2

Anti-Poverty Strategies
Growth, Employment and Human Development

2.1 Introduction

Economic growth and employment generation are essential for sustainable human development and poverty alleviation. Growth, because few societies can afford the required social provision without it, and because it is usually essential to employment generation; employment, because it provides necessary incomes, and also gives incentives to individuals and families to invest in their own human capital. A strategy for growth, employment and human development is an anti-poverty strategy; a strategy for growth on its own might not be. But even labour-intensive growth plus access to services may not suffice in many countries – more far-reaching policies including land-redistribution and credit programmes targeted to the poor may be needed.[22]

There has been a debate in the development literature about whether growth leads to poverty alleviation. On average each additional percentage point of annual GNP growth is associated with roughly 0.5% reduction in poverty levels according to World Bank estimates.[23] But that is an average across developing countries; in any particular country, growth may occur without reducing poverty. There is a widespread consensus among researchers that growth is a necessary but not sufficient condition for poverty reduction: appropriate government policies are also essential.

The word "sustainable" in this context is important: trying to attend to poverty and human development by government spending in the absence of growth, or without attention to the productive base of the economy, may if policies are ill-judged only lead to the creation of a premature and costly welfare state. The ambition must be to ensure that levels of social provision are affordable. In a poor country, this may only be possible with the support of foreign aid, but even that must be managed with a view to sustainability: otherwise there may be continuing aid dependence.

2.2 Growth

There are no universal strategies: obviously what fits one country will not necessarily fit another. Some things, however, are fairly universal. The East Asian experience suggests that **getting the macro-economic "fundamentals" right** is crucial to success. This means: avoidance of excessive fiscal and balance of payments deficits, maintaining realistic exchange rates, monetary and credit control, keeping inflation reasonably low and interest rates positive in real terms. Without continuous economic management to achieve these objectives, countries can rarely grow on any extended basis. They cannot provide the stable economic climate which investors and exporters need, prevent capital flight, or cope with inevitable exogenous shocks. (As noted above, management of shocks is critical to growth; countries subject to high deficits and inflation in placid times will be unmanageable when trouble comes.)

The three key engines of growth in late twentieth century development have been the private sector, exports and technology. In recent years most developing countries have embarked on substantial reforms, moving away from heavily-regulated domestic markets and inward looking trade-regimes, encouraging direct foreign investment, privatising or otherwise reforming state-owned enterprises (SOEs), in general placing their economies on a more liberal

footing. (The same process has occurred in most formerly socialist, now known as the "transitional", economies.) But the results have been highly variable.

Part of the difficulty has been that many of these reform episodes have occurred in the midst of economic crises, and under World Bank and IMF structural adjustment programmes. Very frequently a period of stabilisation has been necessary, involving retrenchment in demand. Typically even where programmes have been reasonably successful, private investment has needed five years to rise to growth-enhancing levels, partly for demand reasons, partly because a period of that order was needed to convince private investors that the new policy regime has commitment.[24]

Partly, however, it is apparent how much has to be done financially, fiscally and in trade and foreign investment regimes, and how much institutionally, before the private sector can flourish where previously it has been subject to major discouragement. The more pervasive the previous impediments, the more severe the economic crisis which precedes reform, and the weaker the country's government and institutions, the harder it is. African economies in particular have found the going extremely difficult.

With all the enthusiasm for market reforms, there is a danger that the **role of government** in fostering the private sector may be relatively neglected. In addition to establishing macro-economic and policy stability, governments have to provide the physical and institutional infrastructure that facilitates investment. Key institutions include tax administration and implementation, legal and regulatory bodies, and of course the civil service itself. Where financial institutions are weak or inefficient, governments may have to play a part in helping to establish the banking sector, though without impairing its autonomy or absolving it from commercial disciplines. Governments also have major responsibility for human development – *see* below. These are all fairly standard necessities.

The most difficult questions concern **trade and industrial policy**. As noted above, the East Asian countries were, if to varying degrees, quite interventionist in promoting manufacturing development and exports, while for the most part maintaining market discipline. How far their example can be followed by other countries is in part a question of political economy, in part a question of governmental capacity (and in part it is also related to the stage of development). One African author states flatly, for example, that "African governments do not currently have the capability to implement an industrialization strategy by 'getting prices wrong'."[25]

This does not mean that they cannot or should not do any of the things that the East Asian countries did. They may exercise care in import liberalisation – over limited periods – to ensure that viable enterprises are not destroyed by foreign competition before they have a chance to establish themselves; they can provide incentives to exporters which do not infringe WTO rules, such as national honours and awards (much employed by the EAIEs); they can do much to attract FDI and promote technological development. What the author in question is making is in part a political-economy point, relevant to the East Asian history of promoting specific products made by specific firms. As he says, "African governments should avoid reforms that foster a rent-seeking private sector, including overvalued exchange rates, administrative allocation of import-support to the private sector, external commercial debt-conversion schemes, and tax breaks for promoting private investment." He could have added subsidised directed credit, which has had a poor record in Africa.

While all these instruments were used in East Asia, those governments had the personnel to judge the capacity of the targeted firms to make good use of their privileges; even more important, they had the political ability to remove the inducements once companies were successful, or if they were clearly not going to succeed – capacities that may be in short supply elsewhere. Many of the forms of intervention employed in East Asia were justified by market failure; in African – and other – countries "government failure has

proved to be a bigger problem than market failure." In several countries there is perhaps still too much government intervention in the economy rather than too little, even while important government functions such as the maintenance of law and order, and the provision of essential services and infrastructure, are incompletely fulfilled.

