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HUMAN RESOURCES DEVELOPMENT FOR COMPETITIVENESS: A PRIORITY FOR EMPLOYERS

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1. Introduction

"Human resources development is the process of increasing the knowledge, the skills, and the capacities of all the people in a society. In economic terms, it could be described as the accumulation of human capital and its effective investment in the development of an economy. In political terms, human resources development prepares people for adult participation in political processes, particularly as citizens in a democracy. From the social and cultural points of view, the development of human resources helps people to lead fuller and richer lives, less bound by tradition. In short, the processes of human resources development unlock the door to modernization."⁽¹⁾

The importance of human resources development (hereafter referred to as "HRD") is obvious when one considers that in any economic activity it is the human element that

- commands
- directs
- organizes
- controls
- maximizes

the factors of production. The quality of people appropriate to the particular level and complexities of the activity determines how well or poorly, these tasks are accomplished.

HRD encompasses a wide range of subjects such as health care, nutrition, population control, education and training. For the purposes of this paper, the term HRD is used to cover only education and training, as they are more directly related to the mandate of employers' organizations.

The objectives of this paper are to identify the reasons why employers and their organizations in the Asian-Pacific region (or anywhere, for that matter) need to be concerned and involved in HRD, and why today HRD is more important than before (irrespective of the level of economic development) for competitiveness and socioeconomic development. The paper also focuses on what employers' organizations should and could be doing. These issues will also be addressed by the participants at the workshop for which this paper has been prepared, as well as by the other two resource persons whose specific area of responsibility is HRD.⁽²⁾

The principal theme of this paper is that investment in education and training is the main key to progress from one level of economic development to another. It conveys the message that societies which do not gear themselves from now to learning will find it difficult to progress beyond their present level of economic and social development. Even the relatively rich economies seeking to capture some of the key industries of the next century, will need to create the conditions and environment necessary for creativity and innovation essential for moving into and being competitive in the knowledge-based industries which will provide the highest value-added for economies. As has been perceptively observed by Peter F. Drucker.⁽³⁾

"We now know that the source of wealth is something specifically human: knowledge. If we apply knowledge to tasks we already know how to do, we call it 'productivity'. If we apply knowledge to tasks that are new and different, we call it 'innovation'. Only knowledge allows us to achieve these two goals."

The emergence of knowledge and its application as the chief determinants of competitiveness may be considered by some countries which are industrializing only now or are seeking to move to the next stage of economic development, to be irrelevant, or of little importance to them at present. Such an assumption would be erroneous for several reasons:⁽⁴⁾

- In order to bear results, HRD initiatives have to be planned and taken well in time, given that they take approximately a generation to bear fruit. This accounts for the success of newly industrialized economies (NIEs) and some countries such as Malaysia.
- All societies are ambitious to move up the ladder of economic development, and it is the quality of their human capital which determines, to a large extent, the pace of such movement.
- Countries which have recognized and paid particular attention to developing human resources well in time, have been able to by-pass different stages of industrialization (or else accelerate their passage) and to make technological 'leaps'. Given the state of knowledge and technology and the availability of access to them, it is easier to make these 'leaps' today (with the added push of competitiveness), provided one has the human resources (and of course the capital and infrastructure) with which to do so.

Therefore, more than ever before, we need to plan for the future, which requires us to take stock of our current situation and to find ways to move ahead.

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2. Some Emerging Trends and Influences

The reason for the increased importance of HRD in achieving socioeconomic development lies largely in the emergence of knowledge work, technological advances and the demand for information and their relationship to globalization.

Emergence of knowledge work⁽⁵⁾

"The skills of a nation's workforce and the quality of its infrastructure are what make it unique, and uniquely attractive, in the world economy. Investments in these relatively immobile factors of worldwide production are what chiefly distinguish one nation from another; money, by contrast, moves easily around the world. A workforce that is knowledgeable and skilled at doing complex things, and which can easily transport the fruits of its labours into the global economy, will entice global money to it."⁽⁶⁾

An appreciable part of the workforces of the highly industrialized countries consist of 'knowledge workers'. Even if not accounting for the majority of the workforce, they are vital

because it is the application of knowledge which determines the productivity of their societies. The importance of knowledge work is reflected in the fact that in the rich economies more than half of the total GDP is knowledge-based⁽⁷⁾, and eighty per cent. of new jobs involve knowledge work. However, as yet there are only a few Asian countries with an appreciable number of knowledge workers. Creating the right environment for the emergence of such workers will be an important consideration in Asia in the next century. Many of the rich economies in Asia are reviewing their education systems with a view to making the changes needed to produce creative individuals who will increasingly add value to the economy. An individual's competitiveness in the job market, as well as the competitiveness of enterprises and industries, will depend more and more on the acquisition and application of knowledge.⁽⁸⁾ If the "most distinctive feature of the knowledge-based economy is that it uses knowledge pervasively as both an input and an output throughout the economy"⁽⁹⁾, then the rich economies qualify for this description.

