Drought in Southern Africa: Shocks and Research

The response to the Southern African Drought of 1991/92 was the largest internationally co-ordinated relief effort since action against the threat of famine in Western Europe immediately after the Second World War. In the course of one year, starting in February/March 1992, the ten SADC countries and South Africa imported 11.5m tons of food, approximately 9m tons more than normal import levels. Not surprisingly, this is seen as a great success for internationally co-ordinated food aid. Huge volumes of food can be organised and successfully moved to prevent famine.

In economic and political terms too it marked a major step forward, towards the economic and political re-integration of South Africa with its economic neighbours. It was an encouraging harbinger of possible future regional co-operation and of the prospects for peace and economic recovery in Mozambique.

Nevertheless, the contributions to this issue of Insights suggest a more complex and less triumphal evaluation of the experiences of this period. They also show how the agenda of social science research itself (no less than policy) evolves over time.

Before the 1991/92 drought, the African food crisis of the mid-1980s had stimulated research on Early Warning Systems and household food security. At that time, researchers and funding agencies were concerned with the extent to which countries, regions, particular communities and vulnerable groups were affected by, and coped with, drought. An earlier issue of Insights (Summer 1990) reported some of the findings resulting from that wave of research.

Current research into drought - Africa's principal form of natural disaster - has some different focuses. First, researchers are trying to redress the powerful tendency of economic and social policy to ignore work in the natural and environmental sciences, despite its direct relevance to policy. Second, while the disasters of the mid-1980s mainly affected the largely rural, least developed economies of the Sahel and the Horn, the 1991/92 drought impacted severely on economies with larger urban populations, high levels of industrialisation and water-dependent energy supplies (Zambia, Zimbabwe and even South Africa). Many policy makers, had, up to that time, conveniently equated drought with the problems of semi-arid agricultural areas and food aid and relief; now it is recognised as implinging on the process of macroeconomic liberalisation. Drawing these two threads together, this issue of Insights summarises current wisdom in the natural sciences (climatology, hydrology and plant ecology) regarding drought forecasting and management. It also shows the consequences for economic performance and policy of failure to take this knowledge into account.

Recent developments in climatology are summarised by Hulme. In many countries on-site and satellite monitoring information is being incorporated into national policy making through Early Warning Systems. Information from satellite images to assess the intensity of the drought has been especially helpful in Mozambique, where conventional terrestrial monitoring has been very difficult.

Meteorologists have been able to identify different patterns of variability in rainfall in different parts of sub-Saharan Africa. The Sahel has experienced a statistically significant decline in rainfall (desiccation) over 30 years or more, creating a problem of adaptation to a less favourable environment, not just of coping with drought. In contrast, South-East Africa experiences well-established 18-21 year cycles, including wet and dry periods. Unfortunately this knowledge was not taken into account by Zambian and Zimbabwean authorities in the

Climatic Information for Managing Drought

Recent developments in climate science, combined with new satellite technologies, now enable climate-related information to contribute in three different ways to drought management: drought early warning, climate/seasonal forecasting and climate change prediction.

Climate monitoring yields information which is the shortest term and is the most locally specific and appropriate for integration into Early Warning Systems. Near real-time monitoring of climate is undertaken in Africa using a combination of conventional ground-based observations of climate and information extracted from satellite images. Both contributions are necessary for Early Warning Systems, although the potential utility and reliability of satellite-derived information is probably greater, especially in regions which have sparse observing networks or which are subject to war. Such monitoring is usually undertaken by national (e.g. National Meteorological Agencies) or regional institutes (e.g. AGRHYMET in Niger) located within Africa. Examples of relevant information for drought mitigation generated by climate monitoring are near real-time assessments of rainfall deficits (using METEOSAT imagery), or the impact of climate anomalies on vegetation productivity (using a Vegetation Index derived from NOAA satellites), crop growth, or river flows.

Seasonal forecasts provide information about the future characteristics of climate up to a year ahead – usually rainfall – with a lead-time of between one and six months.
The primary method for generating climate change predictions uses climate models – usually General Circulation Models – to simulate experiments which investigate how the climate system will respond to, say, large-scale deforestation, desert expansion, or continued increases in the atmospheric concentration of human pollutants. This activity requires major international collaboration between scientific research institutes and programmes; it can at present only be undertaken by well-resourced centres, mostly in Northern countries. These experiments aim to yield assessments, on time-scales of decades, of the likely future direction of rainfall trends in different regions and thus of whether – on a probabilistic basis – drought frequencies are likely to change. But their predictive reliability still remains low.


Box A: Lake Kariba and the 1991/2 Drought

Long-term mismanagement of the water supply was an important factor contributing to the electricity supply crisis in Zambia and Zimbabwe in 1992, and the risk to urban drinking water.

Since 1981/2, there had been a predicted sequence of, on average, years of lower rainfall in the Kariba and Kafue catchments. Climatologists had identified in the 1960s a statistically robust 18 year cycle in the summer rainfall region of South Eastern Africa, and successfully predicted the wetter and drier periods of the 1970s and 1980s (Tysnon, 1978). This regional rainfall pattern appears to be distinctive from the rest of sub-Saharan Africa (Hulme, 1993). Water offtake for power generation at Karba by the Zambian and Zimbabwean electricity generating authorities was based on the average intake for the relatively more favourable 1970s. Offtake was not adjusted to the sequence of relatively lower inflow levels in the 1980s and so exceeded on average the rate of inflow into the lake by 16%, making the system increasingly vulnerable to further rainfall anomalies. At least in the case of Zimbabwe, such reckless management may partly reflect pressures to minimise short-run costs of power generation in face of the large operating deficits of the Zimbabwe Electricity Supply Authority. The effects of electricity curtailment in Zimbabwe in 1992 were estimated as a reduction of 25,560m in GDP, $230m in exports and a loss of 3,000 jobs (Benson et al., 1993).


Box B). From a research perspective, part of the reason was the lack of systematic exploration of the link between drought and the performance of African economies. The effect of an exogenous but internal shock to the economy and economic performance is difficult to isolate. As recent research for Zimbabwe illustrates, although economic modelling is costly it can provide important insights (Box C).

Development studies, from the outset, has been committed to interdisciplinary research. The material in this Insights demonstrates the continuing need for such an agenda in research and policy analysis work on drought.

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Hydrological strategies: from agroforestry in Kenya to irrigated gardens in Zimbabwe

Many observers report that widespread land degradation has occurred in arid zones in Africa. Scientists do not really know the relative contribution of human activities and climate change. But irrespective of what causes dryland degradation, there are always major impacts on the hydrological balance. Recent simulations of the hydrological effects of vegetation degradation for the Sahel indicate not only a reduction in rainfall, but also a large increase in surface runoff (more than double) and reduced groundwater recharge (by around 50%).

Such radical changes in the hydrological balance have profound implications for dryland management. But the situation is far from hopeless, if the necessary water balance information can be collected and applied. Developments in two areas are quite promising and may help reduce degradation in the future.

First, although many practical problems remain to be overcome, mixed cropping systems, e.g. intercropping and agroforestry, are attractive as they can lead to increased water use efficiency. For example, in the bimodal rainfall climate in Kenya, traditional monocrops only use about one third of the annual rainfall. There is clearly potential for utilizing more of the rain to grow trees as well: as much as 7 tonnes/ha of wood could be grown annually. The challenge is to find tree and crop mixtures which are complementary in rainfall, but also a large increase in surface runoff (more than double) and reduced groundwater recharge (by around 50%).

A second approach is to seek to improve the yield of water from a given amount of rainfall. For example, traditional dryland millet in Niger, West Africa, only uses about half of the rainfall; the rest is wasted as direct evaporation from the soil or runoff. An innovative, simple small scale irrigation scheme in Chivi Province, Zimbabwe has attempted to integrate low-cost improvements in both areas. In a collaboration between the Lowweld Research Station (Department of Research and Specialist Services, Zimbabwe), the Institute of Hydrology and the British Geological Survey, large diameter collector wells have been hand dug both on and off-station. They include horizontal boreholes, extending up to 30 metres in each direction, drilled radially from the base. These can greatly enhance the yield of water by tapping a larger area of the aquifer and intersecting discontinuities. This type of well is suitable in areas underlain by basement complex rocks, which constitute 30% of arid and semi-arid areas of developing countries worldwide. The well water is then applied in home made clay pipes or pots beneath the surface or by using mulches on the surface, reducing evaporation and increasing water use efficiency by up to 30%.