In earlier discussion of the East Asian experience, mention was made of a variety of ways in which representatives of relevant bodies came together to discuss collaboration between business and government, research and development, technology support, sharing of information, overcoming export obstacles, and so forth. Variants of these methods of promoting manufacturing and other exports can be used by any country. Japanese technical assistance has promoted the use of small group meetings for such purposes in African and other countries. While obviously replication of East Asian practice at its fullest may only be within the grasp of the more institutionally established countries, most countries have things to learn from the East Asian successes. What is important is openness to such learning, and flexibility in the application of the lessons.

2.3 Employment

In most developing countries, the majority of the labour force is engaged in agriculture and agriculture-related activities.[26] Where this is true, any employment strategy must give considerable priority to the **agricultural sector**. The sector is among the hardest to reform. Whatever the stage of development, as Europe knows well, it is difficult to keep prices at a level accepted as sufficiently remunerative by farmers, and affordable to consumers. Developing countries have the same difficulty, but they have often compounded it by limiting incentives to farmers, by reducing competitiveness, by isolating farming from world markets, and by a variety of other marketing and restrictive arrangements which result in low productivity. In addition, governments have very large subsidy bills, directly to food prices, or to inputs, often amounting to significant percentages of GDP; and the input subsidies are often garnered more by the larger and better-off farmers than by the smaller and poorer. Where agriculture serves neither equity nor efficiency, it will not make an adequate contribution to growth, employment or the relief of poverty.

What needs doing is mostly familiar: reducing biases against agriculture in prices, taxes and exchange rates, and diminishing input subsidies such as on electricity, which encourage capital- rather than labour-intensive methods, and are expensive in government revenue terms. Agricultural research and extension are also often underfunded and poorly managed, despite their having very high pay-offs in terms of raising agricultural productivity. Rural credit is often critical, but all too frequently prevailing systems subsidise larger farmers with cheap credit, *and* have low recovery rates, so that credit institutions fail to help poorer farmers, and become financially unviable.

Some of the difficulties of removing biases are political in the less desirable sense, for example, when it is hard to reduce or take away benefits once granted because the recipients are powerful although not in need; others are political in the more defensible sense, that governments are worried about food price increases which impact on the vulnerable under reform. But in general it is better to cope with distributional questions by food stamps or other schemes, rather than by tampering with production incentives. Many of the policies which harm agriculture have been motivated by food security and similar concerns; they are ripe for reconsideration, if markets can produce higher productivity while food security can still be maintained.

A variety of targeted schemes have also proved valuable in stimulating agricultural growth and employment, particularly those aimed at small farmers. They include community and regional infrastructure projects, land and crop develop-

ment, rural public works, and micro-savings and credit schemes. The latter include the well-known Grameen Bank in Bangladesh, SEWA (the Self-Employed Women's Association) in India, and Indonesia's Badan Kredit Kecamatan. The record of such measures has been quite strong in Asia and Latin America, less so in Africa. Specialist agricultural exports have also been helpful. While escalating tariffs in most industrial countries militate against development of processed agricultural products, several countries – Kenya is a notable example – have generated valuable exports in specialist fruit, vegetable and other horticultural products. They are commonly grown by smallholders, though they may require relatively sophisticated marketing techniques and infrastructure.

Apart from its direct impact on employment, a thriving agriculture is important because of its ability to stimulate off-farm employment in ***small- and medium-scale enterprises (SMEs)***. A number of countries have had major success in contributing to growth and employment through SMEs. Perhaps the most spectacular case has been China, whose "Township and Village Enterprises" (TVEs) have been the mainstay of its recent economic growth, apart from the joint-venture sector with foreign participation. The TVEs rose from a modest presence to over 40% of rural output and employment in the space of some ten years, beginning with the economic reforms of 1979. These have now expanded outside agriculture-related activities, and are substantial manufacturers and exporters; but they began with agricultural processing and supplying inputs and consumer goods to increasingly prosperous farmers benefitting from agricultural reform. The key policy instrument, apart from making it legal to start such enterprises, was credit.

There have been notable developments in the SME sector in other countries, including India, Indonesia and Malaysia. A lot depends on linkages with the farm sector, which seem to be weaker in Latin America, dominated by estate and commercial farming, and in Africa – perhaps because of relatively low use of purchased farm inputs – than in Asia. The critical policy ingredient in SME success seems to be finding appropriate forms of financial intermediation for this sector; and technology imports and technological support. These are also important to employment.

The principal means of **technology** acquisition by developing country firms are through FDI and buyer-supplier relationships – apart of course from purchases of technology and, usually at a later stage of development, domestic R&D. For much of recent decades, developing countries have treated MNCs with suspicion – not without reason. By transfer pricing and other means, MNCs could often manage to produce large profits for themselves, and few benefits for the host countries – though this was sometimes the result of policy distortions in the host country. The transfer of technology was often something MNCs specifically failed to do, or avoided doing, excluding host-country personnel from technological learning. These and many other things have changed. Developing countries have learned to make better judgments about when an association with a MNC will benefit them, and also to negotiate more successfully with them; but the case-by-case approach has pitfalls, and the aim should surely be a regime which creates a "level playing field" – certainly not one which confers uncompetitive benefits on MNCs. Over the years the corporations themselves have also seen the virtues – and often higher profitability – in engaging in closer and more mutually advantageous relations with the host economies.

