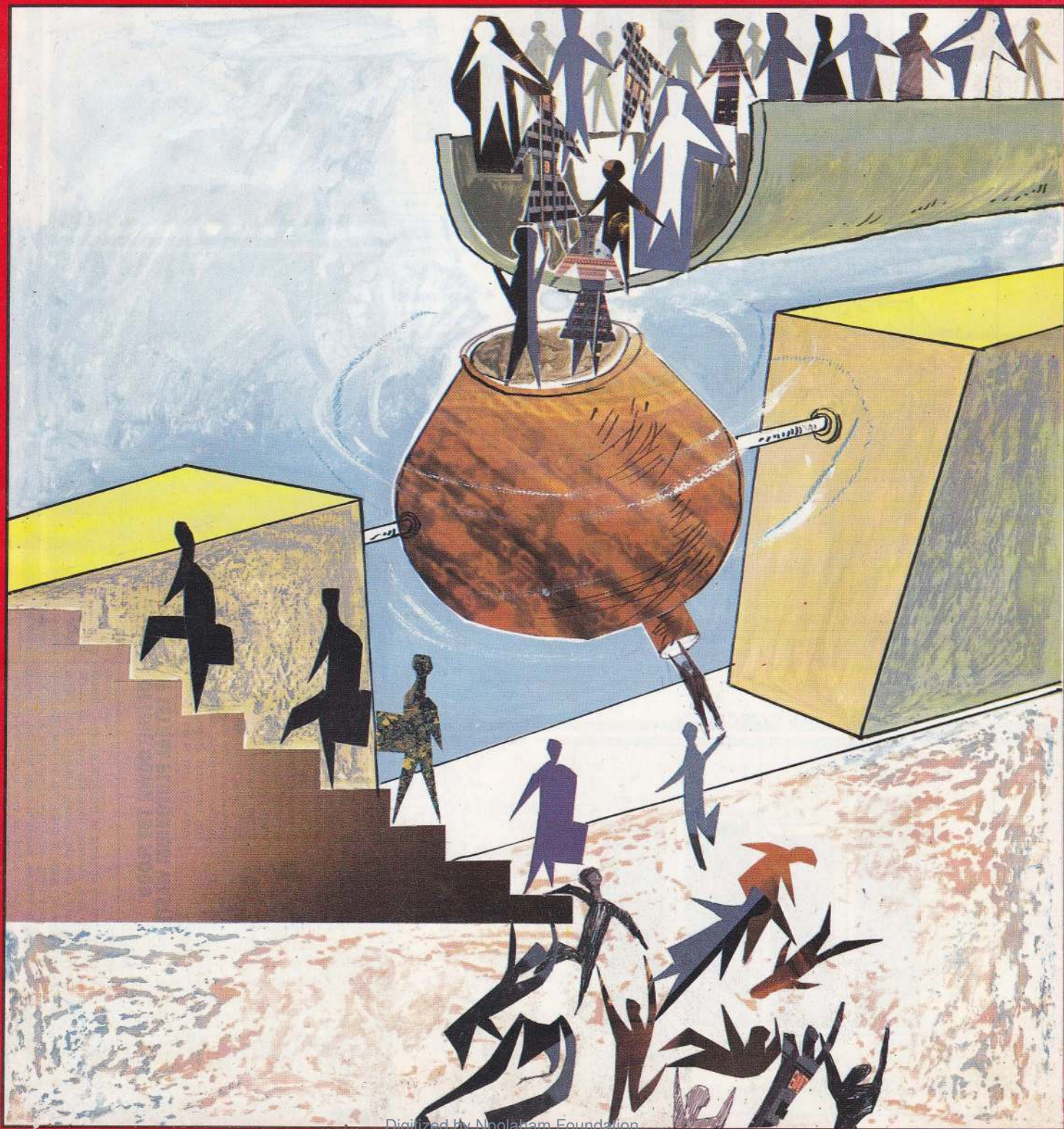


ECONOMIC REVIEW

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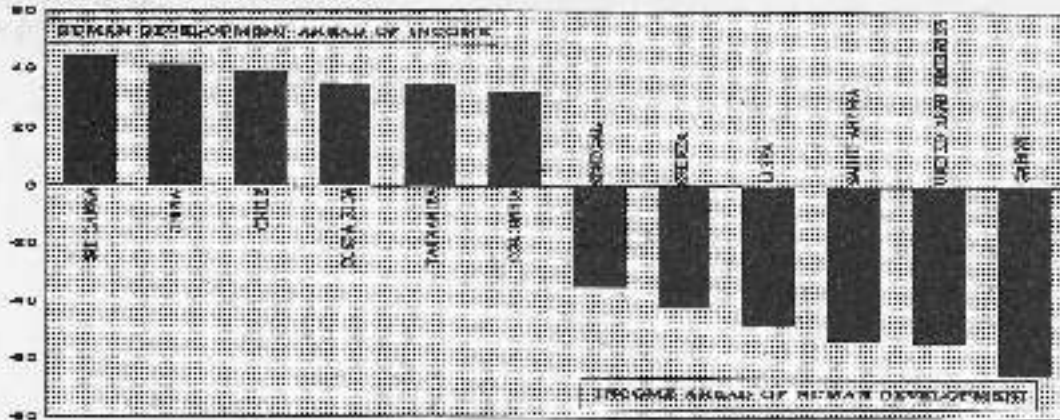
HUMAN RESOURCES DEVELOPMENT



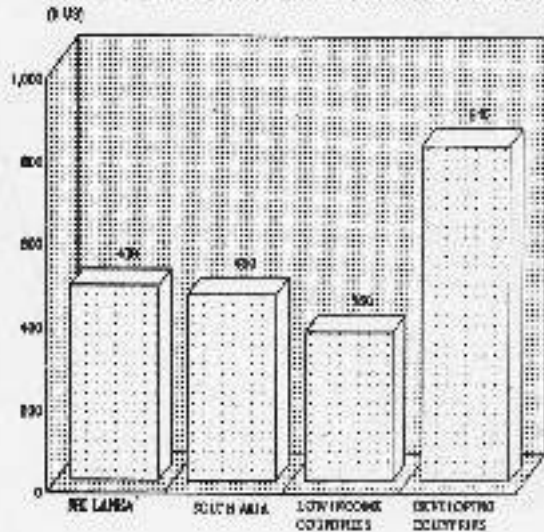
HUMAN DEVELOPMENT - PERFORMANCES

THERE IS NO AUTOMATIC LINK BETWEEN INCOME AND HUMAN DEVELOPMENT

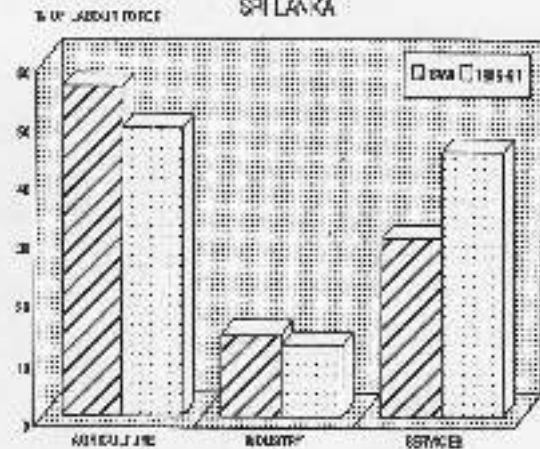
GNP per capita and HDI rank



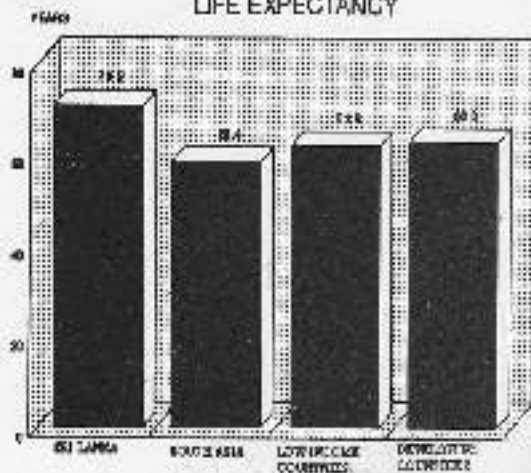
GNP PER CAPITA - COMPARATIVE PICTURE



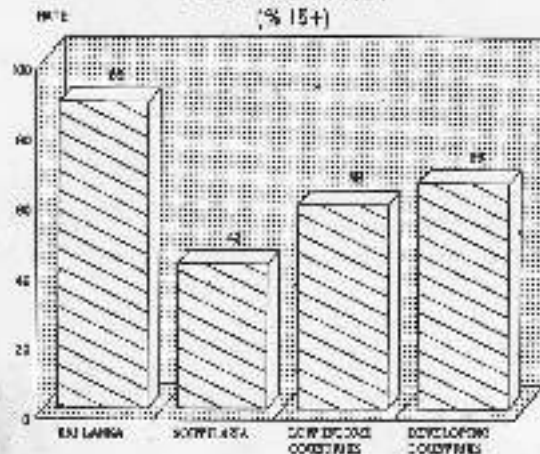
EMPLOYMENT by sectors SRI LANKA



LIFE EXPECTANCY



ADULT LITERACY (% 15+)



Source: Human Development Report 1993.

Published by the People's Bank,
Research Department,
Head Office,
55, Chatterampaya & Cochrane Mawatha,
Colombo 2,
Sri Lanka.

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- * Economy of Sri Lanka - Recent Trends
 - Macro Economic Development
 - Income Distribution and Poverty
 - Monetary and Fiscal Policy Development
- * A Preventive Approach to Reduce Urban Air Pollution
- * Rice Self Sufficiency and Food Security

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Balance sheet of human development - developing countries

PROGRESS

Life Expectancy

- Average life expectancy increased by over one-third during the past three decades; 29 countries have achieved a life expectancy of 70 years and more.

Health and Sanitation

- In the developing world, more than 70% of the population has access to health services.
- Nearly 80% of the population has access to sanitation.

Food and Nutrition

- Between 1965 and 1990, the number of countries that met their daily per capita calorie requirements doubled from about 25 to 50.

Education

- Primary school enrolment increased in the past two decades, from less than 70% to well over 80%. In the same period, secondary enrolment almost doubled - from less than 25% to 40%.

Income and Poverty

- In South and East Asia, where two-thirds of the developing world's population live, the GNP growth averaged more than 7% a year during the 1980s.

Children

- During the past 30 years, infant and under-five mortality rates were more than halved.

Women

- The secondary enrolment rate for girls increased from around 17% in 1970 to 30% in 1990.

Human Security

- With the end of the cold war, developing countries no longer have to serve as proxies for superpower rivalry, and in 1990, about 330,000 refugees returned to their homelands in Asia, Africa and Latin America.

Environment

- The percentage of rural families with access to safe water has increased from less than 10% to almost 60% during the past two decades.

DEPRIVATION

- Of the 300 million people above the age of 60, only 20% have any form of income security.

- About 1.7 million people die every year from infectious and parasitic diseases, such as diarrhoea, malaria and tuberculosis.

- More than 80% of the 12-13 million HIV-infected people are in the developing world, and the cumulative direct and indirect cost of AIDS during the past decade was around \$30 billion.

- Some 800 million people still do not get enough food.

- Nearly one billion people (35% of the adult population) are still illiterate, and the drop-out rate at the primary level is still as high as 30%.

- Almost one-third of the total population, or 1.3 billion people, are in absolute poverty.

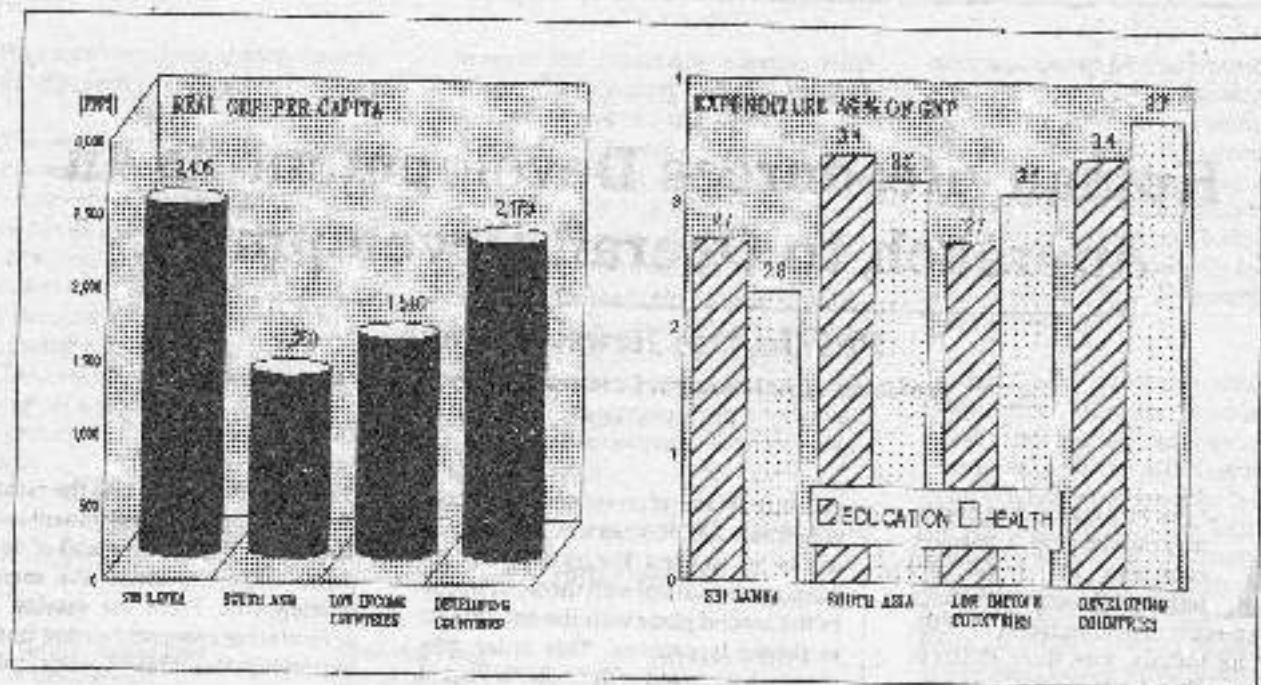
- Each day, 34,000 young children still die from malnutrition and disease.

- Two-thirds of illiterates are women.

- Internal conflicts afflict some 60 countries, and about 35 million people are refugees or internally displaced.

- More than 850 million people live in areas that are in various stages of desertification.

- The rate of tropical forest destruction is about the equivalent of one soccer field per second.



HUMAN RESOURCES DEVELOPMENT

Theory and Practice

Recent years have witnessed a shift of priority in development and growth with the expansion of Human Resources Development (HRD) activities in most developing countries. The earlier preoccupation with the development of physical resources has given way to "people's choices", recognizing the importance of human resources as a major contributing factor to economic growth. During the last two decades, not only policy makers and planners but management teams of lending organizations, also have been involved in human resource-led development. They have focussed more attention on skills, knowledge and more attention on people, as creating a capacity to mobilise and organise human resources considered more important for accelerating growth.

The general approach to human resources development is to identify areas of economic activity which are seriously handicapped due to shortages of technical, professional and skilled manpower and to initiate necessary measures for the development and training of strategically important manpower. The efficient use of available human resources is based on the assumption that economic growth is attributable more to human capital formation.

The investment in human resources, therefore, refers to direct investment in education and training and in the better organization and utilization of human resources.

Although human resources development became a new style of managing growth in the modern era of economic development, many doubts have been raised about the achievement of deliberate expansion of human resource investment, as many developing economies have failed to change their competitive advantages from commodity and other low-skill labour intensive products to more skill-intensive goods and services. Extremely low level of investment in human resources development is considered as the main reason for the under development of skills and technology.

According to the Human Development Report, developing countries spent more than 25% of their GNP through the budget, yet devoted less than one tenth of this to human development priorities such as education and health. As a result, human resources in many developing countries are utilized mainly for the production of primary commodities with a very low absorption capacity. It was also observed that global markets

make developing countries lose economic opportunities worth around 8500 billion annually - ten times what they receive in foreign assistance. The trend unfolding is likely to be more complex as problems of poverty and unemployment are increasing despite increased investment in human resources development. The shortages of technical, professional and occupational skills constitute the most formidable bottlenecks in the successful implementation of economic and social development. The development of human resources through education and vocational training, should therefore be accorded a very high priority in the future planning of economic development. However, the trend in human resources development shows a dichotomy between the theory and practice with the emergence of a global labour force moving towards attractive market places. It is against this background that the theory and practice of human resources development should be analysed.

In the following sections, the conceptual framework of human resources development is presented with a theoretical analysis of various fundamental issues involved in understanding the complexity of the approach. Secondly, the Sri Lanka case is presented with some practical implications of human resources development.

Human Resources Development as an Approach to Overall Development

Buddhadasa Hewavitharana

Professor of Economics, University of Peradeniya

At the very outset it is necessary to clear up a possible confusion in respect of terminology because the term human resources development, or HRD, to use its initials, has three different usages standing for three different concepts. In its conventional use which came into vogue from the 1950s, the term HRD replaced the original term labour to accommodate qualitative changes in labour arising from education, training, skill formation and health improvements. This is the human capital concept. Of late it has become fashionable among big firms to rename personnel development as human resources development. Underlying this is the concept of personnel management. Mention may also be made to the term human development (without the word resources) which has been publicised by the UNDP since 1990. It is based on the concept of enlarging people's choices by making development more democratic and participatory and has given birth to a body of methods for reviewing, measuring and monitoring progress on these lines.

My topic, HRD, connotes differently from these, although it has many ideas and features in common with the UNDP's human development concept. What is under discussion is the "grant strategy" for human resources development evolved by the ESCAP at its 1988 conference and promulgated as the Jakarta Plan of Action for HRD. It consists of one hundred and six action proposals, classified under six operational categories, for transforming into practice certain basic principles of HRD that have been adopted through a consensus. In the manner it has been presented it is simply an agenda for policy formulation, programming and implementation showing

very little by way of an explicit theoretical construct. J.M. Keynes writing the preface to his General Theory said that its purpose was to deal with theory and only in the second place with the application of theory to practice. This order gets obviously reversed in the Jakarta Plan of Action for HRD when it leaves it to the future to deduce the logic and to infer the theory from the guidelines to practice that it has offered.