The first season of the scheme had many possibilities and implications of a drought. The off-station well provided a continuous supply of vegetables for more than 1200 people for home consumption and sale, while other water sources dried up during the drought. The first garden and a further six schemes are currently being monitored so that the long-term technical and socio-economic viability of collector well gardens can be assessed. Particular attention is also being given to the criteria and procedures that should be adopted in widespread siting and installation of groundwater based communal or allotment-type gardens. It is encouraging to note that one NGO is already committed to installing two collector well gardens in southern Zimbabwe.

Hydrologically there is no reason why there should not be a widespread uptake of the research recommendations from this project.

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Box B: Drought and Economic Risk Analysis

The possibility, indeed the near certainty, of a future drought is often ignored, by both governments and donors. For example, the first two five year national development plans in post-independence Zimbabwe assumed continued growth in the agricultural sector and the economy more broadly, making no allowance for the effects of some years of poor rainfall. Similarly, the Zimbabwe Government’s ESAP did not include an explicit risk analysis, identifying possible obstacles to reform; and in particular made no reference at all to the possibility and implications of a drought.

In contrast, Government budget statements, particularly in post-drought years, include lengthy references to the important relationship between rainfall and performance of the economy, and the need to ensure that realistic economic targets are set, taking the possibility of drought and other exogenous shocks into account.

Donors, too, rarely take into account explicitly the possibility of a drought in designing either economic reform or sectoral programmes. Again in the case of Zimbabwe, the World Bank Report and Recommendations on a US$125m loan and a US$50m credit in support of the ESAP also excluded from consideration the possible consequences of a major drought, such as that of 1983/4. Yet there was a risk assessment identifying three other possible risks associated with the reform programme: weakening of political support; limited technical and managerial capacity; and slowness in external financial support materialising for the strategy.

Early indications are that the 1992 drought has created greater awareness of the economic consequences of drought and the importance of taking into account a possible drought in designing policies and programmes in Southern Africa. For example, the World Bank identified poor rainfall as a risk factor proposing in 1993 a Second Structural Adjustment Credit to Zimbabwe. But such awareness may not be sustained over time or translated into differences in practice.

Drought conditions have become more persistent in the Sahel during the last thirty years (Hulme, 1993); and there is a general appreciation of the economic enormity of the 1984/85 drought. But frequently drought is neither identified as a risk factor, for example, in World Bank country strategy papers, nor are measures for mitigating the impact of drought incorporated into programmes or projects in the region (Benson et al, 1993).

References: See Box A
Eco logical Aspects of Drought Mitigation

Dryland ecosystems (e.g., savanna) exhibit ‘pulse-reserve’ dynamics, that is, intense seasonality in biomass production in response to infrequent rainfall events. Where rainfall is low and erratic, native vegetation survives either by avoiding or by tolerating drought. The dominant plant life forms (therophytes) manage to avoid drought by passing the dry period as dormant seeds; others (geophytes) die-back above ground and persist by means of underground storage organs. Plants adapted to tolerate drought (xerophytic shrubs and stem succulents) remain apparent throughout the year but provide little food or fodder useful to human populations. It is the pulses in primary productivity that, by providing such resources for livestock and humans, dictate the population size of consumers that can be supported. Rain-fed farming systems must also operate within the constraints of a short active growth period for annual crop production, and a long period when the system is dormant.

The critical property of dryland plant communities is thus the extent to which they can survive prolonged periods of drought and recover during the rains. Although dryland systems are adapted to survive the temporal variations in climate, disturbance results in yield reductions and changes in species composition, especially an increase in the proportion of woody shrubs and unpalatable species.

Arid zone systems, in particular, have a high degree of resilience, i.e., capacity to recover to equilibrium conditions, but, once the bounds delimiting any system’s stable equilibrium point are crossed, a radical change in community structure will occur with one set of dominant species being replaced by a second, more xeric set. This second state will also, however, exhibit resilience; so that a spontaneous return to the original community structure cannot occur.

If rainfall distribution were to return to its former pattern, and the original environment thus restored, there could be a move back to a plant community equivalent to the initial one; probably not with exactly the same species mix, but functionally so. The ability to move back will depend mostly on the time scale over which change has taken place, whether the original species still exist in the soil seed bank of the area or are available in adjacent communities, and whether changes in the soil structure and fertility have occurred.

Where human population pressure intensifies land use (e.g., grazing, cultivation, collection of fuelwood), long-term stability will be further jeopardised by loss of the dormant reserves or consistent removal of the above-ground vegetation, preventing backflow of carbon to the reserves. Under such circumstances the system may lose the capacity to recover. Ecological research aimed at drought mitigation therefore focuses on determining how much these systems change and how much they can change before the bounds of the system are exceeded.

Work at the Bangor Research Unit is aimed at explaining how spatial and temporal heterogeneity in the distribution of available soil moisture affects the plant species composition and production of a savanna system through the mechanism of root competition for limited water. Different intensities of rainfall fill the soil reservoir to varying depths, and since water is not rapidly redistributed, it is differentially available to roots placed at different levels in the soil. Plants with dissimilar timing strategies and rooting patterns have adapted to exploit this spatial heterogeneity, and the dominant species in each site will be the one that has the largest competitive advantage in the utilisation of the store. Increasing our understanding of the relationship between biodiversity in this respect and sustainability in dryland systems is a prerequisite for improving natural resource management in dryland regions.


Box C: Economic Modelling and Drought in Zimbabwe

The impact of drought on economic activity is investigated by Davies et al. (1993). They construct a model in the Taylor tradition of flexprice-flexprice, applied general equilibrium models, adapted for a small dependent economy and built around a social accounting matrix for 1985. It has five sectors: food agriculture (mainly maize); non-tradeable consumer goods; non-tradeable capital goods; exportables (including tobacco and cotton); and importables. In the food sector, a target level food consumption is assumed. If production falls below this level then it is assumed that food is imported rather than that the domestic price of food increases. The model does not take account of changes in stocks held by the parastatal, the Grain Marketing Board. The model assumes quantitative rationing of imports given an exogenous trade deficit, linking import capacity to capacity utilisation in import-dependent manufacturing industries, to capture the system of foreign exchange rationing which has been in place since the early 1980s.

This model is used to examine the impact of changes in rainfall, devaluation and a change in public expenditure patterns. The impact of rainfall was analysed by assuming an alternative scenario of constant agricultural growth over the period 1981/2 to 1987/8. It was found that agricultural shocks were important for the economy, but that when an easing of import compressions coincided with a period of poorer rainfall, the impact of the two events offset each other, as, for example, in 1984.

This quite simple model provides some useful results in analysing the impact of drought. However, insofar as non-food agricultural products such as cotton and tobacco are not taken into account in the model, it does not fully capture the impact of drought on the Zimbabwe economy (Benson et al. 1993). Larger and more costly models would be required for analysing the impact of the drought fully through the economy.


Development Research Insights is published jointly by the Overseas Development Institute and the Institute of Development Studies and financed by the Overseas Development Administration through its Economic and Social Division. The Editor alone is responsible for the contents of each issue, the Directors of ODI and IDS acting as editorial consultants. Neither the ODI, IDS, nor the ODA take responsibility for the views expressed in this publication.

Production and Distribution by the Overseas Development Institute, Printed by The Russell Press, Nottingham
Europe and development policy after Maastricht

EC policies towards developing countries are changing rapidly. Since the speed and precise direction of change are uncertain the process should be kept under scrutiny.

The Maastricht Treaty will affect the policy framework for developing countries in two ways. First, it may result in a redistribution of responsibilities between the Community institutions and the Member States. Nothing is certain: neither that there will be a redistribution nor, if there is, its shape. At a minimum, Articles 130-139 of the new Treaty simply provide a clear legal framework for development co-operation. But in providing this new basis Maastricht also opens up the possibility that the Member States may choose to extend the areas in which they pool their authority.

No major transfer of responsibility looks likely in the short term, as Jean Bosseyn points out. The British Government is firmly of the view that the principle of subsidiarity does not apply to development co-operation, i.e. there are no areas in which the Community institutions have, or should have, sole responsibility. Rather the code word is complementarity, i.e. Western Europe has thirteen overlapping development co-operation policies. But a recent House of Lords Report has concluded that 'complementarity is a myth'.

While the formal transfer of responsibility from national to Community level may be slow, however, there are other ways in which the balance of power may alter. The power of the purse is one which affects the UK in particular. Community aid programmes have been absorbing an increasing share of British aid, up from 18% in 1980 to 23% in 1991/92 (compared to an average for all Member States of 17%). The principal reason for this is that total UK aid has grown more slowly than the Community average. The other EC Member States have been more able to accommodate growth in the Community programme than has the UK.