Knowledge work and knowledge employees possess special characteristics:⁽¹⁰⁾

- The distinction between knowledge employees and ones who are not is not based on whether or not they work with their hands. A surgeon works with his hands, but brings to bear on his task a vast body of knowledge. The chief characteristic of knowledge workers is that they acquire their position through formal education.⁽¹¹⁾ Knowledge work presupposes a high level of theoretical knowledge, combined with creative ability because knowledge is not productive unless it is applied. Though knowledge is now largely accessible to all, it can be absorbed and used only with the right education.
- Knowledge work and knowledge workers are highly specialized.
- Knowledge workers undergo a life-long process of knowledge acquisition (like the skilled worker today) since knowledge tends to become obsolete rapidly.
- Knowledge employees are highly mobile, both within and outside the country, and move to locations where opportunities for them are greatest. Their capital, which is not labour but knowledge, is easily 'portable'. They form the core of an organization. "Between them they own the organizational knowledge which distinguishes that organization from its counterparts. Lose them and you lose the organization."⁽¹²⁾
- Consequently, it is harder to retain their services through traditional human resource management policies and practices. Increasingly they tend to regard themselves not as employees, and resent traditional forms of supervision.

There are several implications flowing from the foregoing developments:

- Large income disparities are occurring between knowledge employees and the other two categories, i.e. service and routine production employees. This creates the potential for a new type of class conflict, different to the division between capitalists and workers. In the next century divisions in societies may well be based on the differences between groups of individuals who have the requisite education and knowledge for upward mobility and those who do not. Therefore, while the main **economic** challenge will be the productivity of knowledge work, the main **social** challenge will be the productivity of other categories of workers.⁽¹³⁾
- With each recession and business upswing, it is the least knowledgeable and the least skilled who are left behind in the pool of the unemployed.
- There are numerous consequences for management which are outside the scope of this paper. It would suffice to note that once knowledge becomes the main resource

(which is what makes a society a post-capitalist society), management becomes one of "securing the application and performance of knowledge",⁽¹⁴⁾ team work becomes the only productive way of working, and direct supervision becomes an anachronism. Organizations which wish to excel at knowledge-based innovation need to introduce entrepreneurial management.

- Information technology is resulting in a convergence of manufacturing and services in that products, for example, are being adapted to suit particular customer needs, while some services are acquiring the characteristics of manufacturing (e.g. certain legal services).⁽¹⁵⁾
- Technology levels competitive advantage in production processes as it is accessible to all. Competitiveness lies in the productive use of knowledge and information.
- Asian countries will need to develop their own research and development capacity. Countries which aspire to innovativeness will require a very long-term focus in their investments for this purpose. The reason is that among the characteristics of knowledge-based innovation is a long gap between the emergence of knowledge and its transformation into products, processes or services; and often several different kinds of knowledge need to converge to result in a project.⁽¹⁶⁾

Technology, Information and Globalization

Technology, including the information revolution, and globalization continue to exert major effects on HRD. Many enterprises have claimed that the benefits of technology have not matched the cost of investment in it. The reason for this in most cases is that technology has not been used productively or usefully. Technology *per se* is not productive, and does not add value unless there are people who can use it productively. Total factor productivity in the major economies is estimated to have declined since the mid 1970s, and growth has been explained in terms of labour and capital inputs, the contribution by technology being considered relatively minor.⁽¹⁷⁾ Among the many explanations which have been advanced for the apparent failure of technology to deliver the expected productivity gains are the following:⁽¹⁸⁾

- Computers, for instance, are not being used mainly for productive purposes.
- Investments in technology have often been aimed at gaining market share, rather than improving the efficiency and effectiveness of existing production.
- There is always a delay between the introduction of technology and productivity gains resulting from such introduction.
- Diffusion of technology across an economy has to be sufficiently widespread (at least 50%) for productivity to be reflected in the productivity figures.
- Even in the USA computers account for only 2% of its total capital stock.
- The productivity benefits of technology are already in existence, but productivity measurement devised for a different type of operations (manufacturing) do not reflect them. According to these measurements productivity in manufacturing (in many of the rich economies) has increased. The low productivity increase rate claimed for services is due to the fact that productivity in services cannot, as yet, be reliably measured. Knowledge, for example, is difficult to measure.
- Part of the benefits of technology are not derived from cost reductions, but from improvements in quality, greater customer choice and better service, all of which are not reflected in productivity figures.

Information technology, like knowledge, is easily and widely accessible, but is valueless without the knowledge and skill to use it productively. Information technology (IT) is closely linked to the forces of globalization:

"By reducing the cost of communication, IT has helped to globalize production and financial markets. In turn, globalization spurs technology by intensifying competition and by speeding up the diffusion of technology through foreign direct investment. Together, globalization and IT crush time and space."⁽¹⁹⁾

While the familiar pessimistic view is that technology will, *inter alia*, destroy jobs and increase unemployment, the other (and better) view is that new jobs, many of which are better paid, are being created in place of ones which cease to exist. Technology, therefore, plays the role of what is aptly described as 'creative destruction'. Some of the implications of this are that employees will

- in many cases, have not one, but many careers during their working lives;
- have to move from one job to another as job requirements change, and to be able to do so, they must be 'trainable' in new skills. This capability depends on possessing a particular educational background;
- have easier and speedier access to knowledge, which can be codified and disseminated - a major benefit to developing countries.