The Core Concepts

The first step, therefore, is to identify and clarify what might be construed to be its conceptual underpinnings. The centre of the conceptual framework may be taken to be the fundamental duality in the human factor signifying the facts that the humans are the beneficiaries of

development and are also the most critical input into that development process. The former signifies the **end** of development, while the latter, the **means** of development. From the duality arises several other concepts bearing far reaching implications for both policy and practice.

If the emphasis is on the "means" aspect, then the development action will be associated with investment in economic instruments and a strengthening of the economic dimension of human resources, implying the human capital approach to HRD. If, on the other hand, the emphasis is on the "end" aspect, then, the development action will be associated with a promotion of consumption and a strengthening of the social dimension of human resources, imply-

Fundamental Duality in the Human Factor

Means of Development
(most critical input into development)

End of Development
(beneficiaries of development)

If Means aspect is emphasised-
- it is associated with investment in
Economic Instruments

If end aspect is emphasised-
- it is associated with
Promotion of Consumption

and
Strengthening of the Economic
Dimension of Human Resources
implies
The Human Capital Approach

and
Strengthening of the Social
Dimension of Human Resources
implies
The Social Development (Human
needs) approach

The New Perspective-
- Treat the two sides as an Integrated Whole
Warranting
- A Balanced Development of the two sides
and
- A Holistic Approach to HRD,
to formulate
- A Grand Strategy of a Single, Integrated
and Unified Process of HRD.

ing the social development or the human needs approach to HRD.

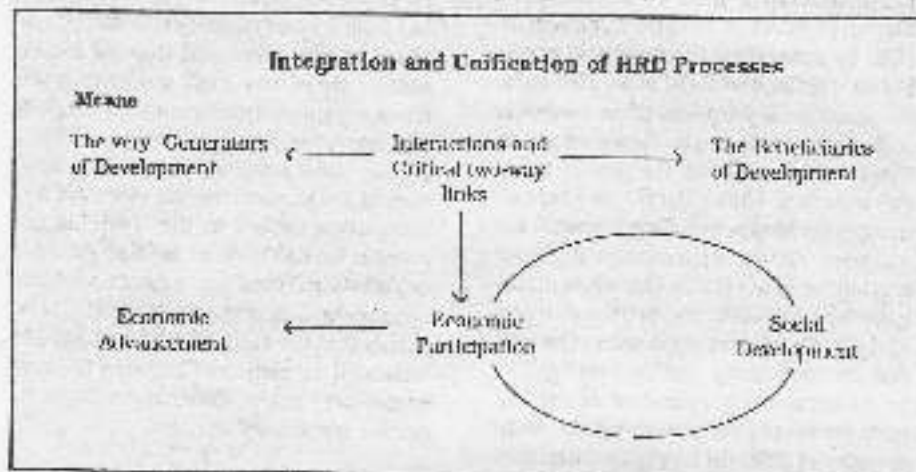
The new perspective of HRD treats the distinctions between end and means and between economic and social dimensions as being only analytical ones. For practical purposes it is possible to view all of these aspects and dimensions as belonging to one integrated whole warranting a holistic approach to HRD and to formulate on that basis the grand strategy of a single, integrated and unified process of human resources development.

become the maximally effective HRD strategy by exploiting these interactions and the critical two-way links.

There are, however, certain conceptual and practical difficulties obstructing the way. It has been customary to treat the economic dimension and the investment aspect of HRD as "active", as found in development models with human capital formation as an element, and the social dimension and the consumption aspect as "passive", as in the treatment of aggregate consumption as a "residual" in some main economic planning models.

means proposed for this transformation are inspired by the possible direct implications of quality of life improvements for development, as in enhancing the productivity of human capital, and their possible indirect implications for development, as in providing both capacity and incentive to individuals to develop their capabilities by overcoming the obstacles they face.

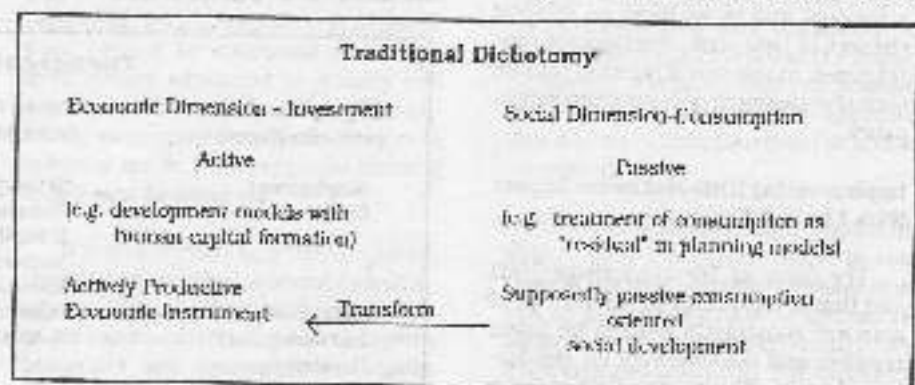
Arranging a judiciously balanced development between the economic dominated human capital approach and the social welfare dominated human needs approach is of importance for transforming the "passive" into the "active". The determining factor here, of course, is the strategy of an appropriately balanced budgetary allocations between the two sides. Its importance can be highlighted by pointing to two types of unsatisfactory country experiences. In some countries, a strong human capital orientation has been associated with low attention to critical quality of life issues resulting in manpower bottlenecks, low productivity growth and social instability. Evidently, in these countries social development has been treated from a consumption perspective, and for that reason, the finances allocated to it have been in the nature of a "residual" dependent on the performance of the economy. On the other hand, in certain other countries, strong social development approaches are observed to have led to serious budgetary problems and disappointing economic performances. Such an outcome may have been due to varying reasons, such as, the indirect and long-term nature of the contribution of social welfare to economic growth, the ineffectiveness of social welfare measures of the simplistic type and the dependency syndrome of



What is the basis of proposing that the two sides with such differences should be merged to form a single process? The integration and the unification of the HRD processes towards fulfilling the strategy are to be achieved by giving full recognition to the interactions and the critical two-way links between the roles of human resources as the beneficiaries of development and as the very generators of such development.

The logic of two-way links between these two dimensions and aspects, however, rejects the traditional dichotomy between actively productive economic instruments of development and supposedly passive consumption oriented social objectives of development. More than that, the integrated HRD strategy in fact attempts to ensure that the supposedly "passive" dimension gets transformed into an "active" one on the basis

The supporting arguments are, that economic advancement is not possible without a firm social base because social development of humans (especially, the disadvantaged ones), impacts on their economic participation, and, that social progress cannot be considered to be a simple straightforward outcome of economic growth because the economic participation of humans impacts on their social development. It is a case of mutual reinforcement between the economic participation and the social development, especially of the disadvantaged population groups, leading to a greater economic advancement. The holistic and integrated approach to HRD seeks to



of the earlier noted key strategy of mutually reinforcing processes of social development and economic participation. The

social services which dampens personal initiative and weakens the incentives for work. Such countries encounter prob-

lems of finding resources to sustain large social welfare expenditure because output growth tends to lag behind the resources needed to support such expenditures. In both these types of country situations the solution that is invariably adopted to deal with the ensuing budgetary problem is the resort to a residual approach to social development.

These residuals are in the last analysis dependent on the success of human capital expenditures which by now have become less productive owing to the very same decline in the expenditures on the complementary quality of life improvements. In this way a pattern of circular causation in which both human capital and quality of life get weakened, taking turns, can set in. Eventually, social development expenditures could become less of an integrated element of long-term targets of development and in this process social development policy would tend to be divorced from economic policy. The strategy of a balanced development between human capital and human needs addresses these complicated issues. It bases itself on the argument that outlays for improving quality of life should not be perceived as consumption oriented unproductive social expenditures, to be undertaken at the expense of productive investments, but as outlays for transforming the beneficiaries of such expenditures into active and innovative agents of development and, therefore, as essential investments for supplementing and reinforcing investments in human capital and physical infrastructure. The aim of this strategy is to ensure a pattern of allocation of funds for the two purposes that would rescue social development expenditures from the status of a residual and make them an integral element of long-term development programmes. In this way it hopes to reunite social development policy with economic policy.

Implementing HRD-Maximum Impact With Limited Resources

The issue of operationalising HRD and that of optimising in the context of resource constraints need to be taken together and discussed as an amalgamated issue. The reason is that for a grand strategy to be practicable and effective, it must in its very design contain a number of approaches and manipulative mechanisms that are capable

of producing the maximum possible impact on human resources with limited budgetary resources. Mindful of these imperatives the integrated HRD strategy has equipped itself with strategies based on the principle of selectivity for ensuring cost-effective implementation.

(I) The Integrated-Thematic Approach

Under this approach the focus is restricted to those elements and components of HRD that have been judged for a country to be the most critically important ones for the development of its human resources. In selecting them, special attention is paid to an element's ability to effect a holistic approach to HRD by generating the Strongest possible interactions with the other elements. For functional purposes these elements and components can be classified under three interdependent themes of equal consequence. Under the theme Employment and Manpower Development are included all the elements and issues pertaining to access to employment, income and productivity, skills formation and labour market dynamics. The second theme Science and Technology has as its aims, the preparation of the human resources for absorbing the technologies of different levels, the invention and adaptation of technologies to suit the labour proportions and meet the development needs of a country and by these means, spread a technology culture across society. It encompasses the key issues in science and technical education and technology development. The third theme, Quality of Life Issues, envisages coordinated strategies in an unusually wide range of key quality of life sectors, including culture and environment, to improve the quality of life and by its means raise productivity as well.

Since the constituent elements of these themes are closely inter-related, the thematic approach is predicated on the planned and full exploitation of this network of inter-relationships and complementarities. None of these elements is new. What is new is that they are coordinated in a unified integrated approach to HRD policy making and planning with a focus on the role of humans as both a critical input and the ultimate beneficiaries of the development process. This integration is best facilitated if emphasis were to be laid on those elements of HRD which are capable of producing the strongest of interactions and synergistic relationships. All types of education and training, for example, show very high scores of interfaces, complementarities and synergistic linkages with the other elements of HRD. Hence education and training have earned for themselves the status of key integrating factors in the thematic approach to HRD. It is in the possible exploitation of the complementarities and synergistic linkages among the HRD elements that the earlier noted strategy of a balanced development between the economic and social dimensions finds its actual operational content.

The implication for budgetary allocation and programming is that the investments in the different elements of HRD have to be combined in appropriate proportions or else the complementarities and the linkages among the elements will not get exploited in full. A disproportionately low allocation of funds for one element, for example health, may be too small to produce a major impact and may even have negative consequences on other elements of HRD, such as education and employment. These consid-

The Integrated - Thematic Approach		
Employment & Manpower Development	Science & Technology	Quality of life Issues
- Employment Creation	- Primary Education	- Literacy
	- Science & Technical Education	- Education (various types and levels)
	- Technology Inventions, Innovations, Adaptations & Applications	- Primary health-care
- Income Generation		- Health & Family Planning
- Increasing Productivity		- Housing
- Vocational Training		- Nutrition
- Manpower Development & Planning		- Urbanisation
		- Culture
		- Environment

A mathematical formulation of the human development index

The human development index (HDI) is constructed in three steps. The first step is to define a measure of deprivation that a country suffers in each of the three basic variables — life expectancy (X_1), literacy (X_2), and the log of real GDP per capita (X_3). A maximum and a minimum value is determined for each of the three variables given the actual values. The deprivation measurement places a country in the range of zero to one as defined by the difference between the maximum and the minimum. Thus d_i is the deprivation indicator for the i th country with respect to the j th variable and it is defined as:

$$d_i = \frac{\max X_j - X_{ij}}{\max X_j - \min X_j} \quad (1)$$

The second step is to define an average deprivation indicator (d_i). This is done by taking a simple average of the three indicators:

$$d_i = \frac{1}{3} d_{ij} \quad (2)$$

The third step is to relate to the human development index (HDI) as the inverse of the average deprivation index:

$$HDI = 1 - d_i \quad (3)$$

To illustrate the application of this formula to Kenya is as follows:

Maximum life expectancy	= 78.4
Minimum life expectancy	= 41.8
Maximum adult literacy rate	= 100.0
Minimum adult literacy rate	= 12.3
Maximum real GDP per capita (log)	= 3.68
Minimum real GDP per capita (log)	= 2.34
Kenya's life expectancy	= 59.4
Kenya's adult literacy rate	= 60.0
Kenya's real GDP per capita (log)	= 2.90

$$\text{Kenya's life expectancy deprivation} = \frac{78.4 - 59.4}{78.4 - 41.8} = 0.519 \quad (1)$$

$$\text{Kenya's literacy deprivation} = \frac{100.0 - 60.0}{100.0 - 12.3} = 0.456$$

$$\text{Kenya's GDP deprivation} = \frac{3.68 - 2.90}{3.68 - 2.34} = 0.582$$

$$\text{Kenya's average deprivation} = \frac{0.519 + 0.456 + 0.582}{3} = 0.519 \quad (2)$$

$$\text{Kenya's Human Development Index (HDI)} = 1 - 0.519 = 0.481 \quad (3)$$

Excerpt from Human Development Report, 1990

crations point to the need for arranging an appropriately balanced development of the different elements of HDI by means of carefully planned budgetary allocations and appropriate programming.

It needs to be realised further that a restructuring of budget priorities necessitated by and in conformity with the pattern of priorities under the thematic approach would improve the efficiency of spending on development by bringing about a more desirable mix of economic and social development expenditures. The allocations and reallocations of resources that are necessitated for fulfilling the requirements of the integrated thematic approach are in fact potential mechanisms for increasing the impact while reducing costs. Promising such potentialities are the deliberate allocations in favour of improving productivity

in small farm and cottage and small industries sectors and other labour-intensive production sectors, and the deliberate reallocations of resources: from curative to primary health-care, from highly trained doctors to para-medical personnel, from urban to rural services, from general to vocational education, from tertiary education to primary and secondary education, from formal to non-formal education, from formal sector to informal sector, from expensive housing to low-cost housing etc.

It is now obvious how the integrated thematic approach also becomes a strategy for producing the maximum possible impact on human resources within given budgetary and resources constraints. When mutually supportive and mutually reinforcing HRD policies and programmes are formulated within the

framework of the T approach they would generate synergistic linkages and multiplier effects and exploit the complementarities so as to create in the end a total impact that would be greater than the sum of the effects of any actions taken individually and separately on these elements. It means that the impact on human resources that can possibly be created by adapting the approach would be more than merely the sum of its component parts.

Such potentialities as are attributable to the T approach stand in contrast to the relative ineffectiveness of ad hoc or piecemeal efforts at human resources development often found in under-developed countries. For examples, employment and manpower development are considered separately from the development planning processes and are

treated as a by-product rather than an integral element of the development strategy; separate and specific programmes for poverty alleviation guaranteeing employment or for satisfaction of basic needs are implemented without realising that the problems of inequality and poverty are unlikely to be overcome in the absence of carefully coordinated strategies and programmes. The implication is that the commonly found programmes addressing specific fundamental development objectives such as, eradication of absolute poverty, full employment, universal basic education, universal access to secondary education, vocational training, national self reliance in science and technology, satisfaction of basic needs and people's participation are likely to produce better results if they were to be implemented in a coordinated manner within the framework of an integrated-thematic approach to HRD. This is because the integrated-thematic approach accommodates all the relevant policy interests and expertise areas in HRD and promotes the linkage, spread and multiplier effects of a coordinated set of programmes.

Institutional Arrangements Required

It is now evident that a thematic approach necessarily implies an integrated approach, and an integrated thematic approach in turn necessarily implies an inter-sectoral approach because

the different elements of HRD come under different sectors or their respective sub-sectors. Typically, HRD plans and programmes are developed sectorally and implemented by sectoral agencies. To satisfy the requirements of an integrated-thematic approach, however, much of the planning, programming and implementation should be done inter-sectorally and in a coordinated manner. It should be noted that the institutional arrangements for the inter-sectoral approach and its inter-sectoral coordination contribute to the cost saving and the impact maximisation aim of the I-T approach by improving the deliveries to the beneficiaries and by facilitating a fuller exploitation of the complementarities and the linkages among the sectorally conceived programmes. Inter-sectoral planning and implementation will be facilitated by an inter-agency coordination because there are many agencies and institutions belonging to the public, private and NGO sectors engaged in HRD work. A coordination among them could lead to an improved mobilisation of resources by exploiting the complementarities and to a rational use of resources by preventing any overlap in the activities and eliminating thereby the wastages of resources. Besides, as pointed out by the Human Development Report of 1991, NGOs are able to provide some HRD services at much lower unit costs than the public or private sector agencies. In these several ways the institutional mechanisms needed for the I-T approach make their own contributions to a maximisation of impact with limited resources.

(II) The Target-Group Strategy

In this strategy too, the principle of selectivity is observed at the expense of comprehensiveness in its attempt to maximise impact with limited resources. The method adopted is the prioritisation of the development of the human resources of the disadvantaged sections of the society, such as, women, children under the age of five years, the rural poor, the urban poor, scheduled castes and tribes and isolated communities. These may be adopted as target groups for the I-T approach to HRD. The target group ideology is to tap the resources of such groups in order to improve their quality of life so that it will in turn lead to a rise in their economic participation and productivity. The rationale for giving priority to these groups is that cost-

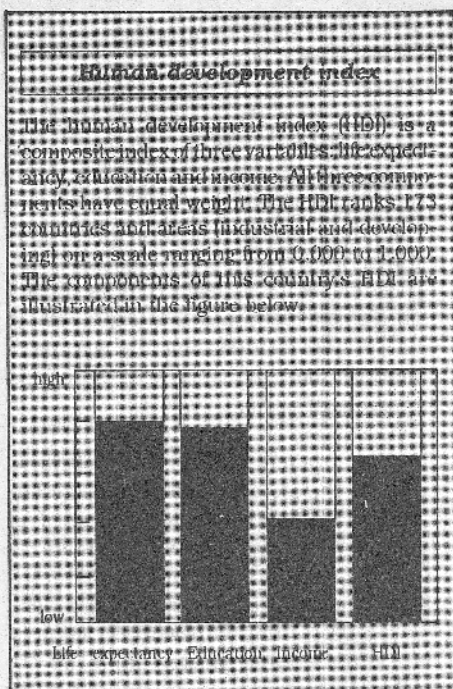
effectiveness of HRD programmes is high with them and, therefore, they are a means of obtaining maximum impact under a resources constraint. The targeting of disadvantaged sections of society maximises cost-effectiveness of HRD in four ways.

