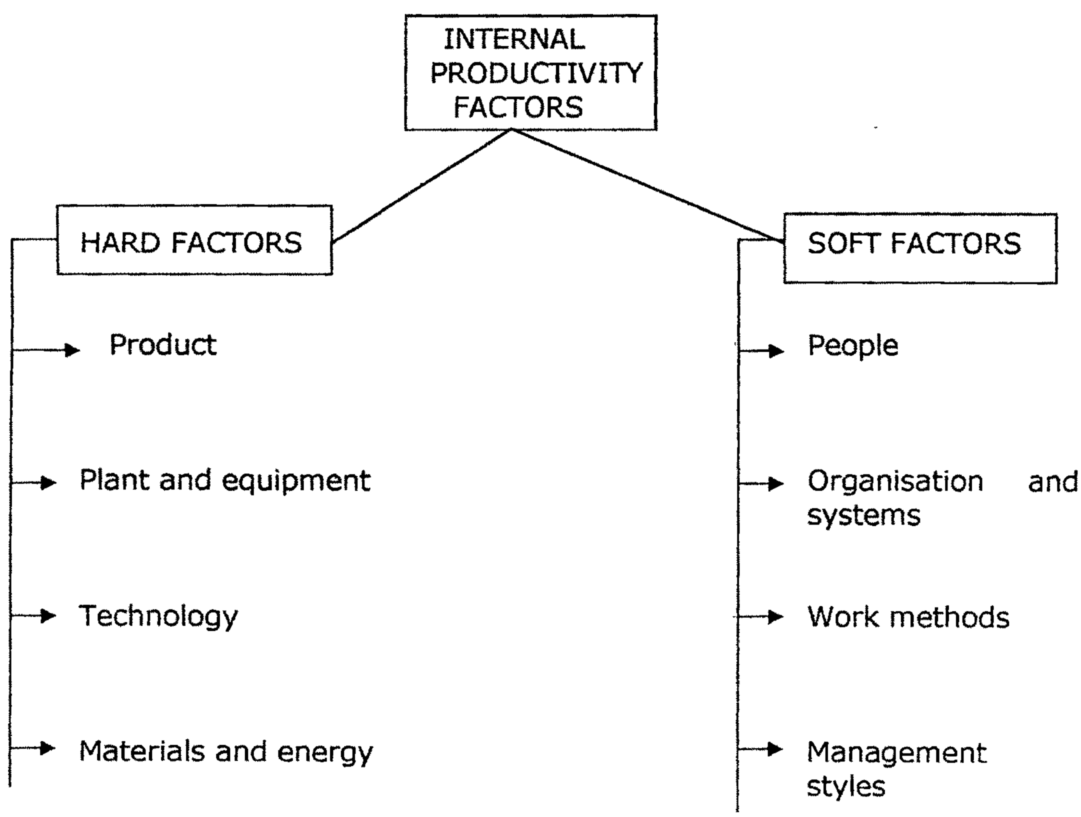
Work Methods:

Improved work methods, especially in developing economics where capital is scarce, technology intermediate and labour-intensive methods dominant, constitute the most promising area for productivity improvement. Work method techniques aim to make manual work more productive by improving the ways in which the work is done, the human movements performed, the tools used, the workplace laid out, the materials handled and the machines employed. Work methods are improved by systematically analyzing present methods, eliminating unnecessary work and performing the necessary work more effectively with less effort, time and cost.

Management Styles:

There is a view that in some countries management is responsible for 75 per cent of productivity gains, because management is responsible for the effective use of all resources under enterprise control. One productivity expert and consultant to many leading Japanese companies believes that as much as 85 per cent of the quality and productivity problems in United States industry are common problems of the system that lie within the province of management, not the individual worker, to correct. There is no perfect management style. Effectiveness depends upon when, where, how and to whom a manager applies a style. Management styles and practices influence organizational design, personnel policies, job design, operational planning and control, maintenance and purchasing policies, capital cost (working and fixed capital), sources of capital, budgeting systems and cost control techniques.