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3. Implications for Employers

The issue for employers (and for employees and economies) goes beyond the need to upgrade the skills of the current workforce. It is also necessary to equip future entrants to the workforce with the requisite education which makes them 'trainable' for emerging and constantly changing skills requirements. Improvements have to be equally qualitative as well. Employees need to be endowed with the capacity to move from one skill to another as each one becomes obsolete, and to develop the cognitive, analytical and inter-personal skills required to work in a modern organization and as the economy progresses from one level of development to another.

Four situations are discernible among developing countries in Asia. The first consists of countries with high adult illiteracy rates (especially among women). The countries with over 40 per cent. adult illiteracy rates (as at 1995) are: Nepal 73%, Bangladesh 62%, Pakistan 62%, India 48% and Laos 43%. The consequences of pervasive illiteracy to a country's capacity to move up from a low-wage, low-skilled economy to value-added activities are obvious.⁽²⁰⁾ A second category consists of countries which have experienced high growth rates during the last decade and have high literacy rates, but with low levels of secondary education constraining their ability to move beyond low technology and basic service activities. In some of these countries a very high percentage of workers have had only a primary education and/or a minuscule percentage of them has undergone vocational training in any structured way. A third category consists of countries which have advanced rapidly, are paying particular attention to education and skills and are investing heavily in them but

suffer shortages of skilled and/or unskilled workers because of their rapid industrialization (Korea, Singapore, Malaysia).⁽²¹⁾ A fourth category may be suggested as being represented by Myanmar, Sri Lanka and the Philippines with high literacy and secondary school enrolment rates and good levels of tertiary education. But they failed to develop for reasons outside the scope of this paper, though the Philippines is at least now launched on the path to progress. In the case of Sri Lanka, even though tertiary education is available and free for everybody, the education system was less geared than it should have been to linking up with job requirements, resulting in educated unemployed and acute social and political tensions and disruptions.

It is instructive to note that the former centrally planned East European economies have well educated workforces. It is estimated that their primary and secondary education systems "are nearly as good as those of industrialized countries, and far better than those of many fast-growing developing economies."⁽²²⁾ Consequently these countries have a significant advantage over some fast developing countries in attracting higher value-added investment, absorbing new technologies, and adapting to new skills requirements through training. Some of the problems they face - such as political ones and the lack of management skills to manage in a competitive environment - are also ones faced by other countries in transition to a market economy.

It may be argued that the trend towards more knowledge-based activities is relevant to industrialized rather than to developing countries. This is not so. Industrialized countries are less dependent today on developing countries for raw materials since goods manufactured in their countries have substantially less raw material components than they did before. Less labour is needed in manufacturing processes today to produce the same volume of goods. As investors move their operations from one location to another (facilitated by the reduction of investment barriers, trade liberalization, deregulation of financial markets and advances in technology), the choice of country for investment is determined by the needs of each industry. Availability of cheap unskilled labour will attract low cost, low skilled, high volume businesses. But higher value-added activities are attracted by the quality of the available workforce.⁽²³⁾ Even in high volume production and the provision of basic services (e.g. tourism-related), due to the spread of information and advances in communication technology and travel, customers increasingly expect higher quality products and services.

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4. Human Resources Development For Socio-Economic Development

If in the past planners failed to make investment in HRD a central theme of development strategies, it was due partly to the difficulty of distinguishing between what part of HRD represents an investment and what part represents consumption. While investment in human resources promotes economic growth, a country's economic capacity also determines its ability to invest in its human resources, so that

"A good educational system may be the flower of economic development, but it is also the seed."⁽²⁴⁾

Several circumstances, as illustrated by the following, account for HRD now occupying centre stage:

- Earlier development strategies which largely neglected the social aspects of development, did little to promote growth, and this resulted in political and social unrest in several countries.
- High productivity depends on the quality of human capital (and on how human resources are used) - a lesson to be learnt from the 'developed' countries. As contended by Peter F. Drucker,⁽²⁵⁾ productivity is arguably the most important social event in the developed countries in the past hundred years.
- Education, management and training shorten the time-span within which a country with low wage costs can achieve higher productivity,⁽²⁶⁾ though with high productivity wages will rise.⁽²⁷⁾
- HRD (including easy access to education) contributes to a more equitable distribution of income. It thereby negates the necessity for compulsory redistributive measures (such as through the tax system) which usually have negative consequences.
- There has been a steady decline in the importance of other resources such as natural resources, in creating national wealth.⁽²⁸⁾
- Shorter product life and the consequent need for workers to be able to absorb new skills quickly impact on education and training needs. Education has to contribute to trainability; education does not cease with school or university; methods of teaching adults have assumed importance, and employers need to invest in training and retraining.
- In mature economies a lack of investment in education and training increases the risks of unemployment,⁽²⁹⁾ as well as wide disparities in income.
- Information and advances in other technology have increased the demand for intelligent workers who can extract the most out of technology, as well as for people at higher levels to create and adapt technology to new uses.