First, it economises on the outlays on HRD by directing them to selected population groups instead of spreading them wide across the entire society.

Secondly, it reduces the high costs associated with human resources under-development among women as manifest in high rates of birth and infant mortality, low life expectancy, low levels of literacy and also reduces the impact of such costs on the other aspects of HRD.

Thirdly, it is the disadvantaged groups that can be expected to generate the highest social rate of return, especially the highest long term rate of return, on investments in HRD. Even small investments in their favour could result in disproportionately high improvements in their human resources implying that the development of the human resources of these groups is crucial. Such improvements will not only enable the attainment of a minimum quality of life but would also stimulate and accelerate economic growth by the enhancement of human productivity via education and training and release of human productive capacity via programmes in health, nutrition, family planning etc.

Fourthly, the social rate of returns can be further enhanced by adopting an additional sub-strategy of making appropriate investments for the development of the human resources of groups of persons identified to be "key target groups". The strategy here is to stimulate the particularly sensitive variables in HRD and to trigger off the generators of multiplier and spread effects. There are persons who have the ability to put investments in HRD to best use not only for themselves but also for the development of other priority groups and sectors. They are in a position to generate strong multiplier effects to benefit others. Thus the development of women's human resources; for example, can be considered to be a key investment in human infrastructure, because of its high potential for spreading multiplier effects through the family to improve the human re-



sources of important and vulnerable segments of the community as in improving the human resources of the succeeding generation through improvements in children's health. Social returns from investments in women's human resources may take the form of reduced fertility, reduced infant mortality, lower school drop-out rates, improved family nutrition and lower population growth rate. Besides women, there are other groups who could qualify to be "key target groups" because they have the potential to extend their own human resources development to other members of the community through multiplier effects such as employment creation, demand creation and a promotion of social participation. In these four ways the target group strategy maximises impact with limited resources by economising on outlays on HRD, eliminating certain costs of under-development of human resources and maximising social returns to investment in HRD.

The target group strategy provides operational content to the ideals of egalitarianism, social justice and distributive equity by prioritising those disadvantaged sections of the society who stand to benefit most from HRD by virtue of the urgency of their needs and by optimising the distribution of the benefits of human resources development among the broad masses.

(III) The Demand-Oriented Strategy

With disadvantaged sections of society, the usual supply-focused HRD programmes may not be able to achieve much distributive justice because of the many economic, socio-cultural, psychological and physical obstacles to their participation in HRD and to their effective utilisation of the means of HRD so supplied. Thus it is commonly observed that despite the existence of policy and planning administrative for HRD and the availability of facilities for HRD, the quality of the human resources of the disadvantaged groups remains largely unimproved. The solution to this problem is the sub-strategy of a demand-oriented approach to HRD which seeks to arrange an appropriate balance between supply side and demand side approaches to HRD. Its aim is to stimulate or create a demand among the affected persons for upgrading their own human resources by raising community and individual awareness of the opportunities

for and benefits of HRD, and enabling them to overcome the socio-cultural and other constraints that reduce their demand for HRD. This is to be achieved through measures to affect the values and attitudes that determine such demand. By bringing in the demand-oriented approach to HRD, the Jakarta Plan of Action is making a unique contribution to HRD as found in its sectoral integration and its simultaneous incorporation of the demand and supply aspects of the role of HRD.

Institutional Arrangements Required

Implementing a demand-oriented sub-strategy requires the use of several demand stimulating or creating instruments sustained by certain institutional arrangements. Enablers in groups or as individuals can be used to catalyse HRD among target groups, mobilise popular participation and ensure that programmes reach the intended groups. Community programmes, and volunteerism are among the important institutional means of stimulating demand for HRD among disadvantaged sections of the society. Inter-agency coordination for field operations at micro level, as already noted is a cost-effective measure and a means of maximising impact on each target group. It is notable that while allowing alternative mechanisms of HRD to flourish, arrange for a planned distribution of roles in HRD among the agencies and institutions in the public, private and NGO sectors so that individual initiative will be given full rein, overlap in the activities will be prevented, complementarities will be exploited and community and private resources will be mobilised to supplement public resources. The new concept developed by the Jakarta Plan of Action for inter-agency coordination of HRD is making the NGOs and private sector institutions serve as active partners of public sector agencies. It contrasts with the traditional concept which required only complementary approaches by them.

Popular participation at local level planning, programming and feedback processes in HRD and "bottom up planning" are potentially effective institutional arrangements which can be harnessed in support of the demand-oriented approach. Devolution of power and decentralisation of implementation are necessary to create a congenial institu-

HUMAN DEVELOPMENT

INDICATORS - Sri Lanka

Population	17.4 million
Land area	65,7 million ha
GDP	US \$7.3 billion
Region	Southeast Asia
Income group	Low
HDI rank (among 178 countries and areas)	88
High value (on a scale from zero to one)	0.688
Human development group	Medium
GDP rank (on the HDI rank)	44

HUMAN DEVELOPMENT

Life expectancy (years)	70.1
Access to health (1991)	100
Access to electricity (%)	46
Access to sanitation (%)	50
Child mortality (per 1,000 live births)	101
Adult literacy rate (%)	78
Female literacy (%)	78
Real GDP per capita (1991)	406
Real GDP per capita (1990)	405

ILLUSTRATED DEPRIVATIONS

Without access to health	17
Without access to safe water	21
Without access to electricity	54
Without access to sanitation	50
Without access to electricity	50
Without access to electricity	50
Without access to electricity	50
Without access to electricity	50
Without access to electricity	50
Without access to electricity	50

Source: Human Development Report, 1993

tional framework for popular participation to flourish.

These institutional arrangements may also be viewed as mechanisms for increasing impact while reducing costs. More decentralised and participatory approaches increase the efficiency of the utilisation of existing resources by improving the delivery system, making prudent economies, reducing unit costs and by encouraging private initiative in both the financing and delivery of services. Involving community and self-help

schemes are proven methods of reducing costs and eliminating waste. The involvement of NGOs, as noted earlier, could result in a supply of services at low unit costs by means of a use of cheaper technologies.

Can the Integrated-Thematic Approach to HRD be Regarded as an Approach Also to the Overall Development of a Country?

There are several grounds for arguing that the integrated - thematic approach is qualified to be regarded as an approach to overall development or at least that it relates very strongly to it.

First, at the stage of development policy making itself, the integrated-thematic approach can play a very constructive role in resolving long-standing development policy dilemmas. The conflict between the qualitative objectives of output growth and social welfare has for long engaged the attention of policy makers and development planners. The discussion on "growth with distribution" that commenced in the 1970's after the disappointing experiences of the UNO's first development decade, was an attempt to find a *via media* in the context of this dichotomy. The integrated HRD strategy as it unfolds itself through the foregoing analysis not only provides body and soul to this discussion but also seems to surpass it by indicating possibilities for "growth through distribution". This role emerges in a sharper profile in resolving another long standing conflict between qualitative objectives; the one between economic growth and social justice or distributive equity. In this context, it should not be noted that the target-group strategy provides operational content to the ideals of egalitarianism, social justice and distributive equity. By raising the status of disadvantaged groups who are normally denied their due share of the means of HRD, it brings into balance the concerns for equitable distribution of opportunity with those for the fullest possible development of the individual potential. What is of significance here is that this very same strategy which contributes to productivity increases and growth by optimising the use of resources, maximising social returns, upgrading the quality of labour and generating spread effects and multiplier effects is simultaneously promoting social justice and distributive justice. The thematic approach attempts to re-

solve the above conflicts and also the one found in output growth versus employment by advancing the unified "two in one" HRD objective. The very centrality of its role in resolving these central issues in national development policy making and planning should be given its due weight.

Secondly, even greater importance should be attached to the new definition of the development objective it has introduced. It is a landmark in the history of economic development thought. Thinking about economic development started half a century ago by equating development with the growth of the industrial sector following the model of historical development of the West. Later it switched over to equating development with the growth of output not just of one sector but of all sectors (GNP) in the light of the shortages of all types of goods and services experienced during the population explosion of the 1950's and 1960's. This definition was in turn replaced by equating development with economic growth plus social development in the light of the disappointing results of the UNO's First Development Decade and thanks to efforts of many to develop indicators to measure social progress. The integrated-thematic approach takes economic development thought beyond this third stage of its evolution by making social development play, not just an additional role, but an integral role in development and growth. In this fourth stage of the evolution of economic development thought, the objective of the development of the human factor is to improve the living conditions of human beings and make them better productive agents in a mutually supportive manner. By this definition the objective of the development of human beings is made to overlap with the objective of output growth over a wide range of cumulative growth, making the new HRD approach a major approach to overall development.

Thirdly, the very extensiveness of the coverage of development issues by the thematic approach should be given some weight. While it encompasses all issues in social development, it directly covers the wide range of issues in economic development and growth falling within the purview of the three themes. Furthermore, it is seen to encompass indirectly through spread and multiplier effects many of the important dimensions

of overall development. Therefore, by virtue of the extensiveness of its coverage alone, it can claim to be regarded as an approach to overall economic development rather than as just one of its components.

Fourthly, the I-T approach can be evaluated from the perspective of the growth-oriented aggregate production function. Of its five variables that determine output (GDP) growth, the variable science and technology is regarded as the most dynamic one. Since it constitutes one of the three themes, many of its issues are the direct and the deep concerns of the I-T approach. Likewise, all issues in the human resources variable in the aggregate production function, including population, which is its most dynamic aspect, are of course the central concerns of the thematic approach. Organisation, institutions and socio-cultural factors constitute another variable, but its issues are seldom specifically or separately addressed in development plans. The Jakarta Plan, however, explicitly assigns to it crucial strategic roles and tries to manipulate it purposively to carry out specific tasks. So much so, that many of the integrated-thematic processes are institution-propelled. On the variable natural resources, the thematic approach can have a significant impact through its concern over issues in environment under quality of life and through some of its other concerns as well. The thematic approach in the course of being implemented will be exerting a strengthening effect on the remaining variable, capital, by causing a decrease in its under-utilisation and an increase in its productivity, as the efficiency of labour, capital's cooperant factor, begins to rise under the impact of the various sub-strategies and programmes.

Fifthly, the programmes of the I-T approach have far reaching implications for the coefficients, the parameters, the ratios and the functions in the economic development process and the planning procedures: in concrete terms, the capital labour ratios, the capital output ratios, the rate of saving, the investment pattern and priorities and project appraisal and evaluation procedures. Since the macro-economic variables are determined or governed by these, the I-T approach gets empowered thereby to indirectly influence the behaviour of these variables.

Finally, it needs to be remembered that the I-T approach with its potentialities for maximising impact with limited resources offers itself as a cost-effective means of human resources development as well as of overall development.

Obstacles to the Adoption of the I-T Approach

For an approach with radical ideas of this sort to get adopted, a strong political commitment to it is required. There is a problem here, because the very people who are its would-be beneficiaries can neither articulate a strong demand for HRD nor exercise much political clout on its behalf. For the advocacy of the growth objective, there are the ranks of the capitalists and the investors. For simplistic welfare and redistribution programmes, agitation would be readily forthcoming from the political parties, especially the ones that happen to be in the opposition. For it to gain in acceptance, the I-T approach has to necessarily look towards the thinking and philosophising abilities of the intellectuals, the professionals and the spiritual and cultural leaders and the opinion makers of the society. The responsibility devolves on them to initiate the discussion, keep the discourse alive, refine the arguments through research and experimentation, improve its credibility and spread the message.

Although the I-T approach to HRD may not be incompatible with some of the existing development models, certain technical issues may still obstruct its adoption as a key planning concept. From a national development point of view it would be necessary to delineate the functional relationships between HRD conceived as a problem solving concept and the national development problems that have been prioritised, such as slowness of growth, balance of payments problems, low productivity, rural under-employment etc. The planning instruments needed by such a planning procedure based on the centrality of HRD are yet to be defined, and as long as that is the case, the centrality of HRD in the national development effort and its potential role as a leading source of growth would not be fully appreciated.

Obstructing the elevation of the I-T approach to the status of a key planning concept is the lack of well developed techniques for measuring the long-term

and the indirect economic and social returns on investments in HRD, including their non-pecuniary benefits. The difficulty would continue to exist, therefore, for the appraisal and evaluation of projects in general and more specifically, for the assessment of rates of returns on alternative investments in HRD and on such investments directed towards alternative population groups.

Yet, given a preparedness for radical thinking and an agonised search for development alternatives much of the spirit and the key features of the I-T approach may get incorporated in development plans, purely for pragmatic reasons. A case in point is the remarkable policy document entitled "Towards Social Transformation - Approach to the Eighth Five Year Plan 1990-95" brought out by the Indian Planning Commission after a brainstorming session in June, 1990.

Another impediment is that investments in HRD are of a long-term nature with long gestation lags, whereas the planning done in most of the countries is with short or medium term time horizons. Where there has been a switch over to long term planning, however, as recently witnessed in Bangladesh, it has become possible to adopt the I-T approach to HRD as a near-central planning concept, purely on pragmatic grounds. Thus the authors of the Fourth Five Year Plan of Bangladesh, 1990-95, the first stage of a twenty year plan, have prepared a plan which is nearly compatible with the Jakarta Plan of Action, without being well acquainted with it. It demonstrates that the I-T approach does not really stand in the way of the search for viable development alternatives.

Evaluating the Philosophical and Ideological Contents of the New HRD Concept

Efforts at development there have been, but in many of such recent experiences, a limited human relevance and narrowly defined development goals are observed to have fostered materialistic values and an individualistic climate. In association with these there have been a marginalisation of some sections of the societies and a persistence of mass poverty even where the GNP had doubled. With this as the diagnosis of the present crisis in development policy, the Jakarta Plan of Action for HRD has initiated a

new discourse to bring the human factor to the centre of the development process with the new perspective of "putting a human face on development".

Prima facie, there is reason therefore to examine the new HRD concept in relation to the humanistic protest that has surfaced in recent times and to evaluate it in terms of the philosophy of humanism. Erith Fromm, the most articulate proponent of New Humanism, holds that the development of the economic system is no longer determined by the question of what is good for man, but what is good for the growth of the system. The protest here is against the dehumanisation of the social character and the rise of industrial and cybernetic religions and the plea is for a society centered not around things but around persons. The I-T approach to HRD makes the same diagnosis, judges a somewhat singular protest and makes the same sort of plea. As regards corrective action also there are some ideas shared in common by the two lines of thought. Lewis Mumford, a leading proponent of Humanism, advocates decentralisation and institutional arrangements for the running of the economy and the society. Under the I-T approach, as noted earlier, the processes of human resources development, and through them the development of the economy, will be largely propelled or guided by institutions. Again, the I-T approach is congruent with two of the five main ideas for building a new economic and social order put forward by the post-Marxian radical humanists. These are the ideas concerning the individual being an active not a passive participant in social life, and the relation between man and nature being one of cooperation and not of exploitation. It should, however, be noted that with regard to the remaining three ideas there is either only partial agreement or no agreement.

From these points onwards, however, there is a parting of the ways between the I-T approach and humanistic philosophy. This becomes evident in the definition of the objective of developing the human factor. In the I-T approach it is to improve the living conditions of human beings and make them better productive agents in a mutually supportive manner. The principle underlying this is the imperative of nature that

Development Paradigms: 1960-90

Period	Dominant Paradigms	Main Constraints	Strategy Proposed	Alternative Paradigms
1960-70	Maximisation of growth	Absorptive capacity Low savings	Art Foreign investment Human capital formation	Stages of Growth Socialist accumulation
1970-80	Structuralism	Structural rigidities Market imperfections Patterns of ownership Domestic politics	Redistribution with growth Basic needs Employment generation	State socialism Dependency and neo-Marxism
1980-90	Neoliberalism	Balance of payments disequilibrium Constrained markets State as partial Rent-seeking	Liberalise markets and prices Reduced role of state	Modified structuralism Adjustment with Indian face
1990-	Human Development Poverty alleviation	Recession Stagnation Deepening poverty	Investment in basic services for human development Learning intensity Societywide	Neoliberalism

men must of necessity become good productive agents or else they cannot survive. To Erich Fromm this would not be acceptable as a definition of the end of human development because it is conceived at the mundane level and it is too contextual. In his perspective, the fact that man is the end of development has been lost sight of in every sphere. Man in increasing his power over matter, to solve what he calls the production problem, has become enmeshed in the network of the means and has "lost the vision of the end". Man, he says, has lost sight of the most important and fundamental questions of human existence - what man is, how he ought to live and how the tremendous energies within man can be released and used "productively". In this perspective, the attempt of the I-T approach to define the end of HRD has to be regarded as a visionless one.

Humanistic ethics is about the art of living that enables man a full development of his productiveness. Following from this is the thesis that the life-style and the consumption pattern adopted by man can lead to either his well-being or his ill-being. Consumption pattern and preferences are social phenomena in the sense that they are imposed on men by the society. In the words of the Buddha, "*pursassa kamo sankappa rago*" - "man's sensual desires are only attachments to concepts". To Erich Fromm and E.F. Schumacher, such conceptualised consumption and life-styles give rise to irrational strivings and

cravings and these in contradiction with man's real interests result in pathogenic consumption and a pathogenic way of living. In modern life therefore "ends themselves have a shadowy and an unreal existence". Now, the I-T approach advocates an increase in consumption for the disadvantaged sections of society, but beyond that it is neutral as to what should be the production goals, the life-style and the consumption pattern of the society as a whole. It cannot and does not relate life-styles to man's optimal well-being because it has no discourse on either of them. For this same reason it is silent on New Humanism's idea that maximum consumption should be replaced by sane consumption.