Figure : 11 Model of internal productivity factors:

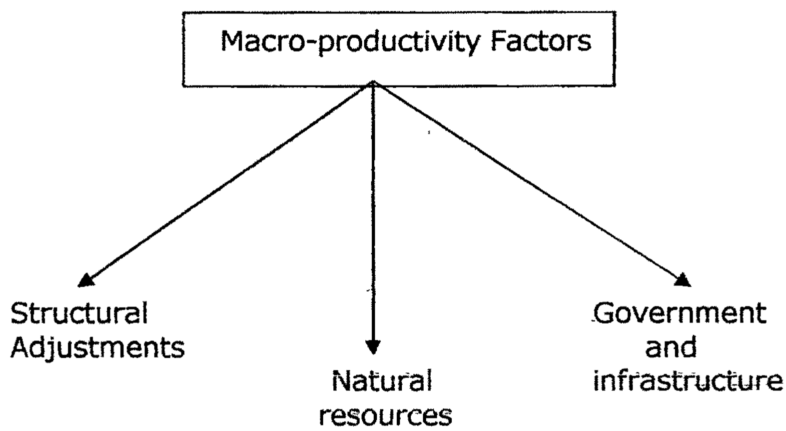


Source : Adapted from S.K. Mukherjee and D. Singh, 1975, p.93.

External Factors Affecting Enterprise Productivity :

External Factors include Government Policies and Institutional Mechanisms, political, social and economic conditions, the business climate the availability of a finance, power, water, transport, communication and raw materials. They affect individual enterprise productivity. The productivity largely determines real income, inflation, competitiveness and people's well-being. A general classification of the three main groups of macro-productivity factors is shown in Fig. 12.

Figure : 12 Main macro-productivity factors



Source : Adapted from S.K. Mukherjee and D. Singh, 1975, p.93.

Structural Adjustments :

Structural changes in society often influence national and enterprise productivity independently of enterprise management. Just as structural changes affect productivity, productivity changes also modify structure. Such changes are not only the result, but also a cause, of economic and social development. The most important structural changes are economic, social and demographic.

Natural resources :

The most important natural resources are manpower, land, energy and raw materials. A nations ability to generate, mobilise and use these resources is crucially important to productivity improvement and is, unfortunately, often overlooked.

Government and infrastructure :

Government policies, strategies and programmes greatly affect productivity through :

- Practices of government agencies :
- Regulations (such as price control, income and wage policies);
- Transport and communications :
- Power ;
- Fiscal measures and incentives (interest rates, tariffs, taxes)

FOUR LEVEL HRD FOR POSITIVE WORK CULTURE

The objective of building positive work culture is achieved in the long term through a systematic and successive pursuit of the following in the order mentioned :

- Awareness
- Motivation
- Sustained Effort
- Skills
- Capacity

A basic lacuna in India industry and systems of management has been the very low emphasis on training and education of workers at lower levels. The efforts so for have been mostly towards skills and capacity development for executives and managers motivation and commitment towards sustained effort seems widely lacking. In Japan training given per employee is 40 days on an average per year whereas in India, it is 2.5 days per employee per year in PSU and government. It is even less in private companies. In fact, this is inclusive of both officers and workers. Therefore, primary emphasis in the scheme suggested is as creating the right kind of awareness.

The second level of training suggested is for creating motivation and commitment. This is necessary as even with enough awareness and knowledge, employees are not sufficiently motivated or committed to exert themselves or to achieve the desired results. Consequently, organizations are not able to compete in the changing competitive environment particularly with foreign companies (Dubey, 1994).

Once sufficient motivational climate and commitment are created, the third level of training and intervention is for sustaining the spirit for longer. This level of intervention is found necessary because many a work or project is started with all enthusiasm and fevour which perter out after some time. The resultant cost and time overruns bring neither any benefit to the employer nor satisfaction to the employees and customer (to use the new word to denote the affected party). This has particularly been the experience when motivation was sought to be created through alien management theories/practices like MBO, QC, JIT, Kanban, Kaizen, etc.

The fourth and the fifth levels respectively address development of skill to do the job and enhance the capacity so as to turn out more work and at a faster rate. Only after reaching the final stage can it be (truly) claimed that the enterprise and the employees are near perfecting productivity. Only then the dictum 'Yogah karmashu kaushalam', excellent definition of productivity namely, achieving excellence (perfection in skill) in one's duty/work can be said to have been followed. Only when such an HRD intervention is implemented systematically, productivity will be achieved which manifests in excellence in work and knowledge.