The fruits of HRD are evident in the much publicized rapid development achieved over a short period of time by Singapore, Hong Kong, the Republic of Korea, Taiwan China, and earlier by Japan. The World Bank studies of East Asian development have identified the investment in human capital as one important factor accounting for the rapid development, enabling it to periodically upgrade labour skills and the economy.⁽³⁰⁾ Government investments were mostly in primary and secondary education, with tertiary education being largely left in private hands.

The impact of economic/industrialization policies on the development of human capital is illustrated by two categories of Asian countries. The East Asian NIEs represent the outward-looking economies where imported technology was used to fuel (along with cheap labour at that time) export growth. The inward-looking import substituting South Asian countries invested in plant and machinery basically for a domestic market where semi-monopolies and lack of demand for quality were features. It is arguable whether the NIEs made a conscious policy choice or whether it was the only choice available to them given their relatively small domestic markets and the lack of natural resources. Be that as it may, their industrialization policy involved selling to the sophisticated and quality conscious markets of the industrialized countries. Improved human capital was essential for them to produce the goods such markets would accept. This led to a symbiotic relationship between economic and human resources development. On the other hand, in the inward-looking economies there was little incentive to invest in human capital because they had 'captive' markets which were

unable to reject the goods and services offered as there were no choices available. In other respects the strategies adopted by the NIEs were not necessarily the same. Hong Kong represented the 'freest' economy of them all. Singapore welcomed the multinationals as a means of fuelling growth, and astutely harnessed their cooperation to improve the country's human capital. Korea developed through a high degree of government intervention designed to create national 'champions' in the form of huge conglomerates, while Taiwan China depended on nimble small enterprises. The government in Japan, contrary to some opinions, did not select the industrial 'champions'; the areas of business were selected by the business community, and it was their development that was supported by some government policies. But whether through government intervention or otherwise, they had a common focus on external markets, which led them to comprehend what it takes to be competitive in an international environment - a lesson that the inward-looking economies failed to learn in time.

Developing the education, knowledge, skills and abilities of people helps the economy to grow through the production and provision of marketable goods and services and by attracting investment. This in turn helps to create the surpluses needed to raise living standards through increased incomes, more equitable income distribution, increased employment opportunities, improvements in infrastructure and better social benefits (e.g. education, health care, housing, social security). By creating opportunities for upward mobility HRD reduces social stratification and tensions. In high population growth countries HRD contributes to population control because acceptance of smaller families comes with higher levels of education.⁽³¹⁾

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5. The Need For Action

"Education and training are the primary systems by which the human capital of a nation is preserved and increased.... from an economic standpoint, higher standards in the schools are the equivalent of competitiveness internationally."⁽³²⁾

The pace at which education and training systems transmit knowledge and skills of the requisite quality directly affects the pace of development. Countries that do not plan from now to address not only their current human resource problems but also those of social infrastructure conducive to future knowledge work and workers, will find that the development gap between them and those that do will continue to widen as is the case at present. In Asian countries which wish to be involved in some of the high value-added and key industries of the next few decades (microelectronics, biotechnology, the new materials science industries, civil aviation, telecommunications, robotics plus machine tools, computers and software), much needs to be done in the fields of education and training.⁽³³⁾ India's achievements in the software industry indicate that it can be done even in a relatively economically poor country.

What, then, can (and should) employers and their organizations do? Part of the problem is what employers in many developing countries have riot done. Though much of the foregoing has been known to employers, many have done little to influence the policy environment. They have often left such problems to governments to sort out, on the basis that it is the duty

of governments to provide facilities for education and training. This assumption is no longer valid (if it ever was) in regard to training, while in the field of education, employers do have a vital role to play in influencing the policy environment and the education bias.

High levels of education do not by themselves guarantee economic development as has been witnessed in the Philippines, Myanmar and Sri Lanka. Therefore, employers need to influence, where necessary, education policies and systems to promote the acquisition of knowledge and skills geared to business needs and the ability to use them - which should be an important function of organized education. In Asia-Pacific the New Zealand Employers' Federation has played a significant role in influencing education to cater to business needs.⁽³⁴⁾ The high standard of education in Sweden is due in no small measure to the role employers and the Swedish Employers' Confederation (SAF) have played over the years. In 1981, for instance, the SAF formulated a detailed educational policy programme.⁽³⁵⁾ In 1984 the congress of the SAF⁽³⁶⁾ stressed the importance of companies developing working relationships with schools, and listed the following objectives of the schools contact programme:

- to contribute to a more motivating and efficient learning situation for the students
- to give them a greater insight into what professional work entails in practice, and as a result a better chance to independently take on responsibility for their future
- to be included as a part of the educational process
- to be a part of the students' professional training.