This process is likely to accelerate. At its Edinburgh Summit, the EC Council agreed to permit the maximum level of external spending to increase in real terms up to 1999 by some 61% over 1992 levels. The precise implications are still uncertain, but on current UK spending plans it is extremely likely that the Community will absorb an increasing share of British aid, with the bilateral programme taking the strain. Both the House of Commons Foreign Affairs Committee and the House of Lords European Communities Committee have expressed concern.

Eastern Europe

Besides aid for developing countries, assistance to the former Soviet bloc is the main call on EC external spending: will the latter take precedence over the former? Many believe that 'aid and trade diversion to Eastern Europe is a reality'. In trade, developing countries may in fact be best served by a substantial EC liberalisation towards Eastern Europe than by narrowly-drawn concessions. The former, as Jim Rollo and Alasdair Smith emphasise, could result in dynamic gains for Eastern Europe and the EC, to the benefit of all. The latter, which will simply increase the number of States able to sell into a heavily regulated market, will dilute narrowly-drawn developing country preferences. Unfortunately, Rollo and Smith conclude that the EC's market opening to Eastern Europe is more apparent than real. The EC is offering restricted access on a similar list of products to those on which developing countries receive preferences.

The Impact on non-aid policies

While EC trade policy decisions are at least subject to some scrutiny by developing countries and others in the Continued on page 4.

European development cooperation in the post-Maastricht era

In the Treaty of Maastricht, general objectives for EC development cooperation have been formulated for the first time. As stated in Articles 130-139, these are to further sustainable economic and social development, particularly in the poorest countries; to foster the campaign against poverty; to integrate developing countries into the world economy; and to contribute to the pursuit of democracy and human rights.

The centrepiece of the EC's formal development policy is the Lomé Convention, a comprehensive, contractual agreement of 'partnership' between the EC and ACP (African, Caribbean and Pacific) countries, covering both aid and trade. The current Convention (Lomé IV) has been signed for 10 years (1990-2000), although the Financial Protocol attached to it, referring to resources in the European Development Fund (EDF), runs for only five years (1990-1995). The EDF is due for replenishment beyond 1995 after a mid-term review of the Convention. Without making any changes to the Convention itself, the terms of EDF replenishment, post-Maastricht, and Continued on page 3.

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EC Beef surpluses

Each year around ten per cent more beef is produced than is consumed in the EC and there is now an unprecedented stock of 1.2 million tonnes. Because of the high costs of storage surpluses are sold outside the community with the help of large subsidies. These surpluses have a profound impact on local economies and agriculture, particularly in west Africa. The dry lands on the Southern fringes of the Sahara desert, fragile soils and uncertain rainfall mean that people cannot rely on cropping. Instead, millions of people in Mali, Niger and Burkina Faso rely on extensive livestock production to provide for their economic needs. Traditionally they have sold their livestock to the wealthier coastal countries like Côte d’Ivoire, Ghana, Togo and Benin.

However, since the mid-1990s large quantities of heavily subsidised European beef have been arriving in the region. This cheap beef (subsidised to the tune of two ECUs per kilo) is up to two-thirds cheaper than locally-produced beef and thus destroys the market for African farmers. Since 1984 the EC has spent more than 400 million ECUs in export subsidies to dispose of beef in west Africa. This is paid for by tax-payers in Europe.

The EC policies not only undermine the efforts of millions in the region to survive, they also undermine the aid policies of the EC and its member states, which spend enormous benefits on anti-dumping duties and subsidies against Eastern European producers, should circumstances warrant to ‘contingent protection’, as it is called.

Agriculture is now and will remain heavily protected. It is likely that non-tariff barriers with nominal protection levels of around 100% will remain in place against East European producers, even in 2002. For textiles and apparel, footwear and iron and steel, contingent protection is likely to have as significant, if less visible, effects. Despite the rundown in explicit protection promised by the EC Agreements, the effective cartelsisation of the European market will maintain EC prices and producers will act in concert to keep out imports, as recent safeguards (August 1992) and anti-dumping actions (November 1992) demonstrate. Chemical products are also likely to be subject to anti-dumping duties against Eastern European of chemicals have been estimated to be equivalent to average tariffs of 16%.

These sectors are certainly important to the EC economies. Agriculture accounts for just over 6% of value added in the four largest EC economies (Germany, France, Italy and the UK) and 10% in the rest of the EC. Iron and steel, textiles and clothing and footwear, and chemicals account for not less than 5% of GDP (except in Greece and Denmark). Employment shares are similar to or greater than value added shares.

Yet the product categories named do not warrant the label ‘sensitive’ in the most pertinent sense. Even on the most extreme scenario for the increase of exports from Eastern Europe to the EC, the effects on the EC would be well within the range of normal experience of economic change. The import penetration ratio of products from Eastern Europe is for almost all products less than 1% of EC output, so import flows could be multiplied several-fold without major ill-effects on EC producers.

Even if protectionist measures are not imposed at the behest of EC producers in the event of increased imports from Eastern Europe, the threat of contingent protection will be damaging. Eastern European producers are fully entitled on the basis of past experience to assume that absence of overt protection is no guarantee of market access: investment in production capacity in Eastern Europe will be inhibited.

Not only will this prevent increases in output and income in Eastern Europe, it will prevent the realisation of a net welfare gain to the EC itself. In each sector there would be a gain to consumers and taxpayers (through reductions in prices and producer subsidies) which would outweigh the loss of producer surplus.

Assuming an increase in Eastern European manufacturing exports by a factor of four over a ten year period and a doubling of agricultural exports, the net welfare gain is largest in agriculture, amounting to at least 1% of total EC consumption (even after compensating farmers for their losses). In manufacturing, the effect would be small but positive in each product category. These estimates do not include any increase in EC producers’ surplus from increased sales to Eastern Europe. It is inconceivable that trade could grow in only one direction, so that these figures clearly underestimate the total EC welfare gain.

To the Eastern European economies, the opportunity to increase exports of these products would be exceptionally valuable. They represent a much higher share of total value added in their economies than they do in the EC. They represented over a third of value-added and employment in manufacturing and over 40% of manufacturing output in 1989. The collapse of the USSR and disappearance of GDR trade have made the EC by far the main destination for exports. But since 1989, exports of sensitive products to the EC from Bulgaria, CSFR and Hungary have grown more slowly than total exports and at about the same rate in Poland. It has been suggested that this is due to the uncompetitive cost structure of production in these sectors in East Europe; but this is not convincing. The imposition by the EC of trade restrictions through anti-dumping and other measures is the most likely cause, whether by actual refusal of imports or by deterrence of investment in production capacity.

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Contingent protectionism: EC trade with Eastern Europe

Despite a commitment to open trade with Eastern Europe, with the objective of reaching industrial free trade in 2002, the EC has offered only a limited liberalisation of protection against imports of a core set of ‘sensitive’ product categories (agricultural products, textiles and clothing and footwear, steel and chemical products). It has reserved to itself the right to reintroduce restrictions on market access for Eastern European producers, should circumstances warrant to ‘contingent protection’, as it is called.

Agriculture is new and will remain heavily protected. It is likely that non-tariff barriers with nominal protection levels of around 100% will remain in place against East European producers, even in 2002. For textiles and apparel, footwear and iron and steel, contingent protection is likely to have as significant, if less visible, effects. Despite the rundown in explicit protection promised by the EC Agreements, the effective cartelsisation of the European market will maintain EC prices and producers will act in concert to keep out imports, as recent safeguards (August 1992) and anti-dumping actions (November 1992) demonstrate. Chemical products are also likely to be subject to anti-dumping actions if past EC behaviour is any guide. Past anti-dumping duties against Eastern European of chemicals have been estimated to be equivalent to average tariffs of 16%.

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CAP reform and developing country interests

The EC's Common Agricultural Policy has a significant impact on developing countries. Guaranteed intervention prices allied to import controls have greatly increased European self-sufficiency in agriculture, so that considerable export surpluses have emerged in most sectors. Surpluses are transmitted onto world markets, normally with the help of substantial export subsidies. These subsidised exports deprive developing countries of foreign exchange by reducing their market shares and depressing world prices. They also undermine Third World food systems by flooding local food markets with heavily subsidised EC surpluses. This depresses prices, reduces the household incomes of staple food producers and discourages investment in agriculture.