But the prevailing thinking in most enterprises is that awareness, motivation and commitment already exist in all employees to the desired extent and training is required is only for skill up-gradation and capacity enhancement (Dubey, 1989). So much so, training and HRD intervention in a majority or cases are also directed accordingly. But then, as underlined earlier, until and unless local values and custom are embedded in the HRD interventions and training, the employees will not be able to reach their peak performance and consequently the organization/industry will find it difficult to survive and grow in the fast changing environment of global competition.

ORGANISATIONAL EFFECTIVENESS :

Organizational theorists have long been concerned with the assessment of the performance of organizations. Organizational effectiveness is a hypothetical construct for assessing the overall functioning of the organization including its goal, survival health and development. Various criteria of effectiveness have been proposed - firstly, at the organizational level like achievement of goals, viability as a system, satisfaction of stockholders and contribution to socio-economic development of the society. Secondly, the criteria at the individual level include absenteeism, employee turnover, motivation, psychological well-being etc. With so many criteria, it is unlikely that organizational effectiveness could be reduced to a single measure of indicator (Khandwalla, 1985).

Steers (1977) suggested that multivariate measures or techniques have distinct advantage over univariate measures or techniques in that they generally represent attempts to study in a more comprehensive fashion the major sets of variables involved in the effectiveness construct and suggest how these variables fit together.

Organizational effectiveness is generally regarded as a dependant variable, that is as an outcome of organization's contextual, structural, strategic and process variables. A major gap in research firstly, is how the configuration of context, management styles, goals, structure, organizational culture and processes affect different criteria of effectiveness (Khandwala, 1985). Secondly, the models that predict one indicator of effectiveness such as profitability may not predict another criterion such as quality of working life and occasionally there may be conflicting prescriptions (Dubin, 1976). Any criterion of effectiveness like satisfaction, profit etc. has multiple determinants. Hence it is desirable to asses the relationship between multiple determinants and multiple criteria of effectiveness simultaneously. Organizational effectiveness is influenced by a large number of micro and macro variables. Some of the macro variables include contextual, structural, strategic and process variables.

THE CONCEPT OF EFFECTIVENESS

Concepts of organizational efficiency and effectiveness date back to Barnard's time (1938). Barnard defined effectiveness in terms of organizational goal attainment and efficiency in terms of satisfaction and cooperation of organizational participants (Barnard, 1938). Over the years the two terms came to be defined differently by different researchers. Etzioni conceives effectiveness in terms of goal attainment while efficiency is defined in economic terms (Etzioni, 1984). Thompson noted that in scientific management, administrative science and bureaucratic theory it is efficiency that is viewed in terms of goal attainment (Thompson, 1976).

Many scholars tried to identify the univariate measures of organizational effectiveness. It is striking how effectiveness productivity and efficiency were conceptualized as univariate measures of effectiveness. Effectiveness is the degree to which an organization is accomplishing all its objectives. Productivity is the quantity or volume of major product or service an organization provides. Efficiency reflects some aspect of unit performance to costs incurred for that performance (Steers, 1977).

According to Katz and Kahn effectiveness is the maximization of return to the organization (Katz & Kahn, 1978). Efficiency of an organization is given by the ratio of its energic output to its energic input. They differentiated efficiency from profit, although the two are related. Maximization by economic and technical means increase efficiency, but maximization by non-economic and political means increases effectiveness without increasing efficiency.

Mott considered organizational effectiveness as "the ability of the organization to mobilize its centres of power to produce, adapt to change and cope with emergencies" (Mott, 1972). Effective organizations are not only high in production but are also effective in problem solving and maintaining quality. Rushing is of the opinion that organizational correlates its efficiency and effectiveness differ depending on whether the organization is profit oriented or a non-profit one (Rushing, 1974).

Since there is little agreement among researchers on what OE is, it is obvious that the measures of OE are conceptualized differently.

HRD AND ORGANISATIONAL EFFECTIVENESS

HRD function has got a good deal of attention in the recent past and is continuing to get more. The instruments of HRD are many. The HRD instruments should lead to the generation of HRD processes like role clarity, performance planning, development climate, risk-taking dynamism, etc. in employees. Such HRD should result in more competent and committed people that would make the organization grow by contributing their best to it. Such HRD outcomes influence the organizational effectiveness. A model explaining the linkages between HRD instruments, processes, outcomes and organizational effectiveness is presented.