The result is that developing countries today are making much greater efforts to attract FDI. But only a few succeed. While FDI flows are large, they are concentrated on a relatively small number of countries; over two-fifths (42%) of all 1994 FDI flows to developing countries went to China (*see* table below). A small number of other countries in Asia (Singapore, Thailand and Indonesia) and in Latin America (Mexico and Argentina) account for the bulk of the rest. Nevertheless, even if not major sites for FDI in absolute terms, countries as varied as Barbados, Botswana, Mauritius and Sri Lanka owe more than 20% of

their modern manufacturing employment to MNCs.[27] Malaysia has had perhaps the most spectacular sustained growth of exports in East Asia in recent years, related largely to MNC investment in computer chips.) The things that make for economic growth are ingredients in the attraction process: macro-economic and policy stability, well developed infrastructure, institutions and business climate, and also good levels of human development – there is evidence that much MNC investment today is attracted by low-cost skilled, not unskilled, labour.

Table 1: **FDI in Selected Major Recipients in 1994**

	US$ millions
All developing countries including	80,102
Asia and Pacific	**47,600**
China	33,800
Indonesia	2,700
Malaysia	5,200
Thailand	2,100
South Asia	**1,275**
India	620
Pakistan	
Sri Lanka	
Latin America and Caribbean	**16,230**
Argentina	1,282
Mexico	7,978
Sub-Saharan Africa	**2,415**
Angola	350
Nigeria	850

Source: World Bank data

The foreign investment regime is also significant. Under economic reforms, numerous countries are undoing the restrictions on FDI that have inhibited foreign investors in the past. Requirements for majority shareholding by host-country firms, restrictions on profit repatriation, and other obstacles have had to go. But these usually need to be coupled with liberalising reforms in the domestic economy. India, for example, is finding it possible to attract much needed foreign investment for power development; it had not only to make conditions more propitious for the foreign investor, but also to open up the energy sector to private enterprise.

Exporting itself contributes to acquiring technological capability. A growing proportion of manufactures are no longer produced "blind" and then sold to whatever buyers can be found; they are made to specification, for client-specific orders. This of course requires information technology, marketing, design and other skills, and a high level of quality control. But in this process, buyers will often assist supplying firms to acquire the necessary capacities, whether they are Japanese car manufacturers getting parts made overseas, or European clothes and fashion chains seeking low-cost garment suppliers. Special export processing zones may help countries whose overall infrastructure is thin to get off the ground.

A final area important to employment is that of **labour markets and labour regulation**. Most countries have a variety of forms of worker protection and labour standards, ranging from minimum wage to employment legislation and regulation, and commonly including important roles for trade unions. Their record is rather mixed, and at least sometimes harmful to labour or sections of it. Overall, experience suggests that the demand for labour is more important than anything else for employment and working conditions; and that the more that can be done to enhance worker security and conditions by means that do not affect firms' hiring decisions, the better.

Evidence on the experience of minimum wage provisions is both pro and con. In industrial countries, there is mixed evidence, but recent work in the US has shown increases in the minimum wage not to have harmed employment in some areas. In the industrial countries too, a minimum wage is likely to be of benefit to low-paid workers, even if it may sometimes inhibit the employment of the worst paid. There is some evidence too that it may have a role in enhancing worker

commitment. In the poorer developing countries it is rarely of significance to the low-paid, who work in rural and urban informal sectors – in fact it is quite likely to work to the disadvantage of poor workers who seek formal employment, and who are better off so long as their pay is higher than in the informal sector. Even in the formal sector, minimum wages are often legislated but not enforced.

Perhaps the regulations most harmful to employment are those which restrict firms' ability to lay off workers, such as exist in India and Sri Lanka. The result is commonly a tendency of firms to prefer casual or short-term hiring and subcontracting, and the practice can serve as an inhibition to new investment. Requirements on firms to provide worker benefits such as maternity leave and pay may also prove an impediment to women's employment; if such benefits can be organised through social security systems, as happens in several of the Transitional Economies, the impediment is removed. More broadly, to any extent that worker security can be provided – by such means as employment guarantee schemes, public works programmes and so forth – rather than through charges on firms, the better the prospects for employment of poorer workers.

This is not at all to say that labour regulation and benefits have no place. There are many whose functions are positive – safety and health regulation, statutes against child labour (on which also see the discussion below) and against all forms of discrimination in hiring. Worker benefits and security organised through the firm can also enhance productivity and job commitment – but then it will be in the *firm's* interest to put such benefits in place. This is a different matter from legislating for such benefits – much depends on the context for the results of any labour legislation and regulation.

2.4 Human Development

When economists have in the past talked of investment, although there was a respectable history of attention to human capacities, investment was usually a matter of factories and buildings, roads and power-plants. "Human capital" in the growth literature was until relatively recently discussed mostly as an adjunct to physical capital. In the last few years years there has been a spate of literature on "human development", which has been particularly concerned with the humanitarian side of social investment. It has served in particular to establish human and social welfare as the principal objectives of economic development. But economists have also become much more aware of the range of economic and other benefits from investing in people.

There are two strands in the human development (HD) literature. The first considers HD as an output and goal of economic development. The second strand is the "input" approach, focussing on productive aspects – the various means by which HD contributes to industrial, social and economic goals. The productive aspects of HD are interpreted here to mean its contributions to productivity, growth and competitiveness in manufacturing, agriculture and services; and its contributions to individual welfare, social integration and avoidance of social costs.

Determinants of education and health: findings of recent research

At a national level, there is a broad correspondence of social indicators with per capita income: the higher the level of income, the more governments and individuals can afford to spend on basic services. But as is well known, income is far from being the only determinant: if for any indicator one plots a curve relating its level in each country to per capita income, there will be a considerable spread of countries around the curve, with some distinct "outliers" well above and below it. Very commonly if it is a health indicator, a large part of the variation from the curve is associated with education, particularly female education.[28]

This is true even at relatively high income levels: several of the higher-income developing countries whose life expectancy is below the

average for its level of income are countries where female education is relatively neglected. The same is often true for the outliers, positive and negative, at low income levels – the extent of female education will often prove to be a key factor. Female education has been found to be the most important single positive correlate of life expectancy in the developing world.[29] Yet income is also one of the principal determinants of education level.