New Humanism's and Radical Humanism's diagnosis of the present malady extends to the psychology of man, revealing that man's character traits are engendered by the socio-economic system, leading to a pathogenic way of living. Pleading, therefore, for a profound psychological change in man, (a radical inner-human ethical change), Fromm advocates a characterological and spiritual change while Schumacher urges a development of the spiritual culture. The corner-stone for these pleas is found in the Buddha's teaching "*mano pubbanga dhamma mano settha manomaya*" - "mind is the forerunner of all component things, mind is chief and all things are of the mind". In this context there is a perceptible incompleteness in the HRD concept because it is neither

explicit nor specific about the non-physical and non-material aspects of the development of man. While its concern over cultural life is brief and devoid of any specific programmes, its reference to spiritual life is only tokenistic.

While the radical humanist economist E.F. Schumacher pleads for a value-based development of the culture of the inner-man, the radical economists Mark A. Lutz and Kenneth Lux argue for a sovereignty of political, moral and spiritual values over economic life. In their perspective, economics should promote human welfare by recognising and integrating a full range of basic human values. The I-T approach is not concerned with such normative issues. Indeed, it aims to change existing values, but only those that obstruct social participation and economic advancement.

It is evident that despite some common grounds, the thoughts in the new HRD concept and in Humanism inclusive of radical economics are of different categories and at different levels. Still, taking fully into account the difficulties of integrating humanism with the development processes at the present juncture, there cannot be much doubt that all humanists and radical economists would join together to say about the new HRD concept that here is at least a beginning to a good thing.

[Courtesy: Central Bank of Sri Lanka]

Human Resources Development in Sri Lanka - A Macro Perspective

Sudatta Ranasinghe
Senior Lecturer
Postgraduate Institute of Management,
University of Sri Jayawardenepura

Being a developing country aspiring to achieve the status of a newly industrialized country, Sri Lanka can benefit from her educated youthful labour force through a sound human resources development policy. However, the existing imbalance in the labour market manifested by the problem of educated youth unemployment suggest that the country has failed in producing the kind of manpower that meets the needs of the economy. In a context where there is a serious lack of systematic human resources planning, the present trend of producing large numbers of educated unemployed is likely to continue. Hence, there is an urgent need to address the key issues related to human resources planning and development.

Introduction

This paper intends to take a broad overview of the status of human resources development in Sri Lanka with a view to identifying the key issues related to human resources development and their policy implications. The paper will briefly examine the current labour market imbalance with particular reference to employment and unemployment and the system of human resources development in Sri Lanka.

A glimpse into Sri Lanka's economic performance during the past few decades would reveal that the country has achieved relatively low economic growth although there had been remarkable achievements in terms of development indicators such as life expectancy, infant mortality etc. The welfare oriented development policy which resulted in several achievements in terms of social development underwent a significant change in early 1978 with the introduction of economic liberalization and the open economic policies. In 1993, fifteen years after economic liberalization, the country is still confronted with the problem of educated youth unemployment where the majority of unemployed do not

enjoy much prospects of securing gainful employment in the industries and services in modern sectors of the economy which have benefited from the open economic policy.

As revealed by the Annual Report of the Central Bank of Sri Lanka for 1992, the country has achieved a real growth rate of 4.3 percent and GNP per capita growth rate of 3.5 percent in 1992. The GNP per capita at current prices was in the region of 494 US dollars with a mid year population of 17.41 million. The data also show that agricultural sector had accounted for 21.4 percent of the GDP, while the manufacturing and services sectors have constituted 18.5 percent and 5.1 percent respectively of the GDP in 1992.

The data on economic trends reveal that there had been a negative growth in the agricultural sector where the majority of the labour force is engaged. Relatively high growth rates have been recorded in respect of the manufacturing sector (9.0 percent), construction sector (7.0 percent) and the services sector (5.3 percent). In the case of the services sector growth has taken place mainly in the transport, communication, trade and

banking and financial services. Due to lack of data it is difficult to establish the extent to which the high growth sectors have contributed to an increase in employment. However, the growing unemployment among educated rural youth, seem to suggest that rural youths do not enjoy much access to a limited number of jobs created in certain high growth sectors such as trade, communication, banking and financial services.

It might also be important to note that some of the state sponsored major development projects such as the Mahaweli Scheme, Urban development programme etc. had come to an end towards the end of 1990, which means there were no prospects of creating large-scale employment opportunities for rural youth after the end of the decade. The programme of privatization of public enterprises vigorously promoted by the government may also have had some negative effects on the extent of new employment generated in such enterprises. Against this background let us consider some issues relating to human resources development in Sri Lanka.

2. Labour force composition and growth trends

According to the census of population conducted in 1981, Sri Lanka had a population of 14.85 million. This represents a six fold increase within a time span of 110 years. In the late 1980's Sri Lanka's population growth rate was estimated at 1.4 percent and by 1992 the population growth rate had come down to 1.0 percent with an estimated population of 17.4 million.

The age composition of the population show that Sri Lanka is endowed with a young population as 46% of the population was under 19 years at the census of 1981. The sectoral distribution of the population show that 72% were living in rural areas, 22% in urban areas and 6% in the estate sector which covered large scale tree crop plantations.

The data on labour force growth and male, female participation rates presented in Table 1 show that Sri Lanka's labour force (i.e. those who are gainfully employed plus those who are available for work) had grown simultaneously with the growth of the population. Between 1946 and 1981, the labour force has almost doubled. During the period 1946-53 the population has increased at 2.8% per annum while the labour force has increased at 2% per annum. Between 1953-63, the population growth had averaged at 2.7% per annum, and the rate of growth of labour force had been 1.5% per annum. During the period 1963-71 the rate of population growth was 2.2% per annum while the rate of growth of labour force was 3.3% per annum. In the 1970's the rate of population growth was 2.2% per annum, while the rate of growth of labour force was 3.3% per annum. In the 1970's the rate of population growth had declined to 1.7% per annum, and the rate of labour force growth had come down to 2.7%. The gradual decline in the rate of growth of population has been attributed to reasons such as increased acceptance of family planning, increased educational attainments, urbanization, increased labour force participation and postponement of marriage among youth in the age group of 15-34 years.

3. The Structure of Employment

The data on the growth of employment since early 1950's suggest that Sri Lanka's record on employment generation is very poor. During a period of 25 years between 1946 and 1971 only 1,038,000 jobs have been created in the economy, which means that the growth of employment had averaged around 1.6 percent per annum. During the same period, the population growth rate had averaged around 2.6 percent and the growth of labour force had averaged around 2.3 percent per annum. (Korale, et al. 1983, p.52)

TABLE 1

Title of Survey	Labour Force ('000)	Participation Rate (%)			Employment ('000)
		Total	Male	Female	
1. Census of population-1946	2,611	39.2	37.8	18.2	2,612
2. Census of population-1953	2,993	37.0	53.1	18.9	2,993
3. Census of population-1963	3,464	32.7	49.8	14.2	3,200
4. Labour Force survey -1968	4,150	34.6	50.7	17.2	3,674
5. Census of population-1971	4,488	35.4	50.7	19.1	3,649
6. Survey of Labour Force participation Rates -1973	4,560	34.4	48.5	20.2	3,767
7. Labour Force & Socio-economic survey-1980/81	5,715	37.3	53.1	21.2	4,851
8. Census of population-1981	5,105	33.8	49.8	17.1	4,119
9. Sri Lanka Labour Force survey - 1992*	5,820	48.1	65.9	29.6	4,860

*Excluding Northern and Eastern Provinces.

There has been a slight improvement in the growth of employment during the period 1971 - 1981. In this decade the rate of growth of employment had been in the region of 2.7 percent, and much of this growth has taken place in the post 1977 period due to the economic impact of trade liberalization and other development programme launched by the government. (Korale, 1986: 102). Between 1978 - 1982, about 200,000 new jobs have been created annually and this has helped in easing the burden of unemployment to a certain extent.

The data presented in Table 2 shows that the male population had constituted a greater share of the employed while the female unemployed have outnumbered the males in 1992. Among the employed, females accounted for 24% in 1953 and this had dropped to 20.5% at the census of 1963. According to the census of 1971, females accounted for 22% of the total number employed indicating no significant change in the sta-

tus of female employment over a period of 9 years. The estimates of the Sri Lanka labour force survey of 1992 shows that the females have accounted for 25.7 percent of the employed, and nearly 53 percent of the unemployed respectively. However, since these estimates do not include the Northern and Eastern parts of the island the data need to be treated with some care.

The data on the distribution of employed population by industry sector presented in Table 3 give some idea of the structure of employment in the country. According to the table, the predominant position enjoyed by the agriculture, forestry and fishing industry sector has undergone only a little change since 1953. Upto the census of 1971, the agriculture sector has accounted for 50% of the total employment which had dropped to 45.2% at the census of 1981. The Labour Force Survey of 1992 shows that employment in the agriculture sector had further declined to 39 percent. According to the

table, employment in the agricultural sector had increased from 1.58 million in 1953 to 1.9 million in 1992 signifying an average growth rate of about 1.0 percent per annum over a period of nearly 40 years. Compared with the growth of population and the labour force during the same period, the rate of growth of employment in the agriculture sector appear to be very low.

As borne out by the data given in Table 3 the share of the manufacturing sector in total employment has increased slightly from 9% to 12% during 1971 - 1991. Although one expected the manufacturing sector employment to grow at a faster rate in view of the incentives provided by successive governments to industrialists, the actual number of jobs created in modern industries including those within the free trade zone came nowhere near the expectations. Since disaggregated data is not available it is difficult to comment on the distribution of employed population between different industrial sectors. However, one could observe that employment in the small industrial sector has suffered certain drawbacks due to the liberalized trade policy introduced in 1978.

According to Table 3 the wholesale and retail trade sector and the community, social and personal services sector have accounted for 11.5% and 16.0% respectively of the total number employed in 1992. As compared with the employment share of these two sectors in 1981, the growth of employment in the two sectors over the ten year period seem to be marginal. The extent of employment in the tourist industry had also come down by almost 50% since the spread of communal and political violence in the island which began in 1983. Since 1990, employment in the tourist industry has begun to increase with the upward movement of tourist arrivals. However, specific data on employment in the tourist industry are not available. There has been a reasonable improvement in the employment share of the construction industry sector over the last ten years. The increase in employment in the construction sector can be attributed mainly to the large scale infrastructure development projects undertaken by the government after 1978. The employment share of the transport storage and communication industry sector has remained around 4.0 percent during

TABLE 2

Year & the Survey	Labour Force, Employment & Unemployment by Sex								
	Labour Force (000)			Employed (000)			Unemployed		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Census of population 1953	2,338	2,296	724	2,093	2,268	724			
Census of population 1963	3,464	2,742	722	3,201	2,549	657	264,970	130,400	65,160
Labour Force Survey 1968	4,150	3,166	984	3,074	2,455	629	494,210	312,000	172,200
Census of Population 1971	4,448	3,312	1,176	3,649	2,698	611	590,264	471,065	365,199
Labour Force & Socio-economic survey 1980-81	5,715	4,105	1,609	4,851	3,025	1,226	817,168	503,207	353,981
Sri Lanka Labour Force Survey 1992*	5,523	4,062	1,701	4,657	3,107	1,250	105,901	65,005	51,009

*Excluding Northern and Eastern Provinces.

Source: Ministry of Plan Implementation, Employment and Manpower Planning Division.

TABLE 3

Sector	Distribution of Employed Population by Industry Sector (in Thousands)				
	Census 1953 No. (%)	Census 1963 No. (%)	Census 1971 No. (%)	Census 1981 No. (%)	Labour Force Survey 1992
1. Agriculture, Forestry & Fishing	1584.1 (52.4)	1381.9 (52.3)	1428.1 (50.1)	1373.8 (45.2)	1,905.3 (39.0)
2. Mining & Quarrying	13.8 (0.5)	9.4 (0.3)	13.1 (0.4)	38.6 (0.9)	118.3 (2.0)
3. Electricity, Gas & Water	3.3 (0.1)	7.4 (0.2)	9.6 (0.3)	16.2 (0.4)	175.7 (3.5)
4. Manufacturing	280.2 (9.7)	292.3 (9.2)	339.4 (9.3)	415.8 (10.1)	640.1 (13.0)
5. Construction	50.7 (1.4)	85.1 (2.7)	103.6 (2.8)	124.8 (3.9)	261.9 (5.0)
6. Wholesale and Retail trade	282.8 (9.4)	349.1 (10.9)	348.6 (9.4)	434.3 (10.5)	557.6 (11.5)
7. Transport, Storage & Communication	104.9 (3.5)	137.6 (4.3)	178.9 (4.9)	198.8 (4.8)	207.5 (4.0)
8. Finance, Insurance, Real Estate & Business Services	65.1 (2.2)	15.6 (0.5)	24.9 (0.7)	45.6 (1.1)	81.8 (1.7)
9. Community, Social & Personal Services	396.2 (13.2)	440.0 (13.6)	492.8 (13.5)	596.7 (14.5)	816.2 (16.3)
10. Activities not described	197.4 (6.8)	175.4 (5.5)	313.0 (8.9)	385.6 (9.4)	245.1 (5.0)
11. All Economic Activities	2993.3 (100.0)	3195.1 (100.0)	3628.9 (100.0)	4119.3 (100.0)	4,657.6 (100.0)

Source: Census Data and Consumer Finance Survey: 1981 (Korale, 1986: 104 Dept. of Census and Statistics).

the last decade. Among the modern sectors of employment an appreciable increase in employment has taken place in electricity, gas and water services sector while in the finance, insurance and real estate sector, the share of employment has not recorded a noteworthy increase over the last ten years.

The occupational distribution of the employed population is given in Table 4. According to the Table, the workers in agriculture, animal husbandry, forestry and fishing have accounted for 45% and production and transport workers have accounted for 29% of the total number employed in 1981. The employees in salaried employment who are classified under professional and technical, administrative and managerial and clerical and related categories have accounted for less than 12% of the total. A noticeable increase in the number employed has taken place in the professional and technical, and clerical categories between 1971 and 1981. This could be attributed largely to an increase in public sector employment of teachers, nurses and clerical grades who are classified under these two categories.

Sri Lanka Labour force Survey 1992 (second quarter) report which classified the employed population by industrial sector and occupational groups revealed that over 27 percent of the employed population were skilled agricultural and fisheries workers, 23.7 percent were engaged in elementary occupations (probably as unskilled labourers), 16 percent were craft and related workers, and about 9 percent were sales and service workers. Those classified as managers and professionals accounted for 3.7 percent and 4.7 percent respectively. Among the employed a little over 2 percent were classified as technicians and associated professionals, and nearly 3 percent have been classified as clerks. About 5 percent belong to the category of plant and machine operators and assemblers who were engaged mainly in the communication sector.

A detailed breakdown of Sri Lanka's manpower in terms of skills is not available. The data that is available in respect of different professions and skilled worker categories are based largely on estimates that have been computed on the basis of numbers employed in the public sector and organized private sector. The data

TABLE 4

Major Occupational Group	1963		1971		1980/81	
	No. (000)	%	No. (000)	%	No. (000)	%
1. Professional & Technical	142.7	4.5	178.5	4.9	269.2	5.5
2. Administrative & Managerial	32.9	1.0	14.0	4.0	25.5	0.5
3. Clerical & Related	118.4	3.7	186.1	5.1	274.1	5.6
4. Sales Workers	212.2	6.6	272.4	7.5	396.0	8.2
5. Service Workers	259.6	8.1	198.0	5.4	265.4	5.5
6. Agriculture, Animal husbandry, Forestry & Fishing	1653.6	51.7	1782.1	48.8	2191.2	45.2
7. Production, Transport & Labourers	739.7	23.1	926.4	25.4	1415.4	29.2
8. Workers not classified	40.6	1.3	91.5	2.4	14.8	0.3
9. TOTAL	3799.7	100.0	3649.0	100.0	4851.4	100.0

Source: Population Census 63 & 71
Labour Force & Socio-Economic Survey 80/81

presented in Table 5 give a fairly accurate picture in regard to the number of trained manpower as at 1982 and the projected demand for selected occupations for the period 1983 - 1991. The table does not include engineering and similar scientific professions. However, on the basis of numbers employed in government and other institutions and the number trained by the universities and high level technical training institutions annually, it might be possible to arrive at a guess estimate to place the high level manpower in engineering and related professions in the region of 5,000.

Other categories of skilled manpower are included in professions like accounting, law, surveying, architecture, dentistry and veterinary medicine in respect of which no accurate data are available. Like in the case of medicine and engineering those qualifying in the above fields also secure employment in public and private sector institutions initially and few years after gaining experience some of the professionally skilled manpower tend to leave employment for private practice or to migrate abroad for better prospects. Thus, a relatively high level of mobility among skilled manpower has made it difficult to build up a sound data-base in respect of skilled manpower in the country. One could however, observe that, in certain professional categories there are shortages of skilled manpower while in certain other categories such as legal profession there is a

surplus of manpower. Also, no reliable estimate is available so far to indicate the annual demand for skilled manpower and the level of supply in order to establish precisely the number of skilled manpower in different fields that is in short supply. One might, however, note that due to lack of placement opportunities, highly skilled manpower such as engineers and doctors remain unemployed or under-employed for sometime after passing out from Universities.