Driven by budgetary pressures and the need to accommodate a GATT Uruguay Round agreement, the EC is currently reforming the CAP. A major package of reforms covering cereals, beef and butter was agreed in May 1992 and more reforms are in prospect.

Yet there is no guarantee that reforms will be in the interest of the Third World. On the contrary, the desire to minimise change in the current balance of benefit for the EC interest groups affected by the CAP means that, if European policy-makers are forced to take difficult decisions, there will be a tendency for the burden of adjustment to be transferred whenever possible onto Third World countries, because they cannot retaliate effectively.

Policy-makers in the EC are often unaware of the effects of the CAP and implications of its reform for the world's poorest countries and food producers. Within the European Commission there is no coordination of policy between the Directorate General for Agriculture (DGVI) and that for Development (DGVII). As public concern over the chronic food insecurity of sub-Saharan Africa has mounted in recent years, non-governmental organisations have been faced with increasing demands for information on food policy issues— including the interlinkage between the CAP and food systems in developing countries.

The Catholic Institute for International Relations is therefore implementing a three-year information and advocacy project on the trade and food security effects of the CAP. The project aims to update and generate information on the effects of EC production and export subsidisation policies in three sectors of special interest to Third World countries: cereals, oilseeds and animal feedstuffs, and sugar. It aims to raise the awareness of policy makers and the public of the relationship between the CAP and food security problems in the Third World. Case studies are being carried out in collaboration with Third World partners (NGOs, academics) in a selected group of developing countries that have different trading arrangements in the agricultural sector: Brazil, Burkina Faso, Guyana, Jamaica, Philippines, Zimbabwe. The case studies examine how the CAP affects foreign exchange earnings and the household incomes of peasant farmers involved in producing for export markets and, in the case of food deficit countries in sub-Saharan Africa, the effects of EC cereal exports on local prices and investment in agriculture.

The case study approach has been adopted in order to strengthen the information base and research capacity of the Southern partners, by providing them with information on the EC market and changing EC policies and to make the relationship between the CAP and food security problems in developing countries more accessible to target groups in Europe.

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Continued from page 1, col. 3, pressures to contain its level, may make for substantial modifications to Lomé in practice. Lomé’s dismal record of development assistance makes it ripe for reappraisal. Most ACP countries still seem trapped in adjustment, debt and poverty. Some argue that whilst Lomé may provide ACP countries with some financial oxygen, it upholds a system of clientalism which hinders prolonged development. Others argue that the problems have lain in implementing the partnership principle, but that this is increasingly valuable as more ACP countries move towards democracy. The mid-term review may attempt to accommodate both criticisms by focusing on a review of implementation mechanisms for Lomé, to bring the convention more into line with the newly formulated objectives of development cooperation. The period of ‘aid with no strings attached’, and honouring of individual ACP countries’ aid ‘entitlements’ seems to be over. Instead, those countries that reform or use their funds properly, improving transparency and accountability, will receive a kind of ‘performance premium’ and there will be strengthened conditionalities on human rights and democracy. There will also be increased access to Lomé funds for non-state bodies (NGOs) through more ‘decentralised cooperation’.

This agenda, which excludes any proposals on trade, is a sign of the weak position of the ACP countries. It puts in question the EC’s commitment to integrating ACP countries into the world economy. The extension of GATT erodes their trade preferences, yet no compensation is suggested; and although support for the private sector, which is high on the agenda, might promote exports, little can be expected from this in the absence of structural measures on debt, commodity prices and European market protection. Mass poverty also lead to changes in the organisation of European aid. According to the Treaty, the EC and Member States ‘share competence’ in the field of development cooperation and their efforts must ‘complement’ each other. But there is no agreement yet on what ‘complementarity’ means.

The Commission’s policy document Development Cooperation Policy in the run-up to 2000 suggested that Member States’ development assistance should be gradually aligned and dovetailed in a move towards a single development policy. The EC Council soon reined in this idea, proposing instead greater ‘co-ordination between the EC and Member States at policy, operations and country level. But coordination has been on the agenda for decades and progress has been minimal. In the field, all donors want to do the coordinating, none wants to be coordinated; competition is the rule. Even within the Commission, the different aid instruments are not coordinated and the same applies to the different departments involved.

Another possibility is the idea of a new task division between the EC and Member States. Certain areas or functions of development cooperation might be reserved to the EC, whilst others would rest elsewhere (with Member States, UN agencies, and NGOs). The EC, as a supranational body, could appropriately focus on a number of core tasks in line with its own nature and capacities in such areas as trade promotion, good governance, good regulation, coordination of policy dialogue and conditionalities, and promotion of regional integration. In some areas it might withdraw altogether (e.g. project implementation, for which the EC is poorly equipped). In any event, developing countries must— as prospective clients— participate in the search for a new task division.

If task division is adopted on a functional basis, it will add to the pressures for the eventual phasing out of Lomé in favour of a global EC development policy towards all developing regions. No attempt to change the Commission’s mandate, however, makes sense as long as the present institutional chaos in Brussels remains unresolved.

Political conditionality in the European community

Political conditionality first appeared on the policy agenda of the bilateral aid donors in the late 1980s, and is now widely practised. It involves making the provision of aid conditional on the observance of ‘good government’, which is variously defined to include democracy, open and accountable government, or respect for human rights.

The European Commission was among the first to take action on this new policy. The EC has suspended aid in the cases of Haiti, Sudan and Zaire, and played an influential role in donor decisions to suspend aid to Kenya and Malawi.

Bilateral aid donors have reduced, suspended or terminated aid to particular countries to force the pace of political reform and to punish governments for gross and persistent abuse of human rights, but they have acted in an inconsistent and sometimes contradictory manner in implementing political conditionality. One reason is that they are forced to adapt to geo-political realities and accommodate the multiple goals of foreign policy. The other reason is the variety of definitions of ‘good government’ which they adopt. The credibility of the whole idea of linking aid to ‘good government’ is therefore at risk.

Given these problems there are three strategic considerations that should be borne in mind in making political conditionality effective: (i) it is being added on to economic and, to an increasing degree, environmental conditionality. Increasing complexity of conditions will lead to misunderstanding, resentment and monitoring problems on all sides; (ii) donors are taking on very sensitive issues, invoking concerns both about sovereignty and about cultural imperialism; (iii) it is difficult for donors to effectively monitor and police economic conditionality. Conditions need to be as simple as possible, uniform between donors and commanding as wide an international acceptance as possible, and political conditions should lend themselves to straightforward monitoring.

Donors and recipients should aim to agree on a set of broad principles for political conditionality that meet these criteria. It would probably centre on human rights, with the emphasis in the first instance on political and civic rights. Socio-economic rights should be considered, but their inclusion may not command wide agreement, and there would be problems of securing effective compliance. An insistence on political and civic rights would perhaps be the most effective route to the goal of spreading genuine democracy: once citizens have the freedom to meet and to criticise government, the degree of accountability of governments to citizens will tend to expand.

A great virtue of this approach is that there are already a large number of organisations based in donor countries monitoring human rights world-wide. The monitoring would therefore come cheaply and effectively. Relatedly, the substantial human rights lobby that exists in the donor nations would become more positively identified with the aid programme. The Vienna Conference on Human Rights has affirmed the principle of universality of human rights which strengthens the legitimacy of this course of action.

The EC is the right body to take the lead in beginning the process of dialogue that will lead to the evolution of a ‘world standard’ of human rights observance for purposes of aid allocation. For the EC itself represents a wide variety of political traditions, and is well placed to forge the compromises and consensus that are needed.

Basic education strategies for the 1990s

It is ironic that just as research has more clearly defined the issues and the potential solutions in the provision of basic formal education, economic recession, lack of resources and declining political commitment are hampering progress in developing countries.

At present, over 50% of 6-11 year olds in twenty developing countries are not enrolled in school. 130 million children worldwide, more than 60% of them girls, have never had the opportunity of schooling. This figure is twice as high as in 1970. And repetition and drop out rates are still unacceptably high.

The two central issues facing education policy makers are how to finance the expansion of basic education and how to improve the quality of what takes place in the formal sector institutions. Hinchliffe argues strongly that education must be financed from general taxation (although this view is not universal). Governments have to assess realistically all the options open to them, without undue optimism concerning other sources of funds.

Colclough and Lewin investigate the reasons why children are not enrolled in school and raise a number of cost-effective policy reforms. Even so, they assert that for 'education for all' (EFA) - the title of the 1990 Jomtien World Conference on education - to be possible, additional external aid of at least $2.5 billion per annum will still be required, much of it destined for countries in sub-Saharan Africa, which are among those with the worst record to date.