One could say that the national level of income is an indicator of capacity to afford the activities which produce given levels of social indicators; how far that capacity goes will be a function of many things – the extent of poverty and the distribution of income; policies; cultural, religious and political factors ... And it must be remembered that a few, exceptional societies have achieved high levels of human indicators at relatively low levels of income: China, Sri Lanka and the State of Kerala in India.

Population growth and high fertility play a part. Although many aspects of the link between population and development are still controversial in the research community, the specific links with human development are much less so. At the national level, one of the few cross-country regressions in the field which is significant and negative is that between population growth and educational expenditures per pupil. The faster population grew in the 1980s, the less was spent.[30] This is not surprising, since education budgets typically grow slowly, while school populations grow quickly.

At the *household and individual level*, the effects of high fertility can be seen from household surveys. There is in fact considerable, though not uniform, evidence for negative consequences to children of having large numbers of siblings; and for mothers in bearing them.[31] Not all the consequences for children are purely related to the number of siblings. Children born less than eighteen months after a previous birth have a risk of dying roughly twice that of a child born after an interval of two years or more; and children born to young mothers (less than 18 years), or very much older mothers, also have higher than average mortality risks. It is commonly the case, though, that short birth intervals and early and very late births are associated with high fertility. Much the same is true of maternal mortality: it is a function of both age and the number of children a mother has, as well as the socioeconomic setting. It is also a function of whether births are wanted or not – one of the highest mortality risks for mothers in developing countries is from unsafe abortion. When all the risks for mothers are joined together, it is clear that bearing numerous children is a dangerous activity for Third World women: a woman experiencing high fertility levels common in Africa has about one chance in six of dying as a result. It is also in some respects restrictive of life-opportunities: at such fertility levels, a woman will spend one-third of her adult life in pregnancy or lactation.[32]

The number of surviving children also affects parents' investment in their children. Two main effects have been studied: the impact on children's nutrition, and on their education. It seems that when socioeconomic conditions are poor and fertility high, there is not much effect. This is not as paradoxical as it might seem. Certainly as far as education is concerned, very poor families who are barely sending children to school and who are having six or more children will not differentiate much among their children; and when everyone's nutrition is low, again few differences among children may be observed. The main differences are found when the number of children is in the range of 4-6, and real economic opportunities exist. At these mid-range family-size levels, two conditions are present: a higher proportion of children are unwanted,[33] and there are both incentives to parents for educating their children, and higher costs of doing so.

There is also a negative association of family size with educational attainment. Again there is often a particular effect on girls – in education, especially the older girls in the family, who are the more commonly made to sacrifice for their younger siblings or, more frequently, brothers.[34] If

girls do not receive an education, they will themselves as adults be more dependent on their own children; they will for that and other reasons be likely to experience high fertility. There is a strong likelihood given these difficult socioeconomic conditions of the intergenerational transmission of poverty, high fertility and poor human development.

The household effects are likely to be compounded by societal ones in a low-income country. One thing that is fairly constant independently of the level of development and the stage of the demographic transition is that household educational expenditures per child decline with family size. If rapid population growth dilutes governmental per-pupil expenditures on education, the effect at the household level is reinforced. If in addition fiscal revenues are compressed by slow growth or the need for adjustment, the consequences for poor families of the combined squeeze on private and public resources can be severe.

Of course there is a two-way effect: high fertility and rapid population growth may slow the rate of human development. But human development helps to reduce mortality, fertility and population growth, and thereby contributes to further improvement in the future, breaking a part of the inertial restraint through the population mechanism.[35]

There is a complex of interrelationships among social investments. **Education** is in some sense the key sector: it has more widespread links with other aspects of development, and contributes more to other objectives than the fulfilment of those objectives does to it. Further, the educational system can serve as a "delivery" vehicle for other social sectors. Research has concentrated on relations with health; with fertility; and on the returns to educational expenditure. There are also of course important effects on productivity; these are treated in a later section.

Education and health

Positive relationships between education and health, of the educated *and* their children, are fairly well attested, even if the mechanisms are uncertain: via nutritional knowledge, via greater likelihood of demanding and using health services, via knowledge of disease transmission. It may be even more general, through socialisation and modernisation, and through increasing female status within the family, with consequences for family resource allocation to children and health.

Not all studies show female education to be more important at the aggregate level; but the widespread tendency for mothers to be the principal health-carers for children within the family is one of many considerations which emphasise the importance of female education. The path may be through income: educated mothers will earn more; and mothers' income in many settings may have several *times* the effect of fathers' income on children's health and nutrition.

Education and fertility

Again the relationship is well attested. The "mechanism" by which it works has three components: those which affect exposure to the likelihood of childbearing, most importantly age at marriage; those which affect desired family size; and those which affect the ability to regulate fertility. Many of the consequences of education, from changing aspirations and labour market effects, to better understanding of contraceptive use, play significant parts. Since improved child survival contributes to fertility decline, and fertility decline contributes to mothers' and children's health, there are many possible interactions and causal sequences.[36]

Rates of return to education

Rates of return to education have been much studied at the micro level, and found to be sizeable and positive. A much quoted finding is that the highest returns are to primary education, then to secondary, and the lowest to tertiary. It is probably time to abandon this piece of conventional wisdom – not because this is the wrong order for the relative priorities of the three levels of education, but because the rate-of-return studies do not show them to be so; and as a gen-

eralisation, it may be somewhat misleading for educational policy. A much wider range of factors than conventional rate of return estimates must be examined to determine educational priorities.