4. Characteristics of unemployment

Unemployment has been a major problem in Sri Lanka for well over two decades. As indicated by the data presented in Table 6, the number unemployed which was estimated to be in the region of 340,000 (around 10% of the labour force) in 1960 had risen to 558,600 (14.3%) in 1969/70 and passed the one million mark (20 - 25 percent of the labour force) by mid 1970's. At the census of 1981, the unemployed population amounted to 895,143 (18 percent of the labour force). As estimated by the consumer Finance and Socio-economic survey of 1981 - 82, the number unemployed stood at 604,640 signifying a considerable drop in the rate of employment from 18 percent in 1981 to 12 percent in 1982. However, by 1986 the rate of unemployment had gone upto 14 percent. The figures given in the table refer to openly unemployed population and hence do not give an idea of the

TABLE 5

Occupation	Total Number 1982	Additional Demand									Total Number 1992
		1983	1984	1985	1986	1987	1988	1989	1990	1991	
Medical Doctors	4,384	600	600	600	600	600	600	600	625	650	5475
Ayurvedic Physicians	5,355	250	250	250	275	275	275	300	300	300	2475
Teachers	153,463	5750	6000	6000	6250	6250	6500	6500	7000	7000	57250
Nurses	11,048	1150	1150	1150	1150	1150	1150	1150	1150	1150	11350
Book-keepers	10,300	500	500	500	500	600	600	600	650	650	5250
Stenographers	9,420	1050	1050	1100	1150	1000	1000	1000	1050	1050	10450
Typists	12,400	1050	1100	1150	1200	1050	1000	1000	1000	1000	9500
Masons	17,500	3000	3000	3250	3250	3000	3000	3250	3250	3250	20250
Carpenters	15,500	2700	2700	2900	2900	2400	2500	2600	2700	2700	24000
Plumbers	1,000	140	140	150	150	150	150	175	175	175	1405
Welders	6,700	450	450	450	450	450	475	475	475	475	4150
Blacksmiths	6,000	275	275	275	275	200	200	200	200	200	2100
Electrical Workers	4,400	475	475	500	500	400	400	400	450	450	4050
Motor Mechanics / Repairmen	40,800	2100	2100	2100	2100	1900	1900	1900	1900	1900	17300
Heavy Vehicle Drivers	3,150	400	400	400	350	350	350	400	400	400	3500
Professional Migrants **	4,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pharmacists	3,500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Barbers & Hairdressers	12,104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Farm Machinery * Operators	4,511	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Machine tool * Operators	8,648	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Machine Fitters & * Assemblers	6,305	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Jewellery Makers *	10,070	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Book binders * and Tye setters	50,705	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Census of Population 1971 **Census of Population 1981
Source: Employment and Manpower Planning Division
Ministry of Plan Implementation.

extent of underemployment which has been estimated to be around 20 - 25 percent of the labour force.

It has been estimated, that in the years ahead, between 180,000 - 105,000 job seekers will enter the labour force annually. If one include the backlog of unemployed which was in the region of 900,000 in early 1980's a total of 2.4 million jobs will have to be created if Sri Lanka is to achieve full employment by 1990 (Rodrigo et al 1987:259). However, going on the basis of past records

which indicate a poor level of manpower absorption in the leading sectors of the economy, creating even 150,000 jobs annually to absorb the new entrants to the labour force seem to be a too ambitious target.

The Sri Lanka Labour Force Survey of 1982 had estimated the unemployed population at 0.96 million. This comprised 0.45 million (46.8%) males and 0.51 million (53%) females. The survey revealed that the rural unemployed accounted for 0.77 million, while the urban

unemployed accounted for 0.19 million. The survey (which excluded the Northern and the Eastern Provinces) estimated the rate of unemployment at 16.59 percent.

The labour force survey of 1992 revealed that the highest rates of unemployment were found among the youth in the age groups of 15 - 19 years and 20 - 24 years. The survey also revealed that 23.8 percent of the unemployed persons had passed the G. C. E. (O. L.) or NCE, and unemployment tend to increase as

the level of education achieved increases. Thus the problem of unemployment seem to be more critical among the educated youth.

It has been observed that the unemployment problem in Sri Lanka reflects an overall imbalance between the supply and demand for labour as well as a structural imbalance where the type of jobs available in the economy do not match the job expectations of those who are unemployed (ILO, 1971). A study on job expectations among unemployed rural youth also observed that the job expectations of youth are significantly correlated with their educational attainments. According to this study, educated youth aspired to jobs in professional and technical, managerial and administrative, clerical, and trade and commerce fields, while those with lesser educational attainments expected jobs in manufacturing and production process work, services, sports and recreation work, and transport and communication fields. The study revealed that only a limited number of unemployed rural youth preferred employment in agriculture and related fields. (Ranasinghe 1978: 59).

The problem of job aspirations among the educated unemployed reflects the values imparted by the "Liberal arts based" free education system which was established during the colonial period and continued without much change in the decades since independence. The imbalance in the labour market which arose largely from sluggish economic growth and a poor record of employment creation, as well as the structural imbalance arising from the mismatch of job opportunities and expectations have contributed to worsen the problem of unemployment.

5. Manpower Demand & Supply Imbalance

In Sri Lanka the lack of a sound manpower policy appears to be a critical issue which has resulted in a situation where there is no reliable estimate at the national or sectoral level on manpower demand and supply position. Although the subject of manpower and employment come under the purview of several public sector institutions, so far it has not been possible to prepare a comprehensive manpower plan for the country.

TABLE 6

Unemployment Estimates

Title of Survey	Male	Female	Total	Unemployed %
1. Survey of Employment Unemployment, under employment in 1950-60(ILO)	259,000	90,000	340,000	10.5
2. Census of Population 1963	199,490	65,480	264,970	7.7
3. Survey of Consumer Finance 1963	n.a	n.a	457,700	13.8
4. Labour Force survey 1968	312,000	152,800	464,200	13.4
5. Socio-economic survey 1969 - 70	349,000	209,600	558,600	14.3
6. Census of Population (adjusted) 1971	474,065	197,917	671,982	15.6
7. Determinants of Labour force participation Rates 1973	446,929	346,071	793,000	18.3
8. Consumer Finance survey 1973	n.a	n.a	1,073,000	24.0
9. Land and Labour utilization survey 1975	499,500	484,800	884,300	19.7
10. Labour Force Socio-economic survey 1980-81	503,207	353,961	857,168	15.3
11. Census of population 1981	498,726	396,417	895,143	17.9
12. Consumer Finances & Socio-economic survey 1981 - 82	298,038	306,602	604,640	11.9
13. Labour force and Socio-economic Survey 1985/86	433,243	407,009	840,253	14.0

Source: Korale, 1986:110
Dept. of Census and Statistics of Sri Lanka.

Various studies on manpower have made reference to the existing imbalance in manpower demand and supply. According to these studies, there is an over supply of high level manpower in disciplines such as arts, social sciences, humanities, law etc. for which there is little demand. Even if there is no over supply of trained manpower in disciplines like commerce and management studies, the graduates who qualify in these disciplines find it difficult to secure suitable employment probably because a majority of them fail to satisfy criteria such as proficiency in the English Language, age, etc. considered by the private sector in recruiting personnel.

According to the data on the supply of graduates in arts, humanities, social sciences, law, management studies, and commerce, the annual output is estimated to be in the region of 2500. Of this number about 1/3rd is absorbed into various positions mainly in the public

sector. However, the annual increase in the number of unemployed and under employed graduates is likely to increase since there is a decline in graduate employment even in the public sector following the policy of manpower rationalization.

A demand and supply projection for high level manpower with university degrees which was prepared by the University Grants Commission in 1988 indicated that the supply of arts graduates will exceed the demand, while the supply of graduates in medicine, dental science, engineering and agriculture science will be less than the demand.

A manpower demand and supply projection for the period 1971 - 1978, prepared by the Employment and Manpower Planning Division of the Ministry of Employment & Economic Affairs in 1975 revealed that a serious imbalance in demand and supply of manpower was

found in respect of science graduates only.

One of the significant factors that influences the manpower demand and supply imbalance is the outmigration of skilled manpower. The exodus of professionally qualified high level manpower from Sri Lanka to developed countries like U. K., U. S. A., Australia and other European countries has been going on since mid 1960's. However, the migration of professionals did not take place in large numbers until the regulations were relaxed in late 1970's. According to one study during the period 1971-1976, a total of 4293 professionals have migrated abroad. This included 1254 Doctors, 1974 Engineers, 499 Accountants, 141 University teachers, 625 other teachers, 160 lawyers and 537 Technicians (Nesiah, 1978).

The efforts of migration of skilled manpower made an impact on the national economy with the large scale migration of skilled manpower to the West Asian countries which started in mid 1970's.

The data presented in Table 7 show the distribution of migrants by manpower level for the period 1979 - 1981. According to the table professionally qualified high level manpower and middle level manpower constituted 3.5 and 5.9 percent respectively of the total number of migrants in 1981. The skilled manpower (i.e. masons, carpenters, mechanics etc.) constituted about 20 percent of the total and over 55 percent comprised unskilled labour which included primarily female migrants to middle eastern countries who took up employment as housemaids.

The migration of unskilled manpower mainly to the West Asian countries had helped in reducing the burden of unemployment to some extent. Also the increased foreign exchange earnings from the remittances of migrants has helped the country to improve her balance of payments position. However, the negative impact of migration due to loss of trained manpower in skilled areas where there is already a shortage need not be overemphasized.

TABLE 7

Manpower Level	Distribution of Migrants by Manpower Level 1979 - 81					
	1979		1980		1981	
	No. of Persons	%	No. of Persons	%	No. of Persons	%
High level	1,657	6.4	1,577	4.7	1,081	3.5
Middle level	2,374	9.2	2,199	7.7	3,420	5.9
Skilled	6,119	23.6	5,895	20.0	11,167	19.5
Unskilled	12,833	49.5	14,001	50.6	31,826	55.0
Not classified	2,931	11.3	4,692	16.4	8,513	15.5
TOTAL	25,875	100.0	28,744	100.00	57,247	100.00

Source: Migration Statistics 1981
Employment and Manpower Planning Division
Ministry of Labour and Industrial Relations

6. Education and Human Resources Development

Since the introduction of free education in 1945, a substantial amount of resources had been spent by successive governments on general and higher education. Table 8 gives the data relating to investment in education, and higher education during the past few years.

Although there has been a general growth of educational opportunities in the past few decades, the system of education has not undergone any significant change in order to develop relevant vocational or technical skills among the students. Hence, the investment in education has failed to develop the country's human resources in a manner that would benefit the country as well as those who receive education. A critic who analysed the various defects in the system of education observed that "..... educational opportunity in Sri Lanka has to be viewed in the context that 40% of school entrants do not yet receive any secondary school education, 60% leave without reaching the G. C. S. (Ordinary Level) which lead to the basic qualification for at least middle level employment, and 50% fail to proceed to Grade 11 and 12 which determine access to higher education" (Jayawera, 1978 : 19).

Thus early school leaving which seems to be a serious problem affecting the children from low income families, has not only negated the benefits of free

education but has also resulted in a relatively high level of unemployment among youth from low income families who join the labour force annually without completing school education. This problem has been further aggravated due to the fact that those who join the labour force either due to early school leaving or after completing school education, do not possess any vocational or technical skills that could help them in securing employment. The labour force data for 1992 show that 48.7 percent of the unemployed youth have joined the labour force before reaching Grade 10 and a further 39 percent after reaching the G. C. E. (O/L). Thus, on the basis of minimum educational qualification required for some form of white collar employment, not more than 39 percent of the unemployed youth are in a position to compete for a limited number of white collar jobs that may be available. However, as observed earlier unemployed youths even with relatively low educational attainments tend to seek white collar jobs that could assure them stable income, job security and some degree of social status.

The educational background of the employed follow a pattern similar to that of the unemployed. The data on educational background of the employed as revealed by the Labour Force Survey of 1992 show that 23 percent of the employed have received an education between grades 7 and 8 and 45 percent have received an education between

grades 5 and 9. Thus, more than 65 percent of the employed comprised early school leavers. Those who had passed the G. C. E. (O/L), N. C. G. E. or higher levels constituted 23 percent of the employed.

A feature common to both employed and unemployed is that majority of them (over 75 percent) have received their education in arts subjects. Even among the graduates, unemployment is more acute among those who have obtained degrees in arts subjects. The lack of facilities for science education in the rural areas as well as the inability of the parents to afford science education for their children may have contributed to this situation (Jayaweera, op. cit.).

The lack of vocational or technical orientation in the school curriculum has been emphasized by many a critic of Sri Lanka's educational policy. It has been observed that school curricula have been drafted in terms of the university requirements although majority of the pupils do not proceed beyond Grade 10 (Udagama, 1982 : 12).

Though efforts have been made to rectify this situation by introducing a wide range of vocational subjects to secondary school curricula during 1973-76 period, they did not bear fruit since these reforms were done away with by the government that assumed power in 1977. Hence, the lack of consistency in the educational policy also seem to be a constraint in developing human resources.

6.1 Higher Level Human Resources Development Programmes

In Sri Lanka the total annual investment in higher level human resources development do not constitute even one percent of the GNP (vide Table 8). The expenditure on university education in 1991, accounted for 19 percent of the total expenditure on higher education or 0.45 percent of the GNP. This low expenditure on university education should be viewed against the increasing demand for higher education. The failure of the country's higher education system to satisfy the demand for university education could be seen from the data presented in Table 9 which shows the magnitude of the difference between the number of eligible students and the ac-

TABLE 8

Background Statistics on Education					
	1988	1989	1990	1991	1992*
1. No. of Schools	9,771	9,805	9,864	9,998	10,042
2. No. of Pupils	3,938,062	4,057,815	4,111,272	4,135,114	4,155,035
3. No. of Teachers	146,334	153,243	184,822	177,231	182,597
4. No. of Pupils per Teacher	27.7	27.3	22.9	24.1	23.5
5. Government Expenditure on Education (Rs. Mil.)	3,980	6,166	9,571	9,128	9,664
6. Government Expenditure on Education as % of GNP.	2.0	2.8	3.4	2.7	2.6
7. Expenditure on Higher Education (Rs. Mil.)	1,080.1	1,188.7	1,379.3	1,470.2	NA
8. Expenditure on Higher Education as % of GNP.	0.54	0.53	0.49	0.45	NA

*Provisional, NA Not Available.

Sources:

1. Economic & Social Statistics of Sri Lanka (Central Bank)
2. Sri Lanka Socio Economic Data (Central Bank)
3. Statistical Hand Book - University Grants Commission

tual number admitted to different academic programmes of the eight universities.

According to the table, on an average not more than 20 percent of the eligible students have gained entry into arts, and commerce and management studies streams. Where the two science streams are concerned about 60 percent of the eligible candidates have gained entry into physical science programmes and a little over 25 percent have gained entry into biological science programmes in 1986. Thus, the problem of not gaining entry into universities seem to have affected mostly those who qualify in arts stream. As observed earlier, a majority of them belongs to low income families in the rural areas.

A certain number of eligible students who do not gain entry into universities may gain entry into certain academic programmes of universities as external candidates. However, the performance of external candidates during the last few years show that only a limited number succeed in their examinations. For instance, of a total of 3263 who registered as external candidates for the Bachelor of Law degree in 1985/86, only 337 sat

the final examination, of whom only 71 had passed the examination.

Where arts degree courses are concerned the number of students registered as external candidates had averaged around 5000 per year during 1984-87. Of this number about half had sat the final examination and less than 1000 on an average had passed the examinations.

Notwithstanding the existing limitations to higher education the universities in Sri Lanka have been able to provide facilities for higher education in a number of professional fields. The eight universities in Sri Lanka provide academic and professional degree courses to about 18,000 students who participate in bachelor's degree programmes ranging from 3-5 years. In late 1980s the annual intake for all courses had averaged around 6000 of which the number completing their degrees had averaged around 5000.

According to the data on output of different degree programmes arts graduates have accounted for 40 - 45 percent of the total number of graduates passed out in 1985 and 1986 respectively, among

TABLE 9

Academic Stream		1984 1985 / 86			1985 1986 / 87			1986 1987 / 88		
		No. Eligible	No. Admitted	Percentage Col. (4) * 100 (5)	No. * Eligible	No. Admitted	Percentage Col. (7) * 100 (8)	No. * Eligible	No. Admitted	Percentage Col. (10) * 100 (11)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Arts	Total	7003	2061	29.72	6739	2044	30.74	9737	1072	20.25
	Female	4446	1073	24.12	4347	1051	24.18	13940	391	15.42
Commerce & Management Studies	Total	3977	938	23.59	5722	1012	17.69	5521	1018	18.33
	Female	2026	392	19.35	3123	493	15.86	3000	474	15.30
Physical Science	Total	1251	1061	84.16	1046	1008	96.37	2594	1564	61.06
	Female	276	206	74.82	175	127	72.57	579	208	51.47
Biological Science	Total	3770	1340	35.70	3432	1517	44.20	8122	1634	20.09
	Female	2106	653	31.02	1850	600	32.33	3508	829	23.60
Total	Total	16041	5426	33.83	16046	5561	32.00	24004	3208	25.66
	Female	8800	2325	26.29	14935	3301	24.23	13540	2581	19.06

- Notes: 1. * Number attaining the minimum requirement for admission.
 2. Number admitted by UGC in columns (4), (7) & (10) respectively is different from the number actually registered in the first year.
 Of the number admitted, a few might not have registered or enrolled in the University.
 * Does not include 473 students admitted for Physical Science under special provision.

Source: Mark Books, Department of Examinations Admission Lists, UGC.

them females were in a majority. The second largest number of graduates were in science stream, while commerce and management studies together accounted for 16 and 14 percent of the total number of graduates passed out in 1985 and 1988 respectively. The graduates in medicine and engineering accounted for 8.5 percent and 5.5 percent respectively of the total number of graduates passed out in 1985.

Apart from the eight universities the Open University of Sri Lanka also offer higher educational facilities for students through correspondence courses and other methods of distance education. The courses conducted by the Open University include professional as well as academic courses leading to bachelors degrees, diploma and certificates in science, textile technology, engineering, law, management studies, education, English and entrepreneurship. In the 1987/88 academic year a total of 15,802 students have enrolled in the different programmes conducted by the Open University. The increase in the student population of the Open University since its inception in 1980 reflects the demand for higher education leading to degree and diploma certificates.

In Sri Lanka several institutions which operate outside the university system also carry out higher level human resources development programmes leading to professional qualifications. These include Higher National Diploma Programmes in Commerce and Business Studies, Engineering, Electronics etc. conducted by the technical colleges, professional examinations in accountancy conducted by the Chartered Institute of Accountants and the Chartered Institute of Management Accountants, the Attorney-at-law course conducted by the Sri Lanka Law College, Diploma course in computer technology conducted by the National Institute of Business Management, and the professional course in surveying conducted by the Institute of Surveying and Mapping.

In terms of catering to the demand for high level manpower the institutes other than the technical colleges play only a limited role as the intake of students for the programmes conducted by these institutes is limited. Since the universities in Sri Lanka could not meet the demand for higher and middle level professional training, steps have been taken by the government to broaden the system of technical education. At present, the 24 technical colleges and their affiliated units

conduct several higher and middle level human resources development programmes. However, the emphasis of these programmes has been on theoretical learning with a lesser degree of practical orientation.