The inter-relationships between HRD instruments, processes; outcomes and organizational effectiveness is presented schematically in Fig. 1. Figure 1 presents illustrative lists of HRD Mechanisms, Process Variables, Process Outcomes and Organizational Effectiveness dimensions. As shown in the figure, the organizational effectiveness depends on a number of variables like environment, technology, competitors etc. However, other things being the same, an organization that has competent, satisfied committed and dynamic people is likely to do better than an organization that has better HRD climate and process is likely to be more effective than an organization that does not have them.

This is because a number of HRD processes simultaneously operating in an organization should normally result in the HRD outcome mentioned in third box of Fig. 13.

The HRD processes and outcomes are separated in the figure to bring out sharply the following :

1. HRD outcomes are a few whereas processes are many (what is provided in second box of Fig. 13 is only an illustrative list).
2. HRD processes operating simultaneously effect the outcomes.
3. HRD outcome variables are a step closer to organizational effectiveness than the process variables. For example, better communication, role clarity, performance planning, trust, collaboration and openness can be considered as more remotely related to organization effectiveness than variables like having competent, dynamic, satisfied and committed employees.
4. If the HRD outcomes are not present in an organization at a satisfactory level, then one needs to question the adequacy (qualitative and quantitative) of the HRD processes in what organization.
5. HRD outcomes mentioned in the figure provide the raison d'etre for HRD processes.

The linkages between HRD outcomes and organizational effectiveness are not easily demonstrable due to the influence of several other variables in determining productivity. For example, researchers conducted in the past studying the relationships between job satisfaction and productivity or between organizational health and productivity - have not shown any consistent results. This has an implication for the chief executives, unit heads, line managers and HRD manages interested in HRD. They have to make efforts to promote HRD processes and culture in their organization as a matter of "faith" or "philosophy" and not look for demonstrable outcomes in terms of organizational effectiveness. They should at least be able to believe that their organizations are not likely to be effective for sustained periods without the HRD processes and outcomes howsoever facilitating the other factors (environment, technology, market monopoly, etc.) may be.

Another set of relationships shown in Fig. 13 deserve attention. This is the relationship between first and second boxes i.e. HRD mechanisms and HRD processes. HRD mechanisms like performance appraisal, training, OD interventions, counselling etc. are "systematic" interventions an organization can make to set into motion or to develop the desired HRD process and outcomes. However, mere introduction of HRD mechanisms and HRD departments do not automatically result in the development of HRD climate or HRD processes. There are organizations in our country today that claim that they have been able to generate a good HRD climate and outcomes without having any formalized HRD mechanisms. It is possible to have a HRD culture without having a HRD department or without using any HRD systems. That requires good leadership at the top, vision and building of HRD values from the inception of an organization. Such HRD values may have been promoted in the past by visionaries and institution builders.

In this era of professional management where managers as well as chief executives are being professionally developed, systematic interventions is the only way to develop and institutionalize processes and a new culture. HRD processes and climate can not be developed in any simple way in organization already inexistence and which have already evolved a way of life. Process changes can be brought in through systematic interventions faster if the interventions are designed properly, taken seriously and are monitored constantly. Design of the systems should be based on a clarity of processes. In sum, the following can be postulated about the linkages between HRD mechanisms and processes:

1. HRD departments and HRD mechanisms are useful instruments for initiating and strengthening development processes and culture and achieving HRD outcomes.