Employers, long accustomed to leaving it to governments or to private educational institutions to determine the direction and quality of education, now have greater opportunities (and the need) to exercise influence in view of the changing needs from education flowing from globalization. From a long-term point of view, Asian employers would need to think about making some investment themselves in education. The relationship between HRD and research and development needs to be emphasized. In the USA for example, businesses have become significant educational institutions, accounting for about half of the country's expenditure on higher education. Since the mid 1980s corporate spending on education has increased by 5% a year, and businesses now spend about US \$50 billion a year on education and training.⁽³⁷⁾ Consequently, the American Council on Education has extended "credits" to about 7,000 company classes, which can be used towards obtaining university degrees. A few companies have even commenced awarding their own degrees, while others have established formal relations with educational institutions and have even designed academic courses so that students will be fit for employment. Estimates are that productivity gains for companies from investment in education are twice that of investment in plant and machinery; and that the gains are even greater given the impact on employee morale.⁽³⁸⁾ In Asia in the 1950s, corporate Japan undertook some part of the secondary education of employees to make them trainable for the future. This investment brought in high returns also because of the guarantee of lifetime employment. The next century will witness an expansion in corporate education centres, corporate degrees and even in corporate "universities". These trends will not be confined to Western countries.

Employer involvement in education has been facilitated by technology, though education is one of the sectors least affected by the technological revolution.⁽³⁹⁾ There is no reason why even in relatively poor countries the private sector cannot establish formal relationships with secondary and tertiary educational institutions. This does not require large financial

investments. In influencing the restructuring of the education bias, it is necessary to bear in mind that

- The cost of secondary education to the student should not exceed the expected rate of return to him/her.
- The enhanced earning capacity through more years in the education system has to be sufficiently attractive. For example, whether the cost of management education in the USA which is borne by the individual is worth the return on the investment, has been a matter of debate.
- Education should contribute to the development of a workforce with cognitive skills. At higher levels the system should be able to produce 'symbolic analysts' and knowledge employees for the 'brainpower jobs of the future.
- However, education - even of the right type - means little in the absence of training. It has been aptly pointed out that the "lesson of Japan's experience may be that manpower cannot be sufficiently and adequately trained for the demanding specialized skills modern technologies need by schooling alone. However ... schooling can greatly facilitate the absorption of in-service training and on-the-job day-to-day learning which must be the main source of skills in the workplace during the four long decades of work-life after schooling. And the transmission of the accumulated skills and know-how in the workplace may be most effective in an egalitarian surrounding, rather than in the relatively rigid social stratification of occupations characteristic of South Asia or in the detailed work specifications of modern labour-union contracts typical of some western countries."⁽⁴⁰⁾

Moving to the subject of worker skills training and development, it bears emphasis that there is today an unprecedented convergence of interests between employers and employees in relation to the skills of the latter. But employers (other than the multinationals) in many countries still view worker training as a public responsibility to be undertaken by state-created authorities. Whether technical education can be achieved through a 'school' system or whether the state's role should primarily be one of fostering technical education is an issue, with the evidence being in favour of the latter. The movement today - which is likely to gather momentum - is from training primarily organized and conducted by public authorities towards a broader concept of education and training increasingly under the auspices of the enterprise. Large enterprises in industrialized countries are increasingly acknowledging a responsibility for training employees for 'employability'. Notions of job security or protection through laws (endemic to India and Sri Lanka, for instance) are things of the past. More and more, workers themselves have to make efforts at self-development, and have therefore to seize every opportunity for learning and training. Trade unions can play an important role in this respect both in terms of awareness-raising and by shifting some of their resources to education and training of their members.

Apart from the mind-set which regards training as a public service (and as an expenditure rather than as an investment), employers reluctant to invest in training cite 'job hopping' and 'poaching' by other employers (especially in tight labour markets) as a disincentive to investment in training. That is why training, like other human resource management policies and practices, needs to be diffused across an economy or industry to make a difference to the quantity and quality of training. Hence the value of incentives such as training levies which the employer can recover if he conducts training. Incentives may also reduce the incidence of 'poaching' as the employer has a financial gain as well from training. The government has a major role to play in this regard, in collaboration with employers. The 'poaching' argument

leads to a vicious circle: no training due to turnover, skills shortages proliferate, and the problem is exacerbated.

There are examples of advanced countries (and this is one reason why they advanced) which did not leave it to governments to provide all the training facilities. In Sweden the employers' organization and the trade union jointly contributed to the creation of a high quality, highly skilled workforce. In Germany worker training is regarded as involving responsibilities for all the tripartite constituents. In Japan it has been regarded as the responsibility primarily of employers, who built on the education base provided by the schools system. Thus in Japan compulsory primary education lasting 4-6 years is followed by further education, and thereafter by education and training of workers by employers imparting to them both positive work attitudes and knowledge of production methods and techniques. Singapore relied on foreign investors for the technical training programmes and facilities and promoted them through incentives, so that through formal on-the-job training, vast improvements in skills levels were achieved in a period of twenty years. In both Singapore and Japan

"expansion and improvement of general education by the State was emphasized to involve the masses in their respective modernisation and industrialisation programmes. But thereafter, to meet the increased demand for qualified skilled workers and technicians and improve the technical and human relations quality of this crucial group, the private sector came to be increasingly relied on to provide in-house training."⁽⁴¹⁾

Societies with mature and professional unions are likely to call for more corporate investment in human capital, as the Australian Council of Trade Unions did after an overseas study tour by its officials.⁽⁴²⁾ Bipartite cooperation is of great value in order to maximize (for both parties) on investment in training and development.