6.2 Middle Level Human Resources Development Programmes

A variety of middle level human resources development programmes which award certificates at the Diploma or equivalent levels are conducted by the Technical Colleges, government sponsored institutes, and several non-governmental organizations. The courses in engineering and crafts practice conducted by the technical colleges, the diploma course in agriculture conducted by the School of Agriculture, and the professional courses in nursing practice, midwifery, and medical technology, conducted by the Government Nursing Schools and the National Institute of Health Science are examples of middle level human resources development programmes conducted by public sector institutes. There are also courses in engineering conducted by institutions such as the Sri Lanka - German Technical School which cater to the young school leavers. The duration of most of

the middle level courses vary between 1 and 3 years and they provide a diploma or certificate which are job oriented and therefore valued in the Sri Lankan context. The fact that most of the middle level professional courses are job oriented has led to a high demand for these courses. Often the demand for these courses cannot be fully met.

6.3 Lower Level Human Resources Development Programmes

There are both formal and non-formal HRD Programmes conducted by a large number of government, non-government and private sector institutions, which fall under the category of lower level human resources development programmes. The lower level human resources development programmes are technical and vocational oriented. These programmes are mostly short-term (3 months to one year duration) and they are targeted at young school leavers with some years of education. The craft courses covering areas like machinery fitting, automotive mechanics, electrical installations work, and self-employment oriented short term courses conducted by the technical colleges also falls under this category. The vocational training programmes conducted by the Institute for Construction Training and Development (ICTAD) and the Institute for Automobile Training too can be classified under this category.

The apprenticeship training scheme implemented by the National Apprenticeship and Industrial Training Authority (NAITA) is one of the major non-formal training programmes undertaken within the public sector. Under this programme about 10,000 youths are enrolled annually to undergo apprentice training in various skills in public and private sector institutions. The NAITA has registered about 2000 institutions throughout the country to provide apprentice training for the youths who have enrolled in the programme. The youths who complete the apprentice training successfully are often absorbed into employment in the same organizations where they undergo training.

The vocational training programme of the Department of Labour is another lower level HRD programme which is targeted at young school leavers. This programme is implemented through the

vocational training centres of the Labour Department located in different parts of the island. Under this programme several short-term training courses in masonry, carpentry, motor mechanism, plumbing, tinkering etc. are conducted.

In Sri Lanka there are several non-government organizations (NGOs) and private sector institutions that participate actively in developing human resources at middle and lower levels. The objective of the vocational and technical training activities undertaken by the NGOs is to equip the unemployed youth from poor households with the technical and vocational skills that would help them in securing employment. Among the NGOs that implement regular HRD programmes are the Lanka Jathika Sarvodaya Sramadana Movement, Radio and Electronics Laboratory, the Diyagala Boys Town, the Yahapath Endera Farm, the Lanka Mahila Samithi and the Sri Jinaratana Vocational Training Centre.

According to the Tertiary and Vocational Education Commission (TVEC) which is engaged in regularizing and developing the vocational and technical education system, there are about 1200 agencies registered with the TVEC and about 1000 unregistered agencies dealing with vocational and technical training. Among these agencies the private sector agencies levy fees and conduct a variety of courses depending on the market demand.

7. Evaluation of Human Resources Development Programmes

The human resources development programmes in Sri Lanka are characterized by the multiplicity of programmes undertaken by different agencies in the public, private and the NGO sectors with little or no coordination between each other. Hence there can be difficulties in maintaining standards and tailoring the programmes according to the needs of the target groups. Also, there are hardly any tracer studies carried out by the agencies which provide the training.

The high degree of examination and certificate orientation is a common weakness of higher and middle level human resources development programmes which is difficult to avoid in the absence of fundamental changes in the system of

education. Also, the non-existence of a well defined manpower and employment policy has encouraged unplanned growth of human resources development programmes in the country. Although the government has established a Human Resources Development Council (HRDC) to coordinate the human resources development programmes and advise on policy issues, the ground situation suggest that the expected level of coordination between different HRD programmes has not been achieved.

Although there has been an increasing demand for technical and vocational education it has been found that the available facilities for technical and vocational education have not been utilized productively. It has been observed that, although public sector institutions have the capacity to take in large number of trainees, these facilities in the majority of cases have been very poorly utilized. This applies largely to basic categories of skills such as masonry, carpentry etc.

The reasons that have contributed to poor capacity utilization have not been clearly established. Apart from poor management, the factors like long duration of training, relatively low income support for the trainees during the training period, non-availability of training facilities closer to the places of residence of the trainees, lack of job assurance at the end of training, lack of awareness about the availability of training opportunities and the unfavourable attitude toward manual vocations, may also have contributed to poor utilization of available training facilities.

One might also question whether the current human resources development programmes could meet the requirements of the actual target population. If one considers that a significant portion of the target group comprise the school drop-outs and early school leavers, the available training places for technical and vocational training appear to be much lower than the size of the target population.

If one compares the size of the target population and the number of training places available, it would appear that in certain less developed provinces such as Uva, North Central and Sabaragamuwa, the size of the target population has far

exceeded the number of training places available.

According to the data, in 1987 the total number of training places that were available under public and private sector institutions was 117,352 while the number of school drop-outs and early school leavers was 227,296. If one include those who have passed the G. C. E. (O/L) and higher qualifications in the large population, the under-availability of training places could be much greater.

The Human Resources Development Committee working group in its report of September 1987, made the following observations in regard to the existing HRD Programmes.

"Government Agencies cater to only around 80,000 for training which is a fraction of the total potential target group. Training facilities are not spread out in proportion to potential demand in an even manner provincially. The contribution of the private sector apart from the Western province is also weak."

The Committee also observed that in the absence of systematic training needs surveys, one cannot assure whether the training facilities available coincide with development priorities or occupational needs. Where school drop-outs and early school leavers are concerned the education level stipulated as entry qualification may also have acted as a barrier to gain entry to a training programme of one's choice. This apply mainly to the formal training programmes conducted by the public sector institutions.

Thus the impact current HRD Programmes can make in reducing the labour market imbalance and uplifting the quality of life of the most needy groups in society, appear to be much lower than the desired level. It is also important that the HRD Programmes address the needs of the labour market in a changing economic context. For instance one has to question whether the University education can meet the manpower needs of the growing private sector. Also there has to be a relationship between key public policies such as the poverty alleviation policy and the vocational and technical education system in order to provide job oriented skills in a relatively short period of time. At present there is little or no relationship between the institutional-

ized human resource development programmes and the Poverty Alleviation Policy.

Conclusion

The sluggish growth of employment in the major sectors of the economy during the past few decades coupled with relatively high growth in the labour force had resulted in the problem of educated youth unemployment which is more acute in the rural areas. The mismatch between the educational achievements of the unemployed and the type of skills demanded has further aggravated the labour market imbalance.

The policy of education followed since independence has not undergone any radical change although the opportunity for education has been broad based. The system of education which was highly examination oriented had created a sense of competition as well as a preference for white-collar jobs among the educated youth. The system of formal education has not been able to impart technical or vocational skills which are demanded.

A serious imbalance in the labour market could be observed due to excess supply of educated manpower (especially university graduates in arts, social science etc.) and the shortage of manpower with middle and lower level skills. A relatively high level of external migration of skilled manpower has also contributed to the existing manpower imbalance.

Although unemployment and manpower imbalances have caused serious political problems, there has been no consistent employment and manpower policy adopted at national and sub-national levels. In the absence of a consistent policy and proper manpower planning, the actions taken by successive governments to deal with the problem of unemployment have been rather ad-hoc and produced only limited results.

At present the amount of resources spent on human resources development appear to be much below the desirable level. Thus it is difficult to expect that the current human resources development programmes can make a significant impact on the most needy social groups such as rural and urban poor and the unemployed.

The uneven distribution of opportunities for self employment oriented technical and vocational training is evident from the greater concentration of training opportunities in the Western Province and the urban areas of other provinces. Viewed against the problem of lack of utilization of vocational training programmes conducted by some of the public sector institutions, the effectiveness of training programmes is likely to be limited as they cannot reach the target groups effectively.

It is evident that the participation of the private sector in employment oriented human resources development activities is lower than the desired level. Compared with the private sector, the contribution made by several non-government voluntary organizations in this field seems to be encouraging. The role of the NGO's can be strengthened further if the HRD Programmes undertaken by the NGO's can be brought within the purview of a national or sub-national level manpower plan.

It is of paramount importance to assess the existing human resources development programmes in order to improve their content, the methods of delivery, and the relevance to country's needs. A mechanism for coordination of all human resources development programmes is needed in order to lay the foundation for a national manpower plan and to increase the efficiency and effectiveness of the on-going human resources development programmes.

References

- Abeyskera A.T.P.L., "A Labour Force Projection for Sri Lanka" *Progress* Vol. 3, 2, Ministry of Man Implementation, Colombo 1983.
- Fousheh A. T., *Manpower Problems in South Asia: Sri Lanka Country Study*, Marga Institute, Colombo 1987 (Unpublished).
- Hansen James C & Jayaramani T., "Some Estimates of Future Demand for and supply of Trained Manpower for Agricultural Development in Sri Lanka" *Sri Lanka Journal of Agricultural Sciences*, Vol. 22, No. 2, 1985. National Agricultural Society of Sri Lanka.
- H. K. D., Working Group - Capacity of Available Training Institutions. Paper No. 4, Colombo, September 1987 (Unpublished).

THE JAKARTA PLAN OF ACTION ON HRD

1. The countries of Asia Pacific, including Sri Lanka, assembled in the United Nations Economic and Social Commission for Asia and the Pacific in 1983, adopted, by consensus, what has now come to be known as the Jakarta Plan of Action on Human Resources Development. As the Jakarta Plan of Action constitutes Sri Lanka's accepted point of reference for the formulation, implementation and evaluation of its HRD policies and programmes, it was essential for the Sri Lankan public and its policy makers to be fully aware of the underlying ideology and the thrust of the JPA.

2. The JPA views human resources development as a vital element of both social and economic development. The attributes that determine the quality of life are regarded as being largely congruent with those that determine the quality of human capital. Hence, in the JPA, what is generally considered as social development in developing countries are potentially directly productive.

3. The rationale for the particular strategies advocated by the JPA for macro-level human resources development policy, planning and programming are to be found in an analysis of micro-level human resources development behaviour. The theoretical foundations of the JPA concept of HRD lie at the level of individual, family and household decision making.

4. It is an integrated concept which links the productive role of human resources, implicit human capital theory and the consumption role of human resources, embodied in the quality of life literature, through the instrumentality of rewarded participation in economic activity. The JPA regards people's participation as human capital in production as being motivated by their desire for consumption. The willingness of individuals and families to enhance productivity by the potential returns to be gained from such investments, which arise from par-

ticipation in economic activity which is both socially recognised and economically rewarded.

5. Such investments in human capital are not only a vital source of increased production. The most important human capital investments, in health and education, are simultaneously highly valued items of consumption in developing countries and also constitute the most important determinants of the quality of life. Thus, the characteristics that, from a consumption perspective, reflect the individual's quality of life, constitute the quality of the individual's human capital from a production perspective. Rewarded participation in economic activity, whether as paid work or employment, is the factor which underpins this dynamic JPA model of the interaction between the twin roles of human beings as producers and consumers.

6. It is this general congruence between quality of human capital and quality of life at the individual level which provides the basis for an integrated and balanced HRD-focused strategy for the economy as a whole. Thus the HRD strategy for development embodied in the JPA seeks the kind of economic growth that leads to and is compatible with social development, and the kind of social development that is consistent with and contributes to economic growth.

7. The JPA identifies two reasons account for the pivotal role occupied by employment policy in the implementation of an HRD strategy at the macro level. Employment is a key means of creating output and economic growth. It is also both necessary through the income it yields and indirectly through its effect on self-esteem and personal identity, the main instrument of individual access to an improved quality of life.

8. The JPA recognises that without efficient utilization of human resources in production, the creation of quality of life

will eventually encounter resource constraints. Conversely, the participation of human resources in production, if unaccompanied by a commensurate improvement in the quality of life, will produce poor results due to a lack of incentives for investment in higher quality human capital.

9. Therefore, it argues that an integrated HRD development strategy is essential. On the production side, the strategy must ensure that human capital investments are effectively utilised in production, and that productive activity is complemented by appropriate human capital formation while, on the consumption side, it must ensure that the owners of human capital receive adequate economic rewards, and that, in contributing to a higher quality of life, these rewards provide an effective incentive for further human capital formation.

10. The JPA, in identifying strategies for successful human resources development and the effective implementation of an HRD-focused national development strategy, emphasises: an integrated approach to macro-level development policy formulation; and the effective coordination of planning and programming.

11. The above are pre-requisites to ensuring that human capital investments lead to employment and income as well as access to a better quality of life for both individuals and households. In particular, the JPA stresses the importance of co-ordination between education and training activities, on the one hand, and employment policy and the national development strategy, on the other, in order to ensure that educated and trained manpower is efficiently utilised and that the manpower needs of the productive sectors are met.

12. The JPA also emphasises the demand side and the need to create favourable demand conditions for human resources development through the availability of adequate micro-level incentives.

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HUMAN RESOURCE MANAGEMENT - SOME PERSPECTIVES

Maillika Manuratne

**Senior Manager Training and Productivity
Hatton National Bank**

The world is moving towards Year 2000 at a terrific pace. What was considered appropriate and normal in 70s and 80s are fast becoming outdated. New practices are taking shape almost overnight, making those who couldn't adjust accordingly near redundant. In short, in the journey towards 2000 and beyond, the hall mark is change and the speed of change.

How do organizations across the world react to this fast pace of change? Definitely they are redefining the directions of the organizations and restructuring the internal hierarchies, in order to face the change effectively. Some interesting changes have already taken place, mainly due to improvements in computing and communication, especially in USA, and many others are being contemplated and experimented by the organizations. In the process, most modern organizations have changed over to what they call Human Resource Management from traditionally known personnel management.

At the beginning of this century, the work force is considered as 'hands' and toward the middle of the century, with the development of the Human Relations School of Thought, pioneered by Elton Mayo and the Hawthorn experiments work force was considered as Personnel. This change took into account the importance of motivating the workforce, and their rights as workers or members of organization.

Human Resources Management is the subsequent development that took place in organizations during the recent years. Whether it is called personnel function or Human Resources Management function the organizations recruit, select, position, transfer, promote, train & develop, disciplinary deal with and sever the relationship with people, in other words the apparent functions have not undergone much change. Then what is modern about Human Resources Management?

The basic difference between personnel management and human resource management lies not so much in the functions, but in the philosophy of the organization or the way the organization considers the workforce. An elaboration on the characteristics of Human Resource Management should shed further light.

The Philosophy

HRM is based on the philosophy that human contribution is the most vital component that need to be managed carefully, and people tend to respond best when the work environment itself is conducive in motivating them to do their best.

The roots of this philosophy could be traced to few important events that have taken place in the industrial world. The

most visible one among them was the invasion of Western markets by the Japanese companies, capitalizing on their ability to deliver quality goods to the satisfaction of the customer. The Western industrialists were compelled to look for ways and means of improving the quality of their goods and services.

Another eye opener was the fact that the best companies in the West paid sufficient attention to their work force and ensured that a work environment suitable for obtaining best performance was consciously maintained.

As a result of facing very competitive markets, organizations realised the need to change their orientation from product to market needs. When organizations tried to become more and more customer oriented they knew that it is also necessary to improve the quality to meet customer demand.

With the emphasis on quality it is nothing but natural that organizations had to reconsider the way looked at their people. Many US and European giants went through programmes of change, the success factor of which was the change in their approach towards people.

Objectives of Human Resource Management

It is possible to think of four specific objectives of Human Resources Management. They are:

THE TURNOVER OF IRRIGATION MANAGEMENT RESPONSIBILITIES TO FARMER ORGANIZATIONS

Dr. Amarasena Gamaathige

*Research Associate,
International Irrigation Management Institute*

The terms "irrigation management turnover", "irrigation management transfer", "participatory management", "privatization" have been used widely in the literature of irrigation management. The general meaning of these terms is the turnover or handover of certain irrigation management responsibilities such as water distribution and regular maintenance activities from a government agency to farmer organizations or non-government agencies. The transfer of ownership of irrigation channels and structures and other assets to farmer organization is called privatization and it is the completion of the turnover process. One of the major outcomes of irrigation management transfer is the contraction of the government role and expansion of the role of beneficiaries (Vermillion, 1991). There are considerable differences in irrigation management turnover in terms of (i) the methods used for transferring management responsibilities and (ii) types of irrigation management tasks handed over to farmer organizations at different levels of the system, i.e. handing over of all management responsibilities (self management) or handing over specific management functions at a certain level of the system like distributory channel areas for operation and maintenance tasks.

To improve the performance of irrigation systems in many developing countries several approaches such as physical rehabilitation, training of irrigation officials and greater farmer involvement in decision making and resource mobilization have been used. In Sri Lanka the

responsibility of management and funding for operation and maintenance of major irrigation schemes has always been the responsibility of the government. In 1989 the Sri Lankan government decided to launch a policy of participatory irrigation management in which farmers in major irrigation systems were encouraged to manage the operation and maintenance of distributory channel areas by contributing their labour and other resources in lieu of payment of operation and maintenance (O & M) fees to the government.

Turnover programs in Sri Lanka

The program for turning over O & M responsibilities to farmer organizations (FOs) at the distributory channel level in about 35 major irrigation systems covering about 485,900 acres (196,700 ha.) was implemented by the Irrigation Management Division of the Ministry of Lands and Land Development. This program is known as the Integrated Management of Major Irrigation Settlement Schemes (INMAS). A total number of 731 out of 1349 distributory channel areas were handed over to farmer organizations by the end of 1992. A similar program of irrigation management transfer to FOs in about 175 medium irrigation systems below 2000 acres and above 200 acres was initiated by the Irrigation Department in 1987. This program is known as "Management of Irrigation Systems" (MANIS). The turnover of O & M responsibilities has been planned in only a few irrigation systems, but farmer organizations have been formed in most irrigation systems. The National Irriga-

tion Rehabilitation Project started in 1991 intends to rehabilitate quite a number of medium and small systems and then hand over O & M responsibilities to farmer organizations in the near future. The Mahaweli Economic Agency has developed a comprehensive program of turning over O & M responsibilities to farmer organizations in distributory channel areas under the Mahaweli Development Program. These three programs, INMAS, MANIS and Mahaweli have been implemented for achieving irrigation management transfer or participatory management.