However extra funding is generated, the impact of increased expenditure will depend on the quality of management of education. Stephens pinpoints the importance of the headteacher's role, and of a 'process' orientation in the management of change. The failures of Operation Blackboard in India analysed by Dyer highlight the problems that arise when lines of communication within the hierarchy break down and when those involved in implementing education innovations are not consulted from the beginning. Without this, there is no sense of 'ownership' or of responsibility for the success of the innovation.

Correspondingly, much of the current thinking about educational administration is that power and decision making should be devolved as far as possible from the centre. Raising the quality of teachers through improved teacher training and accountability are avenues for improvement. NGOs can be effective here, as ActionAid's involvement in the Mubende (Uganda) project and SCIAF's work in El Salvador reveal.

The growing, albeit belated, recognition that local people should be involved in the analysis and solution of their own problems has led to a shift in emphasis of aid agencies. Much of King's recent work has analysed the changing thinking in agencies following Jomtien but he focuses on the need for internal changes in development agencies to improve their accountability to their own, two-part constituency: developed country tax payers as well as aid recipients.

Two other aspects of the agenda for the 1990s are the crucial need to improve access to formal education for girls and to raise levels of awareness about science, technology and the environment. Interestingly, research indicates that both areas suffer from cultural obstacles. Brock and Cammish report that initiatives linking healthcare, transportation and safety to educational provision and mobilising the support of the local community have been quite successful in increasing girls' enrolment and retention in school. Lewin reveals the scale of the problem of raising interest in scientific and technical careers in developing countries (even the least resource constrained), and is also able to point to effective measures to tackle it. We need to look ahead in this way. The challenges to education systems in developing countries will not cease even when EFA is achieved.

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Schooling for all: how and when can it be achieved?

Access to good quality primary schooling is of central importance to national development, but it is still far from being universally available. Furthermore, many schools offer an education of very poor quality. What resources and policy changes would be required, nationally and internationally, in order for schooling of an acceptable quality to be received by all the world's children? The high levels of underenrolment have been caused by a complex mix of demand and supply-side factors. Although school systems have expanded rapidly over the past three decades, high rates of population growth have made the quantitative task of 'catching up' more difficult than expected. There are some countries in which the public commitment to achieving universal enrolment appears to be low. In others - particularly in West and Central Africa - high educational costs (arising partly from inherited pay scales, partly from the links between salaries and teacher qualifications, and partly from the budgetary burden imposed by the rapid expansion of higher education) have militated against it. After 1980, the rate of enrolment growth slumped, as recession hit educational expenditures by the state. In Africa real education spending, per head of population, fell by two-thirds over 1980-87 and enrolments have often declined not only in proportionate terms, but also absolutely.

Of course, demand-side factors are also important. The most important continued on page 2.

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AN ODI-IDS PUBLICATION
Funded by the Overseas Development Administration
Financing basic education

Governments face four main decisions in the financing of primary schooling: overall levels of revenue collection and expenditure; allocations between and within sectors; and the degree of targeting. The current trends to move government resources out of subsidised production activities and to restructure aid flows to include guarantees of increased spending in specific areas (as in India), are just two of the several avenues which can allow increased total spending on primary schooling. Some governments have indeed managed to protect or increase overall expenditure on education, even during periods of severe economic restraint. Despite falling income per head for much of the period 1984-89 in Ghana, per capita expenditures on education increased by 40% and education's share of GDP increased from 1.3% to 4.0%. While total government expenditures in Malaysia were 11.5 percent lower in 1987 than in 1984, allocations to education rose from 15% to 19% of total expenditure.

There has also been widespread increased emphasis on devoting the public sector of some activities and encouraging the private provision and financing of social services. Both give potentially larger roles to community and non-government organisations. Community and non-government organisations are tremendously varied in their mode of operations, but their strength does not lie in mobilising continuing amounts of financial resources. NGO activities are largely financially supported by national governments. Their strength lies in being able to innovate and experiment. NGOs may be cost effective, but they are not the answer to resource mobilisation beyond the margin.

Attempts have also been made to mobilise extra resources for basic education by levying user charges to recover some or all of the public expenditures and by having individuals purchase services directly from the private sector. Arguments for general user fees in primary schools have been little used recently, possibly because of the well documented negative impact on enrolments. Charges have been more successful when they have been linked to specific items, such as textbooks.

When a small minority of children are not enrolled in primary schools, the pupil-teacher ratio may be marginally decreased in government schools. The resource implications are neutral or negative. Another way in which resources for basic schooling might be increased is through the imposition of charges on higher education and the diversion of the savings. Again, experience is not encouraging. In a survey of 54 fee and loan schemes the average rate of recovery in schemes covering only board and lodging was around 35%, and in those which also covered fees only between 4% and 14%. These levels are not negligible, but certainly not high. Neither is it by any means certain that savings in one sub-sector will be passed on to another.

The lesson of all this is that better education provision necessarily requires additional public resources. Community groups and NGOs can only make a marginal financial contribution towards the provision of primary schooling. Imposing significant charges for primary schooling reduces take-up. Governments do not always have to be the provider, but they do have the responsibility to be the financier. Arguments of community participation and cost recovery cannot be used to allow this responsibility to be shed.


Home-grown education in El Salvador

In El Salvador returned refugees have set up their own education system in the northern areas. The primary enrolment rate now stands at an exceptionally high 95% in the communities involved. There are 35 schools in the system, where teachers ('maestros populares'), operate on shifts so that classroom space is fully utilised all day. Some older pupils (13-15 years) also act as teachers of pre-school and primary children. Preire's teaching methods are used, focusing on everyday life and including people's own experience of the civil war. The three tier management system mostly comprises teachers but also includes local community representatives. Pupils' national examination results have been as good as or better than those from other regions. Negotiations are underway for professional in-service training for teachers, who wish to achieve certification, perhaps as a prelude to incorporation of the schools into the state system. Whether local control and accountability can still be maintained remains to be seen.

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How to raise the quality of education

There are two key factors in the broad array of inter-dependent variables, such as school-community relations and training of personnel, which impact on quality: the management of change and reform of the primary curriculum.

Research worldwide, in particular in Indonesia (on the Cianjur project), indicates that success in managing change seems to occur when key personnel (e.g. the headteacher) are involved in a support network with both vertical (ministry and school) and horizontal (school to curriculum centre to community) links. Important too is an understanding of change as a continuing process of improvement with two key phases: the primary stage of critique (in which options, choices and information are assessed) and, the stage of possibility (in which 'room for manoeuvre' and the strategies for action upon improvement) are taken forward. Management is not just a matter of directing the education system towards desired outcomes but of sustaining a process of change.

At the heart of curriculum reform lies the problem of the existence of two very different curricula: the official curriculum of the centre (reflected in syllabi and textbooks) and the actual curriculum of the schools. The gap between the two is widening because nearly all the major curricula decisions are now taken by people working outside the classrooms and away from the daily experiences of school life. Successful curriculum development can only occur when teachers and headteachers are directly involved in school-based curriculum reform and supported in their efforts by those responsible for the management and administration of the system. The Model school project in Lesotho and the Pahang Tenggara Integrated Education project in Malaysia are two good examples of this approach.


Aid and education: what we need to know

One of the outcomes of the World Conference on Education for All (WCFEA) in Jomtien was the recognition that agencies 'should examine current assistance practices in order to find ways of effectively assisting basic education programmes'. The Jomtien process had the effect of directing a number of pressures for accountability towards the donor agencies. The original target of these pressures was, of course, to audit the commitment of the donor agencies towards the Jomtien agenda of expanded adult literacy, primary education for all etc. But it may be worth broadening.

1. In this era of better information for parents and citizens, there may be reason to think about A Charter for Aid. Most adults (and many young people) contribute to aid projects via voluntary contributions to non-governmental organisations (NGOs) and through their taxes. But, arguably, particularly in the case of education, citizens in OECD countries can more easily find out how their voluntary contributions are spent than how official aid is allocated.

2. This is because very few countries have regularly been able to provide a breakdown of their educational aid by the different levels - primary, secondary, adult literacy, tertiary etc. and were thus not able to report on the most basic statistics called for by the Jomtien debate: How much educational aid is being allocated to primary education, or to the expansion of adult literacy? However, Sweden was able to say that it allocated 53% of its educational aid to basic education, and the World Bank in 1992 claimed that 38% of its educational aid was committed in this way, but these were the exceptions. Some bilateral, eg. Switzerland and the USA, have changed their statistical procedures since Jomtien and will be able more accurately to report on aid to education by level in future, but others have yet to follow this lead.