Employers and their organizations need to be involved in and influence, the education and training of the current and political future workforce. Apart from actual investment by employers in training, they could be involved in

- contributing to the formulation of policies which promote public and private investment in education and training at all levels both qualitatively and quantitatively, in order to prepare potential workers for current and future jobs. This implies a bias towards business needs in the sense of aiming to produce a workforce which has the requisite basic education to facilitate training and retraining in order to respond to the need for a multi-skilled and flexible workforce.
- school contacts, teacher education programmes to impart to them knowledge of the nature and role of business in society, the environment needed for business development and so on. Employers' organizations can encourage employers to 'adopt' schools, help to upgrade their facilities, introduce students to the business environment, and provide advice and guidance to school leavers.
- training content which needs to be decided on by both employers and employees as it is they who control the work processes.
- lobbying for incentives to be provided by the government, consequent to a survey among members and a study of incentives in other countries.
- monitoring and evaluating the education and training systems, in collaboration with other organizations such as chambers of commerce and manufacturers' associations.
- serving on the policy boards of training institutions, an obvious - but not often

undertaken - role. Employer representatives would be in the best position to identify the skills needed for business growth and development, and to push for policies and programmes with employment potential. Employer representatives should play a role in the formulation of national systems of skills certification and training course content. National training institutions need to periodically change their role to cater to the demands of the labour market, and logically employers should be the agents of such change.

- where there is a significant presence of multinational enterprises, trapping their training expertise to benefit a larger segment of employees.

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6. A Sharing of Responsibilities

A HRD strategy requires a sharing of responsibilities among the government, employers and employees. This division is based on two premises, namely that

- investment in HRD is an investment in social infrastructure which all three parties have a responsibility to discharge. Therefore it is no longer possible to plead that the State 'owes' it to employers and employees to bear the full responsibility for HRD, whether in terms of planning or expenditure.
- The cost of investment in education and training is so high that it is unrealistic to expect one party to bear a disproportionate share of it, even if the bulk of expenditure on infrastructure has to be borne through government expenditure.

This section is concerned with only some of the possible divisions of responsibility between the government and employers. This does not imply an intention to undervalue the role of employees and their organizations, which can play a critical role in developing awareness and defining the directions and contents of training and education, especially in countries with literate and reasonably well educated workforces. Positive and constructive participation by employees, collectively and individually, may make the difference between good HRD programmes and excellent ones which give competitive edge.

Admittedly, the sharing of responsibilities is affected by several circumstances such as the current quality of human resources, the levels and quality of education and the skills levels of the workforce. The suggested divisions, therefore, need to take these circumstances into account in adapting them to any particular country.

In the field of education the responsibilities could be as follows:

- i. Primary and secondary education should be the government's responsibility and its main focus, both in relation to investment in it and the provision of the type of education required to ensure a trainable workforce. Accessibility of education to all, coupled with compulsory education, is important to avoid the creation of a category of illiterate people or one lacking in educational attainments which makes it impossible for it to compete in the labour market
- ii. Tertiary and professional education could be undertaken by both the government and privately funded and managed institutions.

- iii. Employers could establish links with schools and teachers, and influence curricula at all levels of education. Employers are in an advantageous position to acquaint schools and students with knowledge of the choices available to them in the labour market and what a business environment requires by way of educational attainments. Otherwise the workforce of the future has nowhere to turn to, to obtain this knowledge, which may determine the choices they make within the limits of their aptitudes.

Training and development of employees must be viewed as an integral part of an employees overall human resource management strategy. The strategy should be one which links selection, recruitment, training, career planning and development, performance appraisal, pay for performance and skills, and employment security. However, the state has an overall responsibility to provide training facilities and to promote an environment conducive to training. A division of responsibilities could take the following form:

- i. Identifying current, and anticipating future, skills needs should be the collective responsibility of the government, employers and employees. Close interaction among these parties is essential if training policies are to be correctly formulated, training delivered in the most effective way, and if incentives are to be extended to employers to provide training.
- ii. Generally speaking, the government should invest in the provision of the general skills necessary for employees to develop multi-skills and to be trained in enterprise-specific skills. The general skills training provides the capacity to adapt to changing skills requirements. However, employers should also (and would need to) improve the general skills of new recruits because as

"technologies change and ... the need for cross-functional competencies and problem solving increases, so too does the demand for multi-skilled workers. Therefore, it is not surprising that the countries that are experiencing rapid growth in productivity today have typically followed (a) model in which firms provide both general and firm-specific skills to their workers. This creates a new type of flexibility in the workplace which is more compatible with rapid technological change, new production techniques such as 'just-in-time', and otherwise altered organizational structures."⁽⁴³⁾