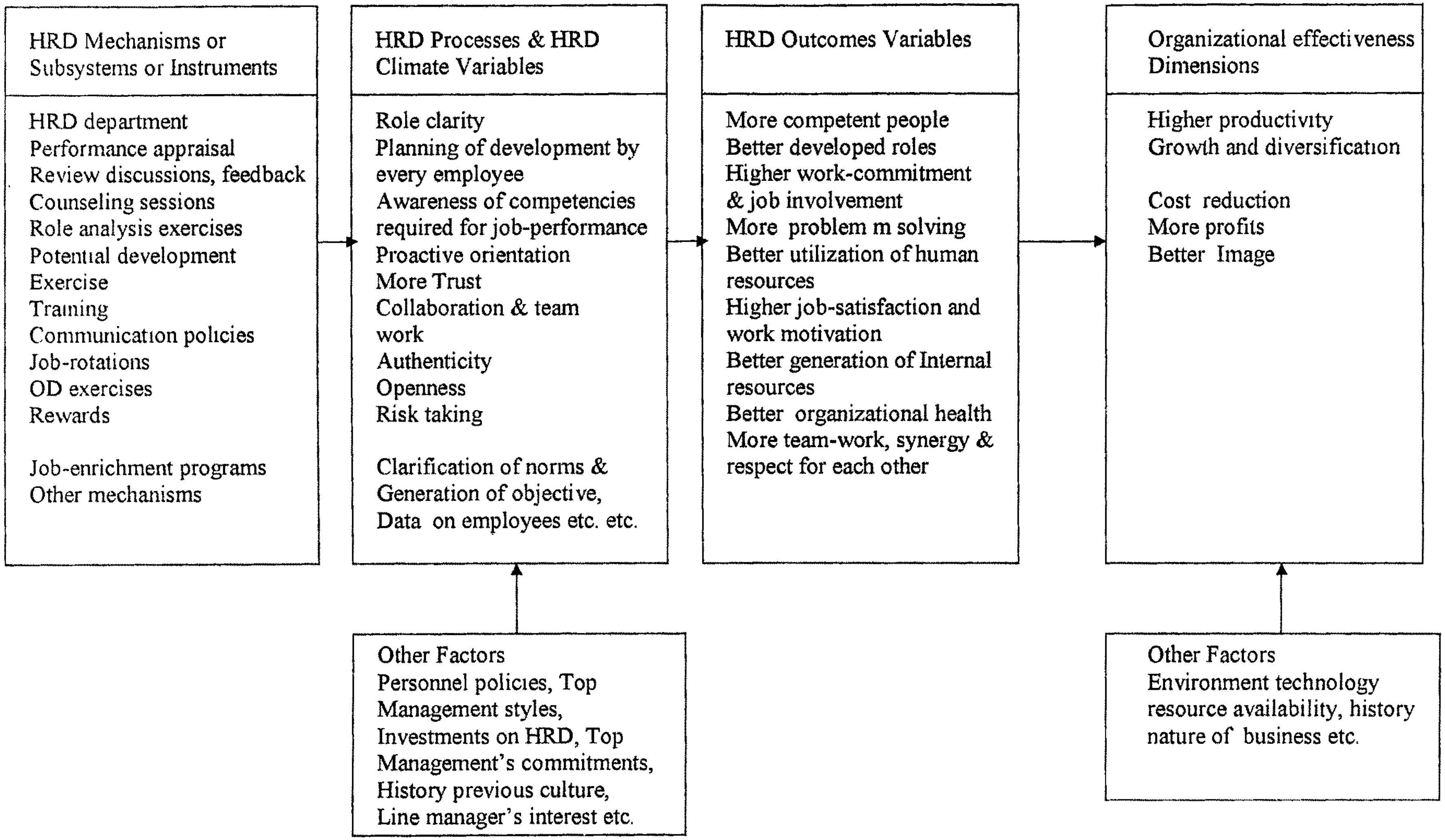
2. HRD mechanisms and subsystems should be designed keeping in view the HRD process and culture to be achieved.
3. These mechanisms should be periodically reviewed to examine whether they are facilitating the institution of HRD processes and culture or not and whether the mechanisms should suitably be changed.
4. Irrespective of how well the mechanisms are designed and implemented, if the top management does not have commitment to HRD and communicates such commitment to all employees, the HRD mechanisms may become more rituals in wastage of managerial time rather than leading to the development of HRD processes.
5. Even when the HRD mechanisms are well designed, the top management is committed and the implementation process is well monitored, generation and internalization of HRD processes and culture is a slow process and many taken some years.

In view of these, the HRD managers have a complex role to perform. In order to make an impact, the HRD manager should :
be a person with a high degree of commitment to HRD and HRD philosophy; have a high degree of perseverance; be closer to the chief executive and be able to get and communicate the top management's commitment to employees; and be given enough time (a minimum of five years) to work as HRD manager without being transferred. In addition, the top management should be sensitive to the organizational processes and be able to perceive the incremental changes occurring in the development climate of the organization.

The variables are :

* Consensus
* Legitimization
* Need for Independence
* Self control
* Job satisfaction (Work as a whole)
* Job Involvement
* Job satisfaction
* Innovation
* Organization commitment
* Organization-Attachment
* Job satisfaction (Organization as whole)

FIG. - 13 ORGANISATION EFFECTIVENESS THROUGH HUMAN RESOURCE DEVELOPMENT



Source : Organizational Effectiveness through HRD & OE by Jerome Joseph