3. One reason for the difficulty is that a very major element in educational aid budgets has been technical cooperation or technical assistance. Much education aid, in other words, was made up of the movement of 'experts' from North to South, and of 'trainees and students' from South to North. This 'people dimension' of educational aid is particularly evident in the case of Britain, France and Japan. Technical cooperation data is usually unallocable by sector, but these were the exceptions. Some had mastered the mechanics of manipulating the TLA, few had any understanding of the underlying policy aim. Others consigned the kit to the cupboards. Administrators made decisions which, while logical in the context of bureaucratic norms, were ineffective in terms of successful or timely implementation of the programme.

Existing structures proved to be incapable of translating into reality the policy idea of qualitative improvement of elementary education. The system that had evolved maintained a very large establishment but pays little attention to the process of education itself. Education is used as a tool in centre-State relations: the centre struggles to maintain control and national integrity, while the State resents this intrusion into its preserve. Such hidden political agendas are not discussed in the policy implementation and education innovations literature but they are essential to understanding how decisions are made which are clearly at variance with what research suggests to be good, innovatory practice.


Operation Blackboard in Gujarat, India

The 1986 National Policy on Education in India aimed for qualitative improvement in elementary education, the increased retention of children in schools and a move towards a child-centred approach to education. Operation Blackboard was set up to implement it. Its object was to upgrade physical facilities in all the smallest and least equipped Indian primary schools through provision of a second teacher, a room and a set of teaching-learning aids (TLA).

In Gujarat state there were difficulties with all three components: adequate funds for school buildings could not be found, political interference complicated teacher placements, and the TLA was purchased by tender and was generally of poor quality. Teachers received minimal training, if any, and while some had mastered the mechanics of manipulating the TLA, few had any understanding of the underlying policy aim. Others consigned the kit to the cupboards. Administrators made decisions which, while logical in the context of bureaucratic norms, were ineffective in terms of successful or timely implementation of the programme.

10: APRIL 1993
Factors affecting female participation in education

Girls account for two thirds of all eligible children who are not in primary school. Schooling for girls has to be made available and accessible and parents have to be able, in economic terms, to allow their daughters to attend. But more importantly, perhaps, parents have to be willing for their daughters to go to school.

The direct and the indirect costs of schooling, core-periphery imbalance in educational provision, the urban-rural dichotomy, poor transport infrastructure and long distances to school all weigh more heavily against girls than boys. Aspects of health such as poor nutrition and healthcare, early pregnancy and family size are also more significant obstacles for girls. The education system itself can militate against them (e.g. lack of female teachers, lack of single-sex provision, and gender-stereotyping in curriculum options.

The biased idea that 'girls don't really need to go to school' is acquired very early, even by primary school children themselves. There is what might be called a 'cultural cost' in sending girls to school, when it is seen to challenge girls' traditional household roles and early marriage, dowry systems and seclusion. Where religion (and law) are concerned, custom and tradition, rather than doctrine, operate.

There has been a wide range of both local and internationally sponsored NGO initiatives to promote girls' education in developing countries. They have included school-based health and feeding schemes, the improvement of traditional agriculture the opening of technical and vocational programmes to women, and the combination of income-generation and literacy schemes for women with schooling initiatives for their youngest children. Problems of physical accessibility of schooling and physical security for both girls and female teachers also have to be tackled. Single-sex education provision may be appropriate in some cases. Scholarship schemes and curriculum and materials projects to reduce gender bias in textbooks have been effective. All these measures stand a better chance of success if they are part of a broad, integrated development programme which includes the provision of infrastructural support systems, e.g. transportation and sanitation, and the provision and protection of female teachers, especially in rural areas.

Finally, and in many cases crucially, is the need to raise male awareness of the importance of education of girls, for themselves and for their country and community. Mobilising the support of local community and religious leaders may be vital.

Strategies for science education and development

For development to be sustainable, science and technology competencies are required throughout the population. But after more than 20 years of investment in science education many developing countries are still experiencing acute shortages of qualified staff at both graduate and technician levels and a very limited extension of scientific literacy to the population as a whole. A cluster of problems have emerged in many countries in varying degrees. They include:

- **Enrollment disparities** between boys and girls and between urban and rural students;
- **Excessive unit costs** - teaching costs of science and technology may be more than double those of other subjects, capital costs can be five to ten times greater;
- **Declining science enrolments** as a proportion of the age cohort. Even countries without financing problems, e.g. Malaysia, have experienced this;
- **Unsatisfactory levels of science achievement**, especially amongst students not specialising in science, and very limited understanding of science and technology in the population as a whole.

Policies which have been effective in addressing these problems include:

- Drawing up national science and technology policies to guide priorities in science education provision;
- Paying more careful attention to the cross-cultural adaptation of science and technology education;
- Enlarging the role of practical work in science and technology teaching, with more use of teacher demonstrations, low cost experimental activities, learning experiences based on locally available materials and utilisation of workplace learning.

Detailed analysis of the performance characteristics of students, to help to identify areas of the science curriculum which contribute most to the variance in scores between different groups and discriminate between students on the basis of past teaching rather than intellectual capabilities; and expanding opportunities for the acquisition of science and technology knowledge outside the formal education system, e.g. by making available low cost written materials suitable for those who have not completed secondary education.


Low cost teacher training

In 1991 over 82% of licensed teachers in the Mubende district, northern Uganda, were untrained. The Mubende Integrated Teacher Education Project (MITEP) will provide them with in-service teacher training using a distance education approach. MITEP is jointly run by ActionAid and the Ministry of Education. MITEP is an interesting example of the role that NGOs can play in education. Rather than working in isolation in small-scale projects, rather than opposing the State or even seeking to complement it, NGOs can act as a catalyst, prompting Ministries to adopt innovative approaches to fundamental problems and also enabling them to take part in a pilot project.

The Uganda government now plans to scale up the project to the whole Northern region, using World Bank funding.

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Relief and livelihoods in war zones in Africa

War has made an enormous contribution to developmental failure. Relief and reconstruction during civil conflict are taking a growing proportion of NGO, bilateral and multilateral funding. Yet the transfer of resources and the presence of agencies themselves influence the nature and resolution of conflicts. Many operational agencies are now realising that they must take stock of their experience, asking whether and how their extended programmes in African war zones have contributed to the long term welfare of affected populations.

Whilst wars have different political-economic causes, there are wide parallels in the manner in which they damage rural livelihoods. Fighting between combatant forces and attacks on civilians usually kill few people, despite their great psycho-social impact. More significant for life and death is the destruction of services (especially health) and of marketing and transport systems. But the main damage is due to the creation of extractive war economies and the loss of individual rights in the face of combatant and administrative machineries. Coercive powers generated by the military environment enable the prosecution of the conflict at the cost of civilians, as well as giving increased opportunities for personal abuses of power, including the setting of private scores.

In African wars both rebel and government forces usually forcibly relocate civilians into or out of the zones they control and into camps or settlements, in which they are forced under the patronage of ‘relief’. The movement of goods and people between the camps and other areas is often restricted to generate economic losses (halving GNP); military expenditure, though massively increased, proved inadequate to protect national assets. The international community has been providing about US$500 a year in relief to the victims of the Mozambique war, about twice the level of government military expenditure at its 1986-90 peak. The government forces’ collapse into a parasitic, tribute-seeking army logistics or maintain civil service salaries. If aid had been given for logistical assistance to the military and recurrent budget support for government salaries, it could have prevented much destitution and suffering, provided a better foundation for post-war administration, and given better returns than the subsequent aid expenditure on relief.

Also in Mozambique, relief distribution and, at times, emergency health services did directly save hundreds of thousands of lives. But the livelihoods of displaced people were mainly re-built through the indirect contribution made by relief efforts to the re-emergence of commerce and civil government. Ironically, it was the widespread ‘diversion’ of relief in the continued on page 3, col. 3.

Relief operations and the law

The legal framework applicable to relief operations is to be found principally in international humanitarian law, notably the Geneva Conventions and Protocols. In essence, the rules provide that ‘relief actions which are humanitarian and impartial in character and conducted without any adverse distinction shall be undertaken’, but they are ‘subject to the agreement of the parties’. The rules applicable in non-international conflicts are much more rudimentary, owing to the implications for state sovereignty in acknowledging any role for international law in what is seen by the state as entirely an internal situation.