- iii. The more company-specific skills should be undertaken by the employer. This does not imply an absence of government responsibility. It could, for instance, provide (whether through the tax system, training levies or otherwise) incentives for training. As a general rule, it is large employers and ones whose business involves fast-changing technologies which tend to invest in training without the need for external incentives. Small enterprises often do not have the means to invest in and provide training. Family businesses in particular tend to lack a training policy, which will need to change if they expand, especially across national borders. It is also necessary for the government to promote the diffusion of training across an economy if employers are not to be tempted to 'poach' from other employers, and training is to contribute to the emergence of competitive industries and not merely a few isolated competitive enterprises. The problems of training for small enterprises may dictate a need for government to institute training facilities for them.
- iv. Employers are in a position to provide incentives for employees to develop skills

through a pay system which rewards them for acquisition of skills. Thus the current decade has witnessed an increasing resort by employers to skill-based pay systems, though they are largely confined to industrialized countries.

- v. There are also the unemployed and the handicapped in respect of whom the government has a responsibility. But for programmes to be effective they should be developed in consultation with employers to whom the government would have to look for employment opportunities for these categories.

The lack of adequate awareness in some countries among governments and employers or both about the critical role of HRD in development and their roles in such development is, to say the least, surprising. Gender inequality and the consequent unfavourable opportunities for women in education, training and upward mobility are critical issues in some countries. Therefore, employers and their organizations should act as catalysts in raising awareness of the importance of HRD of the entire human resources of a country and the need to plan well ahead to be ready to move up from one level of economic development to another.

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7. Conclusions

It is surprising that numerous countries throughout the world have failed to learn from the experiences of the rich economies and of the more recently industrialized countries that sustained investment in human capital is needed for competitiveness and growth. This situation is now changing with globalization, increased investment and trade, and the spread of technology. Investment in human capital is of course no guarantee of development if other relevant policies are inappropriate or are not properly implemented. But without the right kind of human capital other policies (economic, trade and investment policies) will fail to deliver growth, or growth will come to a halt as soon as cheap labour and other resources cease to be critical to the next stage of development. Since the time taken for investment in human capital to bear fruit is, compared to other investments, relatively long, the planning period has also to be necessarily long and timely. Further, unlike most other resources, human capital does not waste or diminish in value through use; on the contrary its value enhances.

This paper concludes on two notes not referred to earlier. The first is that in Asian countries (as elsewhere) priorities in HRD have to be set. HRD includes three basic strategies:

- developing human resources through education and training
- deploying human resources
- providing the incentives to ensure that they are productively deployed

Countries would be at a stage where the priorities shift among these three. It is therefore necessary to identify and address the particular priority.

The second is that foreign investment can be used as a means of raising the stock of human capital - a fact which escaped the inward-looking import-substituting countries which were more engrossed in political ideologies and the fear of economic imperialism. In Asia, Singapore used this strategy effectively. From much further away it is arguable that

attracting foreign investment to the then poor Sweden at the end of the last century facilitated the growth of its human capital, and provided the foundation for the building of a welfare state. The fact that Sweden now needs to change its approach to welfare does not detract from the standards of living it achieved.

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Endnotes

- [1.](#) Frederick Harbison and Charles A. Myers *Education, Manpower and Economic Growth: Strategies of Human Resources Development* (McGraw-Hill, USA, 1964) p.2.
- [2.](#) Workshop for Asia-Pacific employers' organizations on Employers' Organizations in Asia-Pacific in the 21st Century, Turin, Italy, 5 -13 May 1997.
- [3.](#) *Managing for the Future: The 1990s and Beyond* (Truman Talley Books, N. York, 1992) p. 26.
- [4.](#) Besides, the workshop focuses on the future.
- [5.](#) On this subject see Peter F. Drucker *The Post Capitalist Society* (Butterworth-Heinemann, U.K., 1993), *Managing In A Time of great Change* (Butterworth-Heinemann, U.K., 1995) pp. 203-219, Charles Handy *The Age of Unreason* (Business Books, U.K., 1989), Robert B. Reich *The Work of Nations: Preparing Ourselves for 21 Cenutry Capitalism* (Alfred A. Knopf, N. York, 1991). A major project on The Knowledge Worker is under way in Australia under the auspices of the Center for Corporate Change, Australian Graduate School of Management, University of New South Wales. This section of the paper does not address all the implications of knowledge work for organizations, work organization and human resource management issues.does not address all the implications of knowledge work for organizations, work organization and human resource management issues.
- [6.](#) 'Robert Reich, *op.cit.* p. 264.
- [7.](#) *The Knowledge-Based Economy*, OECD, 1996.
- [8.](#) "In respect of knowledge, no country, no industry, no company has any 'natural' advantage or disadvantage. The only advantage it can possess is in respect to how much it obtains from universally applied knowledge. The only thing that increasingly will matter in national as well as in international economics is management's performance in making knowledge productive.": Peter F. Drucker *The Post Capitalist Society, op. cit.* p. 176.
- [9.](#) *The Economist*, 28 September 1996 p. 43.
- [10.](#) Knowledge employees are referred to as "symbolic analysts" by Robert Reich, *op. cit.* See chapters 18 and 19 for their role in modem society.
- [11.](#) "Formal education that is required for knowledge work is education that can only be

acquired in and through formal schooling. It cannot be acquired through apprenticeship... The first implication of this is that education will become the centre of the knowledge society, and schooling its key institution.": Peter F. Drucker *Managing In A Time of Great Change*, *op. cit.* p. 204.