The Progress and Performance of Turnover Program

There is a need for a comprehensive review of the progress and performance of these turnover programs, particularly so after 9 years of implementation of the INMAS program. The other have been in existence only for about 3 to 5 years. Donor agencies, policy makers and implementors are now concerned with the following aspects of the turnover programs: (i) the effectiveness of government agencies and other services provided to plan and implement the turnover program, (ii) the level of FO development or strength of FOs in taking over operations and the maintenance of responsibilities and their capability of mobilizing the needed local resources for a sustainable system of management, (iii) the reduction of government costs for O & M, and overall improvement of irrigation management. In other words, in order to achieve the major objectives in

the policy of the turnover program, effective farmer organizations must be established, first with the support of the relevant government agencies concerned and then these organizations must be organizationally and financially capable of and willing to take over O & M tasks. The success or failure of turnover activities can be understood by evaluating physical improvements in the system, increase in productivity and equity etc.

The critical evaluation of each turnover program has become necessary to learn lessons emerging from the implementation process and the results of these programs not only for further improvements to them but also for the development alternative strategies. There are a few studies and reports regarding the problems and achievements of these turnover programs and most of them are case studies focussed on few

themes and questions. There are some good studies readily available on the INMAS program than the other two programs. Therefore, the International Irrigation Management Institute has under taken a study on monitoring and evaluation of these turnover programs.



Cont. from page 27

- (ii) generating commitment among employees.
- (iii) developing a competent work force.
- (iii) ensuring goal congruence, and,
- (iv) ensuring cost effectiveness.

In contrast, personnel management was more concerned about developing competence and ensuring cost effectiveness. Commitment was considered as a function of leadership, and personnel departments hardly thought of it. Goal congruence is to ensure that all employees understand the mission and the objectives of the organization and they are willing to work towards it.

Human resource management approach advocates that human resource policy should ensure commitment, competence, goal congruence and cost effectiveness.

The Task of the Human Resource Manager

Human Resource Manager should perform all traditional functions of a personnel manager, and in addition should ensure that people are committed and they understand organizational goals. How could an HR Manager get about?

People join organizations to achieve their personal objectives through working towards organization's objectives. The more they perceive organization as a place in which they could achieve their career related objectives more they will be willing to work for the organization. Commitment is therefore an outcome of perceived opportunity for career development through performance.

It is the job of the Human Resource Manager to ensure that employees perceive the organization as providing a fair change for advancement through fair evaluation and opportunity for training and development. Most modern organizations have changed more than once the way they evaluate the employee performance. They have moved away from the traditional method of measuring an employee at input point by marking him on attendance and punctuality, diligence and loyalty. They have also moved out from the more recent approach of measuring only at the output point, based on the philosophy of Management by Objectives (MBO). The new performance evaluation systems are interested in input as well as output, but at the same time they are interested in the employees attitude towards organizational goals, his awareness and commitment to uphold the organizations work values and his deficiencies in terms of his ability to live upto the values of the organizations.

HRM approach considers an employer as a total human being who could not be separated from his other roles specially as a member of a family. Therefore it acknowledges the fact that the employees should be adequately comfortable. Most organizations go beyond the levels of safety prescribed by the law and ensure that the employees are safe

and comfortable. More enlightened organizations have extended various welfare facilities such as day care centres to ensure that employees are focussing on their work without being bothered by routine problems of daily life.

A major task of any HR Manager is to see that his people are trained and developed. Therefore, today's organizations have taken a different approach towards training and development. Most employees at a very early stage go through Assessment Centres in which their potentials are clearly identified. Such identifications allows the organization to groom the employees for future responsibilities in a meaningful manner. This process further ensures employee commitment, and gives the organization an opportunity to plan meaningfully.

Some organizations conduct company based MBA programmes to ensure that their junior and middle level managers are turned into super products, while many organizations sponsor education activities of their employees.

What an HR Manager could do to ensure that the workforce is committed, competent, has goal congruence and is managed in a cost effective manner does obviously differ from organization to organization. The most important area on which he should place sufficient emphasis is developing a human resource policy that ensure those automics. Therefore HR Manager is no more a middle level manager who facilitate implementation of policy but a conscious contributor to company policy itself. HR approach thereby force organizations to take their workforce seriously and do their best towards people.

A RECORD PADDY HARVEST IN 1993

A. J. Satharasinghe

Statistician, Department of Census and Statistics

The highest paddy production since 1985 was reported in 1993. The production in 1993 was estimated at 2,567,000 MT- 1,692,000 MT in 92/93 maha and 875,000 MT in 93 Yala. This total is an increase of nearly nine percent over the previous year. The highest production on record is 2,661,000 MT in 1985, after which a declining trend was followed. Whether this trend was leading to a long term decline was a concern. This is the period when the civil disturbances not only in the North and East but also in other parts too, erupted. Because of the disturbances asweddumized lands could not be cultivated fully. Fertilizer subsidy was also withdrawn during this period. Unfavourable weather conditions particularly the drought in 1991 also contributed to retard the production. The upturn in 1993 may be an indication that the production is now on increase as before 1985.

The annual paddy production has almost trebled within the four decades from 1952 with an impressive growth of 296 percent indicating a stable disposition for the staple food of the country. This increase in the rice production has been made possible by improved irrigation facilities and very effective agricultural extension programs. For instance Mahaweli River Development project now provides water for cultivation both in maha and yala seasons for thousands of acres in the dry zone that had been idling. The share of Mahaweli 'B', 'C', 'G', 'H' and Udawalawa areas to the National production were 18 percent and 16 percent in 1992/93 maha and 1993 yala season respectively. Use of tractors for preparation of lands for paddy cultivation has overtaken all other methods with an area coverage of about 40 percent in each season. New improved varieties are extensively cultivated accounting for about 90 percent of the sown area.

Transplanting which is believed to give higher yields over the other methods of sowing is slowly becoming popular. Many other improved practices also have largely contributed to increase the production.

Rice imports declined sharply until early eighties concomitant with the unprecedented increase in the domestic rice production. This decline is more prominent during the five year period commencing from 1981 compared to the previous five year period. The percentage decrease of five year average for the latter period was 13.5 percent while it was 56.5 percent for the former. However, in the 1986 - 1990 period, imports increased by 19.4 percent compared to the previous five year average imports due to the drop in the domestic production.

Self sufficiency ratio which is defined as the percentage of domestic production to the total availability (available for human consumption) is one indicator generally used to describe the self sufficiency achieved by the local production of a particular food commodity.

The self sufficiency ratio of rice has been varying between 85 percent to 93 percent during the last decade where the performance had been exemplary in comparison to the previous three decades. However, it must be noted that imports of wheat flour is slowly increasing in parallel to the decrease in rice imports. Per capita availability of rice has relatively remained at the level of 100 kg/year. Per capita availability of wheat flour, which is considered to be the principle substitute for rice has nearly doubled from 23 kg/year in 1971 to 45 kg/year in 1978. Thereafter it has declined to about 23 kg/year by 1980. But since then, it has been slowly increasing and in 1991 it was about 34 kg per year.

This is an indication that wheat flour based foods are becoming increasingly popular. In urban areas fast food restaurants are spreading like mushrooms. Also people are diet conscious more than before. Convenient and quick meals are also a current issue among many working people. All these may be leading to a slow decline in demand for rice at least in urban areas.

It is up to the planners to make a decision on whether to maintain the self sufficiency ratio at this level and meet the balance demand through imports or continue to put some more resources and efforts to increase the production till the goal of total self sufficiency is reached. As for any other crop production of paddy can be further increased by increasing the productivity that is yield per unit area or by bringing more land under cultivation or by both approaches.

The asweddumized area or area prepared for paddy cultivation has recorded a 44 percent rise since 1952. In the cultivation year 1992/93, the reported asweddumized area was 737,004 hectares. During the last decade the average cropping intensity which is defined as the percentage of the total sown area in maha and yala seasons to the asweddumized area has been about 125 percent. This means that about 75 percent of the sown area out of the possible maximum of 200 percent remain idle each year.

Except for several years, the proportion sown has been less than 50 percent of the asweddumized area in yala season. On the average about 14 to 36 percent of asweddumized land in maha and 45 to 65 percent of asweddumized lands in yala seasons have been left uncultivated. Significantly, most of these uncultivated lands are in the dry zone. Paddy cultivation being heavily depend-

ent upon water. Inadequacy of south west monsoon rains in the dry zone and inadequate irrigation facilities are identified as the main causes of non cultivation in yala.

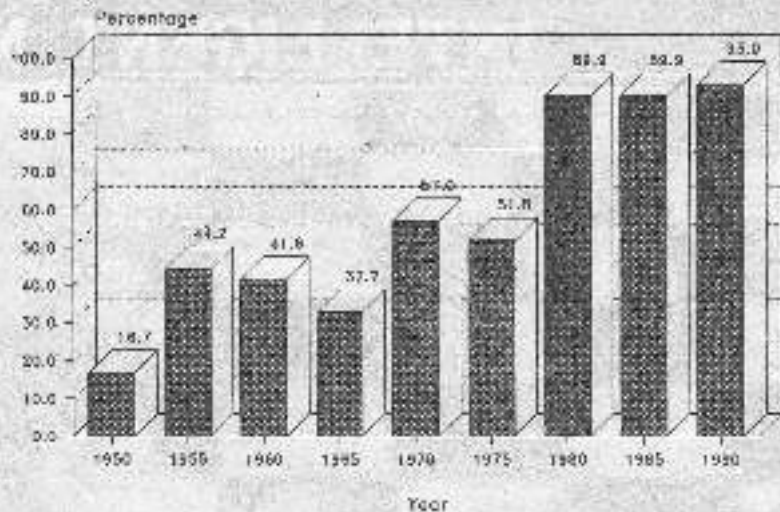
Much has already been achieved in the process of providing irrigation facilities and land development. The cultivated area under major irrigation schemes was raised between 1952 to 1988 by about 188,000 hectares which was about a 355 percent increase. The increase in yala season was about 199,000 hectares and it corresponds to 208 percent increase. Area under minor irrigation schemes was also raised by expanded irrigation facilities. Compared to 1960's cultivable area under minor schemes has been raised by 88,318 hectares or by 155 percent in maha and by 60,505 hectares or by 250 percent in yala season.

The dry zone covers about 77 percent of the total available land area amounting for 75 percent of the country's National production. Therefore in order to achieve the goal of self sufficiency in rice it is necessary to give further attention to the problem of water in the dry zone.

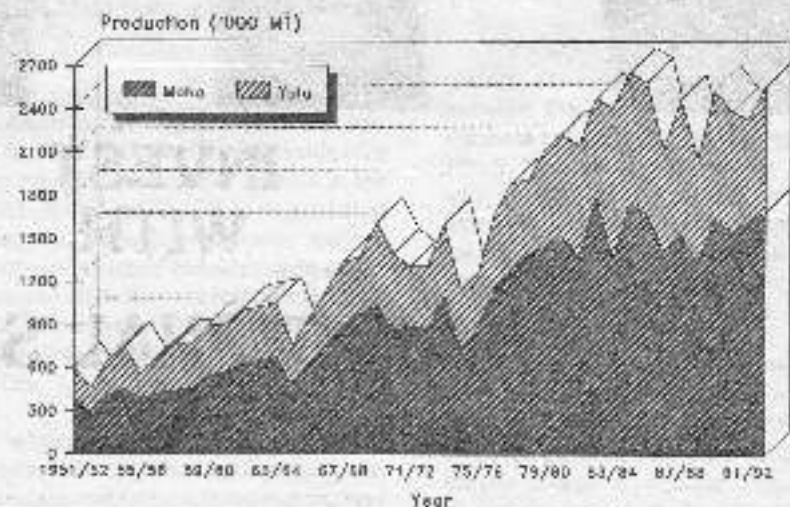
The availability of water is the determining factor of the extent cultivated as well as harvested. Proportion harvested also depends on the crop damages such as pest attacks, insects, floods etc. However, proportion harvested has been between 72 and 98 percent during the past years. In other words, complete crop damage of a serious nature has not been a common occurrence.

Agricultural research and extension programs carried out so far have made it possible to improve the average yield appreciably recording 128 and 98 percent increase for maha and yala seasons respectively, during the period of 1951-1992. It should be noted that yield has not dropped below 3000 kg/hect. during the last ten years in both seasons. Availability of water, use of improved seed varieties, improved cultivation practices such as transplanting, weeding, pest control etc. have largely contributed towards this end. Intensifying the research and other agricultural extension programs further is also necessary to increase the productivity and thereby the production.

Self Sufficiency In Rice
1950 - 1990



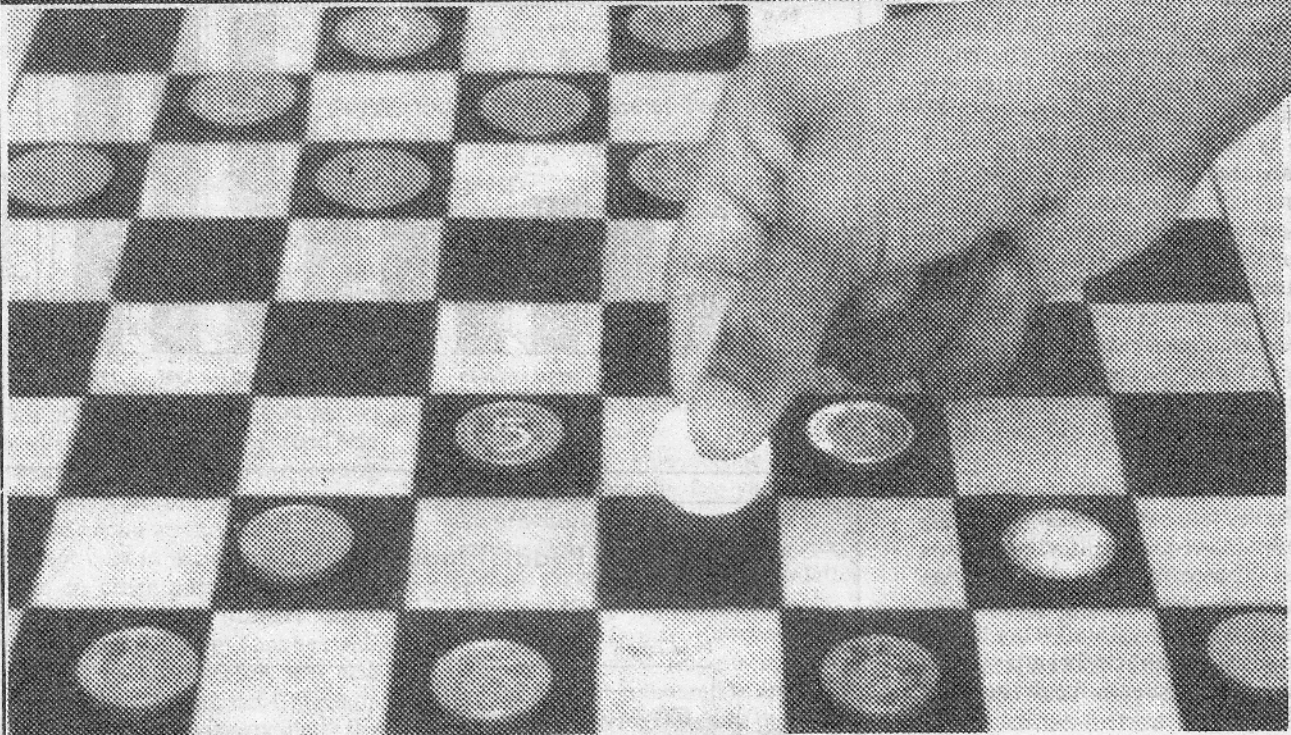
Paddy Production by Season
1952 - 1993



Performance of some of the improved seed varieties heavily depend on chemical fertilizers. As fertilizer is generally imported, this would invariably lead to increase in cost of production. On the other hand, having realized the severity of the environmental pollution and other side effects exporters of these chemical fertilizers such as USA are now focussing on sustainable agriculture and encourage farmers to use organic fertilizers. Therefore agricultural researchers have to pay attention to this also in their endeavour in increasing production.

The issue that must now be addressed is whether efforts should be intensified in raising the production to meet the demand for rice fully or the unmet demand of 10 percent should be imported. The former option requires increasing productivity and/or bringing more land under cultivation. Both measures require greater availability of irrigation. A careful examination of availability and distribution of water is a prerequisite. Maintenance and rehabilitation of existing irrigation schemes is a priority if self sufficiency is to be achieved.

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Trade patterns between Sri Lanka and the Newly Industrialized East Asian countries (NICs)

P. M. S. Tantrigama
Senior Lecturer, Department of Economics
University of Sri Jayawardanapura

This study is an attempt to analyze the trade pattern of Sri Lanka with South Korea, Singapore, Hong Kong and Taiwan which are called Newly Industrialized East Asian countries (NICs). The commodity-wise trade flows between Sri Lanka and the NICs as a whole and trade flows between Sri Lanka and individual NICs have been investigated. Further, it examines the net gain or loss of commodity trade between the two groups and its trends.

It has been found that Sri Lanka's exports to the NICs have been increasing at a rate less than its imports from NICs and the trade deficit widening gradually. Sri Lanka's trade direction has changed towards the Asian region and that particularly the share of NICs in our import market has increased rapidly in recent years. Sri Lanka's trade sector has been diversifying rapidly towards labour intensive manufacturing, while NICs have become exporters of more capital intensive manufactured goods; and that NICs succeeded in capturing a good part of the Sri Lankan market for their manufactured goods such as textiles, synthetic materials, building materials and transport equipment.

The Background

At the beginning of the 1950s Sri Lanka and East Asian countries like the Republic of Korea, Singapore, Hong Kong, Taiwan and China were more or less identical with similar per capita incomes and external trade structures. They were all small agricultural countries and pursuing similar development strategies to promote their economic and social development. Although all these East Asian countries had a similar background at the beginning of the 1950s, after following similar development strategies these other countries except Sri Lanka have succeeded to a greater extent in their development efforts by the end of the 1980s. More particularly, they have been able to increase their per capita incomes substantially and turn their trade deficits in favourable balances gradually. This has affected unfavourably the trade balance of the countries they are trading with. Since the 1980s they have been able to capture a significant share of the foreign markets, especially the European and

the Asian markets. At present their capital surplus is of such a magnitude that they have become capital lenders in the international market. It is argued that these countries have become such a challenge to other industrialized countries and often they are referred to as the Asian Four, Asian Giants, Gang of Four or Newly Industrialized Asian countries (NICs).