Further complex interrelationships are found with **health.**

Health and productivity at the micro level

Both old studies and new testify to the relationship, but it is not strong at the individual level. The "old" studies include examples such as the influence of tsetse fly or onchocerciasis on land-use; the role of malaria and other diseases in worker productivity; the relations between iron supplementation and labour productivity. More recent studies have shown significant relationships between health/nutrition and educational performance;[37] or between health and income. The strongest effects occur among the very poor.

Health and fertility

Health affects fertility, first, via fecundity – the ability to conceive. There is not much evidence that nutrition is important, except under acute deprivation. Malaria and other diseases ***do*** affect fecundity. So some health improvements may increase fertility. But still, second, the main expectation is that better child-survival is important for fertility decline where fertility is high and children are regarded as economically important to families. Since parents' education affects child survival, this is yet another avenue of the education-fertility relationships, and illustrates further the complexity of interactions.

Fertility also affects health. As already noted, under prevailing conditions of childbirth in most developing countries, risks of maternal mortality are high. There is also evidence that child numbers and spacing influence child survival. Where contraception is not available and unsafe abortion is resorted to, there is an additional major source of female mortality.

Health interventions

It is well known that it is hard to account for health improvements. It is also important not to attribute too much to the health care system. The principal factors are easy to list:

- Health care (government or private)
  - technology, organisation/management, expenditure
- Non-medical factors
  - environment (housing, water, sanitation, air quality, workplace)
  - reproduction (age, parity, spacing)
  - nutrition (agriculture, food, prices)
  - the economy (income, employment)
  - household capacity (role of women, education, motivation)

What is less easy is to understand or predict are the interactions among the various factors, which makes for difficulty in determining priorities in health. The situation is further complicated by the fact that economic development does not have unambiguously positive effects on health. The problems of the "epidemiological transition" are becoming more apparent, as countries move from conditions in which the main problems are those of maternal and child health and communicable diseases, to those of chronic and non-communicable illness, often related to economic growth and sometimes bringing – if sufficient progress has been made with the first set of conditions – rising mortality. The "modern" pattern of disease may include lung and other cancers associated with smoking and environmental conditions; heart disease; and industrial and traffic accidents.

A new factor in the epidemiological transition is AIDS, which has particularly devastating social and economic effects. There is uncertainty about the likely effect of AIDS on mortality; though even at the currently anticipated worst, for example in Africa, it does not do more than keep mortality from falling to where it would have declined otherwise. (Only one or two epidemiologists suggest AIDS could generate actual population decline in the countries of greatest

prevalence; their views are not widely shared.) The consequences for attitudes to fertility and other social matters are incalculable.

Relations with poverty

Human development relates to poverty bidirectionally: incomes, health and nutritional status affect people's access to and ability to benefit from services; and their education and health have important consequences for their ability to earn income. As with all these relationships, there are of course numerous mediating variables.

Personal income as a determinant of human development

Very obviously people's incomes play a major part in their health and education. Income is, first of all, a major determinant of nutritional status. This does not mean that raising income is the only important means to overcome malnutrition. Studies show that increases in the income of the poor are not always well spent nutritionally. The imperfect correlation of household income with nutritional status relates also to education and other variables; but also to health status and community variables influencing health: a study in one country concluded that "household food availability does not appear to be the most binding constraint on children's nutrition" – the health of parents and children was also important, with water-supply, sanitation and other community inputs which contributed to health playing a significant part.[38] Clearly where protein-calorie deficiencies are large, income and food availability will be essential; but very commonly they cannot by themselves address the nutritional problems of the poor.

Income is an important determinant of access to services such as health and education. The children of poor families will be under more pressure to earn money, or do household tasks that release their parents for gainful employment. They will also lack the means for the direct costs of attending school: transport if the school is far away, writing materials and the like, uniforms where those are demanded. Since education is more and more becoming a self-help or fee-paying activity, the poor will be the less able to participate. But access to education also relates to other factors, such as ethnic or social characteristics which form the basis of discrimination. Here again there is a web of circumstances which combine to penalise the poor and to keep them poor, since very often poverty itself is associated with social groups disadvantaged in a variety of ways.

This set of issues raises one of the key problems facing the policy-maker wishing to promote human development, namely that of supply versus demand. All too often the job is thought to be done when supply is attended to, whether it be school places (even school places made suitable for girls where this is important), or health clinics. In the case of education, it is very often the same thing that makes people poor that keeps their children out of education: if they possess some characteristic by which they are discriminated against in the labour market, their children, facing the same discrimination, will find the return to schooling lower than it should be, and parents will be discouraged from making sacrifices to put their children through school.

Another important factor is the lack of attention poor parents (and sometimes not-quite-so-poor parents) may give to children in specific ways important to their development. This is not just nutrition and health, but intellectual and social stimulation of a kind which assists a child's mental and emotional development. There is considerable evidence that what happens to a child in the first four to five years of life is critical, sometimes irrecoverable, in determining her later progress.[39]

Human development as a determinant of personal income

The rate of return evidence cited above, however imperfect, bears clear witness to the potential role of education for improving the incomes of the poor. The poor are commonly asset-less, and human capital is among the most important (and least expensive) assets with which they can be provided. The section on productivity in manu-

facturing and agriculture below provides further evidence.