12. Charles Handy *The Age of Unreason*, *op. cit.*

13. Peter F. Drucker *Managing In A Time of Great Change*, *op. cit.* pp.205-206.

14. "Peter F. Drucker *The Post Capitalist Society*, *op. cit.* p. 40. Originally a manager was responsible for the work of subordinates - a task which emphasized rank and power. Thereafter a manager was responsible for the performance of people. In the knowledge organization the responsibilities have changed as referred to above.

15. Andrew Wyckoff "The Growing Strength of Services", OECD Observer No. 200, June 1996. "This merger of manufacturing and services not only messes up statistical divisions, it also finishes off the discredited old argument that government policies should favour manufacturing because only manufacturing creates 'real' wealth and 'proper' jobs. In future, the economies that perform the best will not be those whose governments help particular industries, but those that develop and manage their knowledge assets most effectively.": *The Economist* 28 September 1996 p. 44.

16. Peter F. Drucker *Innovation and Entrepreneurship* (1985) published in Harper Business edition of *The Executive in Action* p.357 *et. seq.*

17. Thus in relation to computers, economist and Nobel Prize winner Robert Solow once remarked that "you can see computers everywhere but in the productivity statistics."

18. For details see "The World Economy" in *The Economist* 28 September 1996, which also differentiates between productivity increases at the enterprise level and the failure of the economy as a whole to reflect it, and draws attention to the view that productivity measurement methods for the economy do not reflect these productivity gains obtained at the enterprise level. See also *The Economist* 23 November 1996 pp. 95-96 which, *inter alia*, refers to the increasing invisibility of output and the increasing difficulties in measuring productivity.

19. *The Economist*, *ibid*

20. At the same time India has a large pool of people whose high educational and skill levels have enabled the country to attract some knowledge-based activities e.g. computer software.

21. See *Far Eastern Economic Review* 29 September 1994 pp. 62-69 for a survey of skills shortages in selected Asian countries.

22. *The Economist* 26 October 1996 p. 118.

23. Obviously investment is also influenced by important considerations such as political stability, macro economic policies, the existence of suitable infrastructure, a legal system needed for conducting business and commercial activity and a business-friendly environment.

[24.](#) "Planning Policies for Investment in Scientific and Technological Education" in Human Resources: Training of Scientific and Technical Personnel, U.N. Conference on the Application of Science and Technology for the Benefit of Less Developed Areas (Geneva, February 1963) Vol. XI, Superintendent of Documents, Washington, p. 132.

[25.](#) *Managing For The Future: The 1990s and Beyond*, *op. cit.* pp. 93-94: "On this productivity explosion rests all the increases in these countries in both the standard of living and the quality of life. It provided the vast increase in disposable incomes and purchasing power. But between a third and a half of its fruits were taken in the form of leisure - something known only to aristocrats and to the idle rich before 1914.... The productivity explosion also paid for the ten-fold expansion of education and for the even greater expansion of health care. Productivity has become the 'wealth of nations'."

[26.](#) *ibid* p. 13.

[27.](#) See Paul Krugman "Does Third World Growth Hurt First World Prosperity?" in *The Evolving Global Economy* ed. Kenichi Ohmae (Harvard Business School Press, U.S.A.) p. 113.

[28.](#) By 1990 prices of raw materials, after adjusting for inflation, were approximately 40% less than they were in 1970: International Monetary Fund *Primary Commodities: Market Development and Outlook*, July 1990 p. 26.

[29.](#) In the industrialized countries each economic downturn over the last thirty years has increased the pool of uneducated unemployed, with less and less of them finding employment with each upturn - *The Economist* 21-27 November 1992 p. 4. In some developing countries where there is a demand for unskilled labour, this phenomenon may be less acute, the problem sometimes being the absence of jobs rather than of skills.

[30.](#) See Danny M. Leipziger and Vinod Thomas *The Lessons of East Asia: An Overview of Country Experience* (World Bank, 1993) pp. 6-7, Nancy Birdsall and Richard Sabot *Virtuous Circles: Human Capital, Growth and Equity in East Asia* (Washington: World Bank, Policy Research Department, 1993).

[31.](#) "In an advanced economy the capacities of man are extensively developed; in a primitive country they are for the most part undeveloped. If a country is unable to develop its human resources, it cannot develop much else whether it be a modern political and social structure, a sense of national unity, or higher standards of material welfare.": Frederick Harbison and Charles A. Myers, *op. cit.* p. 13.

[32.](#) *Workforce 2000.. Work and Workers For The 21 Century* (Hudson Institute, Indiana, USA, 1987) p. xxvi.

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