The problems for relief organisations in internal conflicts stem from two sources: lack of respect for existing law and the content of that law. States may be ignorant about their legal obligations and may be unwilling to see relief taken to areas where the ‘rebels’ might benefit. The ‘rebels’ share these conceptions and may well reject the very idea of international legal obligations binding on them. Both sides, in defiance of international law, may use food supplies as a weapon.

Looking at the situation on the ground, it is easy to suggest improvements, such as a right of transit for relief supplies and relief personnel, an obligation not to attack or interfere with such an operation etc. Such provisions are, however, already in place. What is needed then is improved respect for the law. That involves finding ways to put continued on page 2, col. 1.
The enhanced role of NGOs in relief operations

The last 10-15 years have witnessed a dramatically enhanced role for international and local NGOs in the provision of relief assistance. NGOs are now a key component within the international relief system. In sub-Saharan Africa 40 per cent of emergency food is channelled through NGOs. What factors have contributed to this trend and what are its implications?

Increased support for NGOs from private sources has been important, but of much greater significance has been the increased use of NGOs as channels for the provision of relief assistance by bilateral donor organisations. The trend is particularly clear in the case of ODA's Emergency Aid Department. Whereas from 1977/78 to 1980/81 less than 0.5 per cent of total allocations by the Disaster and Refugee Units were channelled through NGOs, from 1988/89 to 1991/92 the proportion, even within a substantially larger budget, was almost 28 per cent (see Figure).

The active encouragement of the NGO sector by western governments during the 1980s increased the number and capacity of NGOs operating in many developing countries, thereby providing donors with an alternative channel to government agencies when allocating emergency aid. The poor economic performance of many developing countries, particularly in Africa, during the 1980s weakened the capacity of state structures and the evident flexibility and speed of response of NGOs increased their attractiveness.

The numerous conflicts in Africa and Asia during the 1980s also contributed to the trend. The possibility that relief assistance would be diverted to the military made donors reluctant to use government agencies in the affected countries. The high, often over-riding, priority attached to sovereignty by the UN and its member states, effectively prevented the involvement of UN agencies in those areas controlled by 'rebel' movements during the 1980s. The International Committee of the Red Cross (ICRC), though specially created to provide humanitarian assistance in areas of conflict, only operates in an area once permission has been gained from all parties to the conflict and in several important cases this permission has not been forthcoming. In conflict situations therefore NGOs are often the only channel capable of offering bilateral donor organisations a measure of impartiality and accountability.

The substantial, low profile assistance channelled through NGO 'cross-border' operations to 'rebel-held' areas of Afghanistan, Eritrea, Ethiopia and Sudan has been an important factor in the growth of resources flowing through NGOs. The enhanced role of NGOs has important implications for the international relief system. Whilst the institutional capacity of NGOs is usually strengthened by the flow of relief resources, that of government relief agencies within the affected countries is invariably weakened. The potential loss of autonomy associated with the increased use of bilateral donor funds, and the potential conflict between sustainable development activities and relief programmes which are invariably 'top-down' distributions of largesse, present particular problems to many NGOs. For donor organisations the issues are essentially those of ensuring accountability in the use of public funds and, sometimes, how to regain the public relations benefits that have accrued to their NGO 'partners'.

The operation of the international relief system is undoubtedly complicated by the increased number of 'actors', each with their own set of institutional perspectives and priorities and all subject to competitive pressures. The potential for duplication of effort and the difficulties of ensuring effective coordination have undoubtedly been increased. However, in some situations the very diversity within the system increases the likelihood that some agencies will be prepared to operate in situations that the majority would not. For the affected population in such areas this diversity could be life-saving.

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continued from page 3. 1. The pressure on the parties directly and also to do so indirectly, through pressure on third states. That could be done by a change in UN practice. A risk of starvation of civilians owing to interference with relief operations should be treated as a threat to international peace and security. Relief convoys should then be escorted by UN forces, without the need for the consent of the parties. The parties should be warned that the UN forces will be authorised to take all necessary steps to protect the relief operation. Interference by armed force with a recognised relief operation should be made into a 'grave breach' of the Geneva Conventions. That concept should also be made applicable in non-interna-
War and famine in Ethiopia 1982-5

It is a commonplace that the great famine in Ethiopia during 1982-5 was caused as much by war as by natural adversity. It was the result of specific war strategies undertaken by the former government against the Tigrayan People’s Liberation Front (TPLF). The most obvious were the huge and devastating army counter-offensives into the TPLF heartland, using up to 80,000 troops on each occasion. There were major offensives in 1980-1, 1983 and 1985. The ‘seventh offensive’ of February-May 1983 struck into the key grain-producing districts of western Tigray; it is from the launch of this attack that the onset of the famine can be dated, to the week. However, the general counter-insurgency strategies implemented from 1980 onwards had an equally profound, though more insidious effect. The strategies were:

1. The bombing of marketplaces in rebel-held areas. Markets had to be held at night, which caused a dramatic down-turn in trading activity.
2. Restrictions on the private grain trade. The government harassed and detained grain traders using pack animals. This prevented the movement of surplus grain out of Raya (eastern Tigray), northern Gonder, and central Wollo in 1983-4.
3. Restrictions on migrant labour. Migrant labour was formerly a major source of income for poor people in northern Ethiopia. Government harassment virtually prevented this in the early 1980s. As these strategies were introduced, widened and intensified, the famine began and then deepened. Large areas of southern and eastern Tigray are chronically in food deficit; the fighting and restrictions meant that the inhabitants were unable to follow their coping strategies to obtain money or food. Measures one and two destroyed any spatial integration in the grain market: harvests literally rotted in surplus areas, while deficit areas had their problems greatly exaggerated. The price of grain in Mekele, capital of Tigray, shot up in November 1982, to 165 Ethiopian Birr per 100 kg sack – nearly twice what would have been expected if transport had been possible from nearby surplus-producing areas.

Measure three meant that while farmers in coffee producing areas of southern Ethiopia and grain surplus areas of Gonder and western Tigray suffered labour shortages, deficit areas on the eastern escarpment of the highlands had large unemployed populations. When the seventh offensive destroyed employment opportunities in Tigray in March 1983, the labourers who had managed to reach the area trekked back to relief shelters at Korem and Ibat. They formed the destitute populations who were the basis of the first appeals by Oxfam and Save the Children Fund. Alex de Waal, formerly at Africa Watch, 90 Borough High Street, London, SE1 1LL, Tel 071 378 8008. Fax 071 378 8029. Publication: Africa Watch, 1991, Evil Days: Thirty Years of War and Famine in Ethiopia.

From war and famine to peace, food, and livelihood

The tide of war is ebbing in at least parts of SSA, but if emergency programmes are closed down in these areas, we may replicate - this time for human beings - the pattern of live- stock losses from droughts. In Somalia, over half livestock losses occurred after drought had broken because five simple, well-known veterinary drugs were not available. Their supply was somehow viewed neither as ‘emergency’ nor as ‘development’ assistance. Only by recognising that calamity does not cease until livelihoods are restored can further loss of human life be averted. The means to achieve this are:

1. Reprogramming emergency operations to include livelihood rehabilitation.
2. Recognising the need for flexibility in the location of support operations. Dislocated persons and refugees are usually determined to go home as soon as possible. Their food and water needs cannot be deferred to fit a critical path project timetable or bureaucratic convenience.
3. Acting with utmost speed to articulate and implement operations.
4. Keeping costs per household served low by minimising ‘high level’ personnel requirements.
5. Identifying and accepting the priorities of returning and pauperised, in-place rural households which typically include: secure land use access; provision of food until harvest (9 to 15 months) - there are few ‘instant crops’ and even fewer household food reserves; distribution of clearing, building and tilling tools plus seeds and basic household kits (e.g. water pails, to save time); restoration of small to medium rural commercial networks; rapid, phased restoration of primary health, water and education access; and labour intensive, seasonal projects earning cash income for households until they have crops, livestock or fish to sell.

Unless this kind of approach is adopted there will be more deaths and more pauperisation, through institutional and imagination failure to provide a minimum enabling context.


continued from page 1, col. 2.

later years of the conflict that both enabled soldiers and officials to create safe and functioning administrations, and provided the essential kick-start to the economy. Should agencies have been prepared to support the state and businesses directly? The lesson from these experiences is that relief agencies cannot presume to humanise the situation. They have to operate within the processes of the war situation. Much can be done by protecting people from abuse, that cannot on its own be enough.