As already noted, education contributes to the health of the educated and their children. But health also contributes to education: again, there is widespread evidence that ill and poorly nourished children perform less well in school. Both health and education are important to improved survival prospects for children and for lesser fertility, leading to the smaller families in which human development is more likely to be well provided for.

It goes without saying, of course, that other assets are of crucial importance as determinants of poverty and wealth. Ownership of land, or secure rights to land-use, access to common property resources, and credit, together with other productive resources are all important matters which have to be addressed in an anti-poverty strategy.

Education and health as factors in productivity growth and changing comparative advantage

A range of factors bearing on productivity at the micro level has been referred to above. But some of the most interesting recent work on development points to major roles for human investment as contributing to growth at a national level. Among the most remarkable findings are some historical ones: there may well be a link between inequality, health and economic growth: one study attributes "about 50 percent" of British economic growth between 1790 and 1980 to "the increase in dietary energy available for work, and of the increased human efficiency in transforming dietary energy into work output".[40] Historically improving diet in both Britain and France in this period affected the lowest quintiles of the population in particular – in the 18th century a significant proportion of them had insufficient dietary energy to work, or to work more than a few hours a day.

New inter-country estimates incorporate education variables which explain a considerable share of economic growth.[41] And the phenomenal growth of the East Asian countries has been noted above to be due to a considerable extent to their human investment. The World Bank's model for the high-performing Asian economies predicts some two-thirds of their observed growth; of that predicted growth, primary education accounts for more than does physical investment – from 58% of predicted growth in Japan to 87% in Thailand .[42] Secondary education also makes a sizeable contribution to growth in the countries where it has been encouraged most strongly – ie not in Indonesia, Malaysia and Thailand, which have neglected the secondary level and are now trying to compensate for it.

An important part of this has been the world of manufacturing itself, where firstly, competition has been widely seen to have been affected by "lean production", "flexible production" and other changes, and secondly, countries facing competition from new lower cost producers as their own wages rise have had to "upgrade" their products and product-mix to succeed in world markets. It is well known that this has much to do with human skills; even in the industrial countries, or some of them, falling behind in the skilling of the labour force has been a frequent topic in the media as well as academic research.[43]

But studies also show significant effects of human investment on agricultural productivity, at least where agricultural technology is changing; parts of the service sector too, which are now major contributors to many developing countries' GDP and exports, undoubtedly depend on human skills, though this field is under-researched.

If investment in human resources contributes to economic growth, there are also estimates of the cost to growth of failing to invest. Birdsall and Sabot find "a potential increase in current per capita income of 25 percent had Pakistan had Indonesia's 1960 primary enrolment rates, and a potential increase of 16 percent had Pakistan sent as many girls as boys to school in 1960."

A further strand of recent research is on skills and trade. Models explaining countries' trade patterns in terms of their factors of production are being re-developed, and the importance of skills

in exports of manufactures is now seen in a new and emphatic light. It may well be that Africa's problems in diversifying out of mainly primary exports lie more in deficiencies of education and training among the labour force than any other factor.

Women in development

Background papers for the 1995 Beijing World Conference on Women documented the fact that a large proportion of the world's women live under impoverished, inequitable and politically discriminatory conditions. But improving women's economic opportunities and well-being is not just a matter of equity; it is also a matter of efficiency. As so much of the account of HD above testifies, a large proportion of the positive societal effects of investing in people depends on improving women's lives in particular. And as the section on productivity makes clear, women in the labour force have much to do with national economic success, particularly, in the more advanced economies, in export sectors. There should be no need, in a paper on development strategy, for a separate section on women: they are half the population, and important for every aspect of development. But as long as they continue to be subject to discrimination and subordination, their roles will require repeated emphasis.

Again and again in research findings, taking action in social provision to improve women's position and agency comes out as a key overall priority. It is women's education that has the greatest effect on children's health and on life expectancy in society at large. It is mothers' rather than fathers' incomes that have the greatest effect on children's education and health. It is female education that does the most to encourage families to have fewer children, and thus lead to a diminution of population growth. Even in the measured effect of education on national productivity growth, as already noted, female education is often found to be highly significant. In much of Africa, there is often a division of labour in agriculture, women growing food and men cash-crops; in these circumstances, education, credit and extension services for women can play a major part in food production. Women commonly work as hard as, or harder than, men, but usually for lesser rewards; in many situations their work is not regarded as even subject to reward. In general both equity and efficiency demand that the position of women be advanced relatively and absolutely.

Policies

There has been more new thinking on human development in recent years than on most development topics. What constitutes an appropriate human development strategy today is quite different in emphasis from earlier conceptions. There is more concentration on productive as well as humanitarian goals; more emphasis on private and NGO provision and activities, even while government remains a key actor; there is a greater understanding of the importance of the demand for services, as opposed to thinking mainly about their supply; and of the significance of the quality of services, as opposed just to their quantity. In addition, a great deal of research has been brought to bear on what works and what does not, and on how to approach the design of strategies.

Perhaps the first point to be made is a conceptual one: human development is no longer thought of as "welfare", as a cost to the state. It is, as was said earlier, both a main goal and an instrument of growth, and it has potentially high payoffs to government as well as to society at large. Every country is unique in its history and culture, and in its stage of development, and will therefore seek different things from human development policies. But there are many common elements in how to tackle their formulation.