While these countries were able to achieve their targets to a great extent, Sri Lanka has not been able to progress very far from the start in terms of any of the development indicators. Growth of the GDP of Sri Lanka is approximately 4 percent on an average in the 1980s when the GDP growth rate is about 8 percent for NICs. The balance of payments deficit is more usual phenomenon for Sri Lanka but NICs have been able to experience favourable balance of payment positions.

One specific feature of the trade pattern of Sri Lanka during the last two decades is that Sri Lanka's trade direction has changed toward Asia significantly. Mainly industrialized countries

had dominated our exports as well as imports markets in the 1970s but it has markedly declined by the 1990s. The place of industrialized countries in our import-export trade has been taken by Asian countries including India, Japan and the NICs. The NICs alone accounted for 25.8 percent of the total imports of Sri Lanka in 1990. Therefore, it is observed that the NICs were able to widen their export markets not only in the West but have also increased trade with their neighboring countries.

The main objective of this study is to identify the trade inflows and outflows between Sri Lanka and NICs and to examine in detail the net gain or losses which Sri Lanka obtained by trading with those trading partners. It further attempts to examine the changing pattern of commodity trade of Sri Lanka in respect of NICs during the period 1970-1990.

In an attempt to investigate the trade and payments activities between two individual parties a more detailed Balance of Payment (BOP) account of the two parties have to be prepared. This is done in the present study by collecting required data from relevant sources and preparing more detailed trade accounts for individual countries. However, the study covers only the BOP transactions on trade account due to the lack of data on other transactions.

The study covers the period 1970-1990 since it reflects the different regimes of economic reforms and political controls in all these countries. All data are obtained from secondary sources specially from the Central Bank Reports of Sri Lanka, Custom Reports of Sri

Lanka, and the reports of I.M.F and United Nations.

Basic economic characteristics of Sri Lanka and NICs

Sri Lanka is a small developing country in the South-East Asian Region with an area of 66,000 Sq.Km. and a population of approximately 17 million. It is denominated as an export economy specializing mainly in the export of agricultural products in return for consumer, capital, manufactured and intermediate goods from other countries. The degree of external dependency is relatively high in Sri Lanka where the trade dependency ratio of Sri Lanka today is about 56.8 percent¹. It is an indication that the economy is highly vulnerable to fluctuations in the external market.

The four East Asian newly industrialized countries: the Republic of Korea, Taiwan, Hong Kong and Singapore (NICs) those are the countries which attained higher rates of economic growth and export expansion than any other group of developing countries of the world in recent times.

The Republic of Korea (South Korea) is the largest country in this group and it consists of an area of 98,000 Sq.Km. and the population was 42.1 million in 1987 recording the largest population in the group. The second largest is Taiwan with an area of 10,000 Sq.Km. The population of Taiwan is approximately 19 million people.

Singapore and Hong Kong are small in relation to Korea and Taiwan. Singapore consists of 1000 Sq.Km. and Hong Kong is double the size of Singapore. The population of Singapore is approximately 2.6 million whereas the population of Hong Kong is approximately 5.6 million people. These two are city states - 'Pang Eng Fong', uses the term "Twins" to describe these states. As city states both exemplify natural resource poverty.

The ranking by per capita incomes is just the opposite. Hong Kong leads with US\$ 8070 followed by Singapore with US\$ 7940, Taiwan with US\$ 3160 (1984) and Korea with US\$ 2690 (1987).

Table 1

Country	Population Millions	Area Thousand Sq.Km	G.N.P per capita 1987 US\$
Sri Lanka	17.4	66	400
Korea	42.1	98	2690
Taiwan	19.0	-	3160
Hong Kong	5.6	2	8070
Singapore	2.6	1	7940

Source: World Development Report 1990

Table 2

	Exports		Imports	
	1974-1982	1983-1990	1974-1982	1983-1990
Republic of Korea	75.40	3.40	53.90	57.90
Hong Kong	-1.28	25.70	72.88	39.00
Singapore	17.13	17.60	36.90	-5.60
Taiwan		18.00 (85-90)		40.70 (85-90)

Source: Calculated from the Statistics on Direction of Trade - U.N.

Table 3

	1974	1976	1978	1980	1982	1984	1986	1988	1990
Korea Rep. of									
Exports	.0018	.007	.034	.019	.08	.34	.18	.18	.258
Imports	.416	.79	.716	1.73	2.0	2.11	3.81	3.92	4.85
Hong Kong									
Exports	1.27	2.52	1.453	.98	.81	1.05	.9	1.04	.89
Imports	.17	.53	1.42	2.05	2.32	3.19	4.66	5.11	4.56
Singapore									
Exports	1.21	2.97	2.03	1.13	3.74	1.06	2.39	2.67	2.35
Imports	2.79	1.7	2.6	4.5	5.97	5.53	3.92	4.07	3.89
Taiwan									
Exports							.11	.23	.4
Imports							4.76	4.62	5.6

Source: Based on Directions of Trade Statistics U.N.

Balance of Payment on Trade Account of Sri Lanka and NICs

During the 1970s Sri Lanka's export and import markets were mainly dominated by the industrialized countries. Although at present the newly industrialized countries provide a small market

for Sri Lanka, during the 1970's Hong Kong and Singapore - two old trading partners of Sri Lanka - together accounted for 1 percent of Sri Lankan exports and 1.9 percent of imports during that period. There was no marked trade relationship with Korea and Taiwan during that period.

After the 1980's the trade relationship with the Republic of Korea and Taiwan were widened. The total export trade to Korea increased from US\$ 01 million in 1974 to US\$.03 million in 1978 and to US\$ 4.9 million in 1990.

But imports have been increasing more rapidly than exports in relation to all NICs. In general, the average annual growth rates of imports to Sri Lanka have exceeded the growth rates of exports. As a result, Sri Lanka has been experiencing unfavourable trade balances in respect of NICs throughout this period.

Changing Pattern of Trade Between Sri Lanka and NICs

There have been significant changes in Sri Lanka's trade with respect to NICs during the past few decades. Hong Kong and Singapore were our older trade partners in export as well as imports in the 1970's. Hong Kong and Singapore which totally accounted for 8.48 percent of our exports in 1970 have increased to 4.55 percent in 1982 and declined to 3.24 percent in 1990. The reason is the slight decline of Hong Kong's share during that period. Hong Kong's share has decreased from 1.27 in 1974 to .89 percent in 1990. However, of all the NICs Singapore today constitutes the largest export market of Sri Lanka. All NICs together accounted for 3.098 percent of our total exports.

With regard to the import market the most striking feature is the marked rise in the share of South Korea and Taiwan during this period.

Sri Lanka purchased only .416 percent of Korea's exports in 1974 has increased to 4.85 percent in 1990. Table 3 shows the sharp increase in import share of NIC's during that time. In 1990 they all accounted for about 8.28 percent of our exports have increased to 18.9 percent in 1990.

Changing Pattern of Commodity Composition of Trade Between Sri Lanka and the Newly Industrialized Asian Countries

The Export Market

At the beginning of the 1970's Sri Lanka exported a limited number of commodities to the NICs and they were mainly agricultural goods, raw materials, food,

beverages and mineral products. Agricultural goods consisted of Tea, Rubber, Coconut and minor agricultural goods such as cardamom, cinnamon, pepper, and coffee. Non traditional industrial exports were gems and jewellery. Tea was the major export item exported to Hong Kong.

The major item exported to Singapore and Korea in the 1970's was minerals. Graphite was the main item in this category. Tea, coffee, rubber and beverages were the major agricultural goods exported to Singapore and Korea in the 1970s. One of the major characteristics of the export market of Sri Lanka with respect to NICs is the commodity diversification which occurred after the 1980s. New products such as fish and meat products, cut flower and beverages have been added to the export basket in the decade of the 1980s.

Another most striking feature is that as a developing country traditional manufacture exports, textiles have taken the forefront as major export items since 1977 particularly with respect to Hong Kong and Korea. But traditional primary exports of Sri Lanka (including fuel) still account for about 50 percent of the total exports to NICs.

The Import Market

The changes in the import market in relation to the NICs is substantial. During the 1970s imports from NICs constituted food products, minerals, intermediate goods and other machinery equipment.

With regard to Hong Kong and Singapore, textile was a major import item in the 1970s. The relative share of food and agricultural products was insignificant during that period. Fish and meat products accounted for only 2.7 percent of the total import from NICs in 1977. Textiles accounted for 48.9 percent of total imports from Hong Kong and it was the major import market of textiles.

The significant feature of the import market during the 1980s was the increasing relative share of machinery and transport equipments. Electrical and non-electrical machinery which constituted 1.78 percent in 1974 has risen to 5.8 in 1990 and from 0.63 percent in

1974 to 25 percent in 1990 for Hong Kong and Korea respectively.

On the other hand the relative share of manufactured imports from Taiwan increased rapidly. Textiles and machinery are the major manufacture imports from Taiwan today.

Conclusions

It is found that significant changes have occurred in the pattern of trade between Sri Lanka and NICs during these two decades. Sri Lanka's exports to the NICs have been increasingly less than its imports from the NICs. We have experienced negative gains from trade by trading with all East Asian NICs reflecting a deficit of balance of trade throughout the period.

The study of changing pattern of commodity composition of trade during that period revealed that in the early seventies we exported to them mainly agricultural goods. The only industrial item was gems. But it should be noted that several changes in the product composition have occurred. New commodities like agricultural as well manufactured goods have been added to the export basket. Textile and garment export is the most traditional industrial export.

With regard to the import market more than 75 percent of the Sri Lanka's imports from NICs consisted of manufactured goods mainly textiles which accounted for 50 percent of the total. So NICs emerged as our major import market for textiles.

So we may conclude that Sri Lanka has not gained very much by trading with the NICs, but reflects some improvements. The NICs succeeded in capturing a good part of the Sri Lankan market for their manufactures such as textiles, synthetic materials, building materials and transport equipment. But Sri Lanka has not yet been able to capture the market for its manufactures in the East Asian region. Sri Lanka is yet exporting to them the same agricultural and fish products and minerals and tea, which it has been selling in the past.

Note :

$$\text{External dependency ratio} = \frac{\text{Total merchandise exports} + \text{Total merchandise imports}}{\text{Gross Domestic Product}}$$

ILO - Matching Employment Opportunities and Expectations : A Programme of Action for Ceylon. The Report of an inter-agency team. Geneva, 1971.

Jayaweera Swarna, "Educational Opportunity and the School Age Population in Sri Lanka" **Sri Lanka Journal of Social Sciences**, Vol. 2, No. 2, Social Sciences Research Centre, National Science Council of Sri Lanka, Colombo 1978.

Korale R. B. M., et al. Manpower : Data Sources, Utilization Trends and Prospects in Sri Lanka. Employment and Manpower Planning Division, Ministry of Plan Implementation, Colombo 1983.

Korale R.B.M., Employment and the Labour Market in Sri Lanka : A review. Employment and Manpower Planning Division, Ministry of Plan Implementation, Colombo 1984.

"Employment Trends", **Sri Lanka Economic Journal**, Vol. 1, No. 1, Colombo 1986.

Marga Institute, Non Formal Education in Sri Lanka, Marga Research Studies 1, Colombo 1974.

Ministry of Higher Education, Directory of Technical Education, 1988-89

Nesiah D. "The Brain Drain - Internal and External" **Sri Lanka Journal of Social Science**, Vol. 1, No. 2 December 1978, National Science Council of Sri Lanka, Colombo.

Ranasinghe Sudatta W. "A Study of Youth Unemployment in Rural Sri Lanka : Social Stratification, Education and Job Expectations" **Manpower and Unemployment Research**, Vol. II, No. 2, Centre for Developing Area Studies, McGill University, Montreal, 1978.

Rodrigo Chandra, Korale R. B. M. & Athurupana D. H. C., "Employment and Manpower Planning in Sri Lanka" **Human Resources Planning : The Asian Experience**, edited by Rashid Anjad, International Labour Organization, Asian Employment Programme, New Delhi, 1987.

Udagama Premadasa, "The Curriculum in the Whitepaper", **Economic Review**, Vol. 7, Nos. 9 and 10, December 1981/January 1982, Peoples Bank, Colombo.

University Grants Commission, Corporate Plan for University Education 1988 - 1992, Colombo 1988.

Statistical Handbook 1987, Statistics on Higher Education in Sri Lanka, Colombo 1988.

References

2. Chung H, Lee & Seiji Naya - Trade in East Asian Development with comparative reference to South Asian experiences. **Economic Development & Cultural Change** Vol: 36 No: 3 April 1988.
3. David Evans & David Greenway - The Role of trade in the New NIC's. **The Journal of Development Studies** Vol:27 No: 3 1993.
4. GATT - Trade Liberalization Protectionism and Interdependence No: 5, 1977.
6. Todaro M. P. - Economic Development in the Third World
8. United Nations - World Development Report 1974, 1978, 1980, 1985, 1991.
1. Asia Out Look - 1991.
9. United Nations - Direction of Trade Statistics 1980, 1985, 1991.
7. United Nations - Recent Economic & Social Developments in Hongkong, **Economic Bulletin for Asia & the Pacific** Vol: 25 No: 1 1984 June.
5. Reports of Central Bank of Sri Lanka, 1974, 1978, 1980, 1991.



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Sri Lanka: Resources And Expenditures

Indicator	Unit of measure	25-30 years ago	15-20 years ago	Most recent available year	Same region/income group	Next higher income group	
					South Asia	Low income	
HUMAN RESOURCES							
Population (June-1991)	thousands	11,104	13,480	17,150	1,152,332	8,127,268	773,900
Age dependency ratio	ratio	0.63	0.77	0.88	0.72	0.68	0.71
Urban	% of pop.	19.0	22.0	22.0	26.0	40.1	58.9
Population growth rate	annual %	2.5	2.6	1.2	2.1	1.0	1.7
Urban	"	4.5	4.7	2.9	2.8	5.2	3.1
Labour force (15-64)							
Agriculture	thousands	2,843	4,773	6,471	410,330	1,448,134	302,448
Industry	% of labour force	66	54	..	..	..	..
Female	"	14	14	..	..	..	..
Female per 100 males	"	25	20	27	22	33	32
Urban	number	..	..	..	..	..	..
Rural	"	..	..	..	..	..	..
NATURAL RESOURCES							
Area	thous. sq. km.	66	66	66	5,189	86,828	22,890
Density	pop. per sq. km.	170.0	204.0	259.0	218.0	77.0	31.0
Agricultural land	% of land area	83.4	86.3	86.2	58.0	47.1	41.2
Change in agricultural land	1976-81, %	2.5	0.3	0.1	0.0	0.0	0.0
Agricultural land under irrigation	"	16.8	20.4	22.7	26.2	13.7	12.6
Forest and woodland	thous. sq. km.	16	16	17	909	9,197	5,356
Deforestation (part)	annual %	3.0	0.0	0.0	..	..	..
INCOME							
Household income	% of income	52	49	51	..	..	..
Share of top 20% of households	"	14	13	13	..	..	..
Share of bottom 40% of households	"	5	7	5	..	..	..
Share of bottom 20% of households	"	..	..	..	..	..	..
EXPENDITURE							
Food	% of GDP	..	52.2	38.0	36.2	..	..
Staples	"	..	31.5	18.0	..	..	..
Meat, fish, milk, cheese, eggs	"	..	5.7	3.1	..	..	..
Cereals imports	thous. metric tonnes	962	1,100	1,000	3,300	20,008	44,418
Food production per capita	"	..	271	271	2,429	6,029	4,047
Fertilizer consumption	1976-81, mt.	78	48	68	113	122	101
Share of agriculture in GDP	% of GDP	51.0	38.0	13.0	37.5	47.5	43.2
Housing	% of GDP	27.8	23.1	23.9	28.6	28.7	..
Average household size	% of GDP	..	4.3	4.3	..	..	..
Urban	persons per household	..	5	..	..	..	..
Fixed investment: housing	"	5	8	..	..	..	..
Fuel and power	% of GDP	8	2.2	0.2	..	..	..
Energy consumption per capita	% of GDP	..	1.7	2.3	..	..	..
Households with electricity	kg of oil eqvt.	..	123	170	207	350	1,249
Urban	% of households	100	..	..	..	..	..
Rural	"	..	..	..	..	..	..
Transport and communication	% of GDP	..	..	..	..	..	..
Fixed investment: transport equipment	"	..	5.5	12.1	..	..	..
Total road length	km	..	1.5	3.4	..	..	..
		..	..	20,023	..	..	..
INVESTMENT IN HUMAN CAPITAL							
Health	% of pop.	..	..	..	..	..	..
Access to health care	persons	5,818	5,000	7,270	2,450	..	..
Population per physician	"	3,218	1,260	1,268	..	..	..
Population per nurse	"	..	800	908	1,648	1,348	509
Population per hospital bed	% of pop.	..	18.0	18.0	70.8	70.8	..
Access to safe water	"	..	30.0	90.0	70.5	79.0	..
Urban	"	..	13.0	55.0	10.9	92.8	..
Rural	"	..	..	56	18	32	..
Oral rehydration therapy (under-5)	% of cases	..	..	..	..	..	..
Education							
Gross enrollment ratio	% of pop.	..	..	..	..	..	..
Secondary	"	..	..	..	..	..	..
Female	% of working pop.	35	48	74	99	44	58
Pupil-teacher ratio: primary	"	35	48	77	81	37	..
Pupil-teacher ratio: secondary	persons per teacher	..	13	14	68	38	25
Pupils reaching grade 4	"	..	18	..	23	23	..
Pupils reaching grade 4	% of cohort	..	73	38	..	..	..
Repetitive enrol: primary	% of total enroll.	..	16	8	4	..	..
Illiteracy	% of pop. age 15+	25	..	12	54	39	..
Female	% of pop. age 15+	..	..	17	16	52	..
Newspaper circulation	per 1,000 pop.	30	41	100

Source: World Bank International Economics Department, April 1983

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