There is no simple recipe for **establishing priorities** in the areas of education, health, fertility, and poverty. Instead, there is a range of information which can be gathered. Rate of return studies in education will give a preliminary indication, but they have their weaknesses.[44] The state of the labour market, skill shortages and

information on levels of education required for current and prospective jobs give further direction for educational planning. Studies of interactions among inputs and outputs give yet further guidance: of the effects of education on health, nutrition and fertility; or of health and productivity. The health sector has to be studied in relation to the incidence of health problems, and the cost effectiveness of measures to address them, taking account of the importance of non-health inputs such as education and improvement of environmental factors in health. It cannot be over-emphasised that again and again in research findings, rectifying *gender imbalances* in social provision comes out as a key overall priority.

Having gained by these means some indications of priorities, the next step is to pass **from priorities to policies.** Here further ranges of information have to be brought to bear. Expenditure surveys indicate what is actually happening: in India for example, more than 80% of actual health expenditures – including expenditure by the poor – are *private*. While government provides much of the essential health network, control of communicable diseases, and other public health measures, unless there is attention to the quality of privately supplied care and access to it by poor people, the nation's health problems will not be addressed. This is true in many countries. In some African countries as much as 30% of public health facilities may be provided by voluntary organisations; without paying attention to the voluntary sector, again an important part of the picture is missing.[45]

Similarly in education, the role of private and voluntary activities is of major significance. While in most countries primary education is rightly seen as the responsibility of government first and foremost, there are important functions of the private and voluntary sectors. Schools are built by local and self-help communities in several countries. Private expenditures on education, again by the poor as well as the better-off, are often considerable, and private schools are often more cost-effective than public ones: private schooling with vouchers for poor people to attend may make contributions which the public sector cannot.[46]

Supplying services is far from being the end of the story, whether it be school places (even school places made suitable for girls where this is important), or health clinics. In the case of education, it is very often the same thing that makes people poor that keeps their children out of education: if they possess some characteristic by which they are discriminated against in the labour market, their children, facing the same discrimination, will find the return to schooling lower than it should be, and parents will be discouraged from making sacrifices to put their children through school. **Demand** for services has to be looked at too.

This is nowhere clearer than in the field of child labour. It mainly takes place in the small-scale and informal sector, often in occupations traditional to a family and either in or near the home. It has in most countries resisted legislation, and is hard to monitor because it takes place at so many sites. Trying to prevent it would, in any case, often penalise the poor. The most that legislation has usually done has been to prevent children from working in particularly hazardous occupations, and in the formal sector.

There are two main areas of policy: one is in education itself – lack of access to education (distant, unsuitable or malfunctioning schools), low quality education with high dropout rates, or in some settings, high costs of education, can all be factors leading to child labour. Flexible schooling hours, teaching adapted to children's needs – especially non-academic curricula – even mobile and other inventive forms of schooling have all been tried with positive effects. Second, parents' incomes need to be enhanced so that they can afford to lose the income or work that children provide. Community facilities can often assist families with some of the tasks (especially domestic and home-farm tasks) that keep children out of school.

Ideally education should be made compulsory, and legislation to that effect be enforced, at

least up to completed primary education, and preferably beyond. But such legislation is hollow unless parents can afford to lose their children's work and pay the costs of their education, and education of adequate quality and proximity is available.[47]

Some of the "demand" factors are social, cultural and religious. Dealing with these is often very difficult, but is sometimes possible at low cost. Making schools suitable for Muslim girls, for example, is not necessarily expensive. It has been found in some places that once this is done, girls even from quite poor families will attend.

Finally, quantity versus **quality** of services – closely related, as has just been seen to the supply-demand issue. The principal need in countries where primary education is of low quality is more non-teacher inputs: text-books, writing materials, blackboards, adequately furnished classrooms etc. Much of the decline in per pupil educational expenditure which has been associated with population growth has in fact fallen on these items; governments tend to protect teachers' employment (and that of educational bureaucrats) when budgets are hard pressed.

There is often no "trade-off" between quantity and quality: they are complementary. For example, it has been found in Brazil that improving the quality of primary education may require additional expenditure immediately but will eventually reduce costs per pupil because it will lower dropout and repeater rates.[48] *Higher quality commonly means higher quantity*. Such considerations have yet to be incorporated to any great extent into policy determination in many developing countries.

Quality issues in health services have been less studied than in education, but are similarly important. One area that has been studied is family planning services. Some of the pessimism about family planning in the 1970s and 80s has been due to the poor quality of services leading to low uptake, rather than lack of interest among couples – even if demand rather than supply has often been the main problem. This is true more generally of public health services, which may deter patients because of low quality or absence of supplies. A number of other features affect demand, such as distance and costs of travel, waiting times, the opportunity cost of time to the patient. The extent of spending by the poor on private health provision may be a measure of the inefficiency of public services.

Perhaps even more radical than in health and education are the changes in thinking about **skill development**.[49] Some years ago countries would have used manpower planning: forecasting exercises about output growth in specific sectors and products, and related occupational and skill requirements. These are now close to obsolete – even in the former centrally-planned economies, they were grossly inaccurate. (Perhaps "even" is the wrong word.) Manpower planning has been replaced by the use of labour market signals and other information.

Countries will vary in the extent of available information to determine priorities in skill development. Rate of return analyses, vacancy information, firm level surveys and other sources of data on skill shortages can be relatively abundant or scarce. Where deficient, firm-level surveys are among the most useful sources of data; they can be carried out relatively quickly, to yield information on occupations, education and training levels for specific sectors – including management education and training.

Similarly radical are changes in approaches to education and training for manufacturing and services development. Most training today is carried out by firms, but public policy can assist firm level training in a variety of ways, and often must do so, since it is an area where market failure is common. Vocational education is less emphasised, since it is often as far as industry is concerned an expensive way of doing the wrong thing – though it is still of considerable importance in rural education. Important choices for government are when to set up public training institutions: these can be valuable when there is a demand or clear future demand for specific skills, but for reasons of economies of scale or other considerations, the market does not

produce them efficiently.[50] Good examples have been the targeting of information technology (IT) skills by Singapore, through a variety of public and private programmes; or the Clothing Industry Training Institute in Sri Lanka, which has helped that country to international competitiveness in garment exports, teaching skills specific to the modern trade in garments.

But governments should not be overactive in this area. Developing countries are littered with ineffective public training institutions, teaching skills for which there is little demand. They can however often be reformed to do a useful job, by such means as putting business people on their boards, or undertaking contract training for firms on demand. Experience of governments trying to promote IT training has also varied among countries, though there are lessons which have been learned and which can help to avoid future mistakes.[51]

A difficult issue is how to avoid "educated unemployment", i.e. producing skills for which there is insufficient demand. It is probably better to err on the side of excess rather than inadequate supply; but few countries – including the EAIEs – have avoided periods of over-supply. Some so-called educated un- or under-employment is illusory: there are people with paper qualifications not employed for the job they seem qualified for; but in reality their degree of qualification is exaggerated: the quality problem again.

What policies and priorities are likely to emerge from comprehensive examination of the various needs in education and health just described? It will usually be found, after the full range of information has been brought to bear, that *good quality primary education for all* will be an important goal. Most of the relationships between education, health, fertility decline and poverty alleviation lie in primary education. But there are difficult questions of phasing of the achievement of such a goal.

In part this is a question of cost: the last stages of universalisation of primary education are likely to be higher in cost, since they involve dealing with child labour, perhaps requiring compensating parents) and other difficult issues, and also with remote and scattered populations. (The returns to these measures may be lower than elsewhere.) In part, there may be conflicts with other educational priorities: particularly, from the point of view of skills development, secondary and adult education and selected parts of tertiary education and publicly supplied training. Where budgets are severely restricted, it may be that the needs of the productive economy must take some precedence – if greater dynamism can be imparted to development, growth will permit higher public expenditure on basic education in due course. Over-concentration on basic education at the expense of secondary education can also, paradoxically, have an inegalitarian result, creating educational elites.

One cannot leave a discussion of education giving the impression that everything is to be decided on purely economic grounds. Education serves important purposes in addition to the economic – they are national, social and cultural. Preserving a linguistic and cultural heritage is an important function, at the heart of society's values. Universal literacy and basic education help social integration. There are many difficult choices among objectives. But there is an overriding economic constraint – whatever choices are made, they have to be financially sustainable. It is for this reason that the present paper places so much emphasis on the productive objectives.

It is even harder to generalise about health than education: priorities differ from one setting to the next, given the incidence of ill-health and the state of existing health services. But in very many countries, health expenditures are very far from being efficiently distributed, in the sense of being allocated to uses with the greatest health improvement per unit of expenditure. This is always a basic guide, and would, in most developing countries, push health expenditures more towards primary health care and public and preventive measures, and less towards curative measures.

Finally, **the funding of human development.** Many countries have gone through an acute fiscal

squeeze in recent years; and many countries have major distributional distortions in educational expenditure. Any human development strategy is likely to make increasing budgetary demands, and call for reallocation of public expenditure. Foreign assistance can contribute to the necessary finance, but countries will still in most cases be faced with finding more resources *and* taking decisions in favour of the poor which may be resisted by those whose benefits will be reduced. (In a large range of countries, 35-50 percent of the education budget is devoted to higher education, the beneficiaries of which represent a small fraction of the population, frequently the children of better-off families who have been able to pass successfully through the earlier levels of education. A combination of fee-charges and efficiency increases in higher education could often fund the bulk of expansion and improvement needed in the primary sector.)

Among the most fruitful sources of educational reform is the use of private financing and cost recovery in post-primary education. Whether primary education itself should be subject to fees, other than means-tested fees charged to better-off parents, is a more difficult question. Certainly where there is a risk that fees might discourage access, the benefit of the doubt should weigh in favour of free provision. Some countries – e.g. Kenya – have managed to extend secondary education with considerable contributions from parents. If means testing and cost recovery are impracticable, another technique which can be tried is that of education vouchers: schools charge fees, but (non-transferable) vouchers are given to poorer parents which the school collects for reimbursement by government. Failure to collect fees where practicable and equitable penalises the poor: it either reduces the level of services provided, or subsidises the better-off, or both. At the same time, care has to be taken that cost-recovery does not penalise the poor. The presumption that primary education at least should normally be free does not require, though, that *provision* has to be by the public sector.

Private provision of educational facilities and educational inputs has great scope. It no longer is, and certainly should not be, the reflex in most countries that if something is needed in education, the public sector should provide it. From schools themselves, and ancillary items such as text-book production or school construction, there are valuable and cost-reducing opportunities for the private sector, for NGOs and for local community participation.

At first sight it may be thought that there is an impossible task of priority determination, even within education, let alone among all the human development sectors. There are of course choices to be made. But in reality, in any given country, there are a variety of constraints, from manpower to finance. The feasible options are far fewer than the imaginable options. Normally one is pushing out the boundaries at the margin. It is over the long run that major change is possible; then what is important is that the directions of change and the vision that informs a new emphasis on human resources have the right goals. Establishing those goals, and working out an efficient and practical path towards them, may be the most important step.

One further feature in funding is to bear in mind that many outlays pay for themselves very quickly from the government's point of view. The example of improving quality in primary education was given above. Female education has been found to reduce costs in health and other services through improvements in health in India and Pakistan; successful family planning programmes have also been found to pay for themselves within a very few years in terms of reduced costs in health, education and other services.[52]