The various contributions to this issue of Development Research Insights elaborate and extend different facets of this analysis. Borton quantifies the rapid increase in the level of involvement of NGOs in relief operations. He focuses on UK aid but the situation is similar among other donors. It seems to reflect the (perhaps misguided) emphasis on speedy, accountable delivery of relief to civilian victims - rather than to addressing, as far as is possible, the prior problems which result in the emergence of extractive, militaristic structures. Hampson describes the legal framework applicable to relief operations. She suggests that there is greater scope for NGOs, even within existing mechanisms, to bring external pressure to bear on combatant forces, though it remains to be seen whether long term benefits will accrue in Africa from enforcing international law through military intervention. Yet relief agencies did make a very real contribution to the resolution of the Mozambique conflict, though indirectly. De Waal's description of the military strategy action of the Ethiopian government in 1982-1985 documents how the basis of livelihoods can be deliberately destroyed by the state. Relief agencies need to monitor and respond to such acts as the bombing of market places and the restriction of trade and population movements, by both state and rebel forces.

Meanwhile Green focuses our attention on post-war situations, suggesting strategies for more effective assistance to the reconstruction of livelihoods and basic services in the decimated war zones and for returning refugees. Buchanan-Smith, Davies and Petty and Maxwell describe recent thinking on famine early warning systems and on the developmental uses of food aid for famine prevention. While both these aid instruments have undergone considerable technical improvement and refinement in recent years, difficulties remain in their application in conflict situations. Their adaptation to conflict situations requires careful consideration of the political economy of war and its impact on livelihoods, and the nature of opportunities for external intervention.

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Famine early warning and response: the missing link?

By the early 1990s, famines triggered by drought had become quite easy to predict - testimony to the success of 'improved famine early warning systems' (EWS). EWS now face their biggest challenge in zones of conflict. So far, most EWS focus on monitoring the effects of conflict on food security, but the impact is usually sudden and the need for rapid response even greater than for slow-onset drought-induced food crisis. (Early warning of the conflict itself is beyond the 'technical' domain of most national EWS). The most successful examples of EWS set up in conflict zones have been in areas of prolonged conflict, such as Eritrea and Timor during the 1980s; but their effectiveness was entirely contingent on international recognition by western aid agencies. There is a case for trying to factor political indicators into regular EWS monitoring, but it is very unclear who should take on this responsibility and how issues of infringement of sovereignty should be tackled.

Success in famine prediction has not led to a parallel increase in famine prevention. Huge constraints on the response side of the equation must be addressed if the benefits of early warning are to be fully realised. Some of these constraints are bureaucratic: e.g. the lengthy procedures within western aid agencies to approve and mobilise relief resources for Africa. Who 'owns' the EWS information, in the sense of who funds the EWS, is a major factor determining its credibility. Many donor agencies depend upon the FAO Harvest Assessment to inform relief decisions, because it is seen to bear the stamp of international credibility, which is lacking in many government-run national EWS. Other constraints are political: where donor/national government relations are strained, EWS information becomes a pawn in political controversy and negotiation between the two sides. This is often the case for conflict-related famine. It reveals the central paradox of an EWS/response system: it is least likely to work when it is most needed.

However, there are ways in which the links between EW and response can be forged more effectively. Joint funding of EWS by both donors and government would enhance its credibility with both sides; a phased relief response by western donors would start the decision-making process much earlier to ensure a genuinely timely response; and pre-positioning of relief resources within Africa would cut down the response time for mobilising and delivering international relief. Some of these are applicable to conflict-related famine. However, much more work is required to document the kinds of relief interventions that have worked successfully, and to understand why others have not.

Margaret Buchanan-Smith and Susanna Davies of the Institute of Development Studies, University of Sussex, Brighton, BN1 9RE, Tel. 0273 606261, Fax. 0273 621202, and Celia Petty of Save the Children Fund, Mary Datchelor House, 17 Grove Lane, Camberwell, London SE5 8RD, Tel. 071 703 5400, Fax. 071 703 2278. Publications: Margaret Buchanan-Smith, Susanna Davies and Celia Petty, 1992, 'Famine Early Warning Systems and Response: The Missing Link? Summary of Findings and Conclusions', IDS and SCF. Also five country case study reports and report on four donor agency case studies.

Offsetting the indirect costs of war: food aid for famine prevention in Africa

Lower levels of income and increased vulnerability to poverty are a cost of war felt by those who are traditionally food insecure, but also by others newly made food insecure. The general case for intervention to minimise the risk of famine and sustain food entitlement is strengthened in conflict and post conflict situations.

The tool box for famine prevention is large. It includes interventions related to food, but also others in the spheres of health, water and livestock. Food shortage is often not the main threat to life in so-called famines: disease caused by poor water or sanitation is often more serious, especially where populations concentrate in small areas. Malaria is also a serious threat. On the food side, public works, food security reserves, village grain banks and supplementary feeding schemes are common. On the non-food side, immunisation, water supply, social security transfers, livestock and fodder programmes and assistance to migration have all been considered.

Perhaps surprisingly, food aid can sometimes support all these programmes. Sometimes it can be used directly, for example in feeding programmes or on food aid for work. Otherwise, food aid can be ‘moneatised’ in the port of entry or another large town, and the cash generated in a counterpart fund used to finance famine prevention projects. Sometimes, the best use of food aid is simply to sell it into the market, in order to stabilise prices and help maintain trading arrangements: this has been the case, for example, in Somalia. In general, monetisation should be the preferred, ‘default’ mode: direct distribution should be justified on a case-by-case basis. The IDS has suggested guidelines for when to monetise food aid and how to manage counterpart funds. Public works are especially attractive, because they contribute to environmental sustainability and future employment, reducing the likelihood of future food shortage. Public works can be planned in advance and activated when famine looms using emergency food aid.

While peace is the prerequisite for improved food security in much of Africa, famine prevention can become an important objective for new uses of food aid, especially by NGOs. The starting point is locally-based community and district planning, based on analysis of current food and livelihood security, together with the source and magnitude of potential risk. In many countries, NGOs can take the lead in this process and reasonably expect to reduce the call on international relief. Some of these are important objective for new uses of food aid, especially by NGOs. The starting point is locally-based community and district planning, based on analysis of current food and livelihood security, together with the source and magnitude of potential risk. In many countries, NGOs can take the lead in this process and reasonably expect to reduce the call on international relief.
Reflections on a Memorable Circus

After the Earth Summit there are perhaps four ways in which the world will never be quite the same. The first is obvious. Few believe that governments will allow such a complex and all-encompassing agenda to be set up for a global forum again; for while, ultimately, everything does relate to the environment, such a truism is no basis for good decisions. It will take IDA replenishment and autumn discussion in the UN General Assembly to consolidate the vague indications given by the donor group at Rio.

Despite this, Rio has led to an important and positive attitudinal shift. The separation in policy terms between the environment and the commanding heights of the economy is now, beginning to narrow. The 'nature for nature's sake' lobby was not very apparent in Rio; this was a debate about 'environment' as a substrate of 'economy'. Most of the world now either believes in the economy/environment linkage or sees advantage in pretending to. This is why the USA was so out of touch with the event - it could only see negative relationships that implied short run costs, while others believed that investment now in cleaning up will pay in the long run.

The third change relates to institutions. The key text here is the document called Agenda 21. In it the nation state is denominated as the principal follow-up agent to -work to National Sustainable Development Plans. Read this way, the material in this issue of Insights discusses some of the trade-offs and the scope for public action in pursuit of environmental objectives at the national level. It concerns measures of the kind to be incorporated in National Sustainable Development Strategies, which will be the focal statement of governments' follow-up intentions.

The measures the Strategies incorporate will need to be informed, in both design and implementation, by the latest policy research, such as reported here. While there are no quick fixes to be had, there are real opportunities for effective public action. Action needs to be taken at the sectoral level, whatever the prevailing economic policy regime, as Markandya and Richardson demonstrate. Many of the supposed trade-offs between developmental and environmental goals either evaporate or are seen to be negligible on closer inspection. This is the case in many aspects of energy conversion and use in industry, as Bell indicates. Arnold shows that while certain costs for public health.

The technology exists for universal provision. There is also mounting evidence of users' willingness to pay for piped supplies and even for better sanitation and sewage disposal. In many cases users would save large amounts compared to what they are now spending on private vendors, which in extreme cases can account for 50-60% of income. The real block on progress is the institutions currently responsible for providing water-related services. Traditional public service agencies have failed and should move aside and create space for NGOs, user groups, local community bodies and the private sector.

The second, more universal, problem is the adequacy of water supply to meet the growing and, increasingly, conflicting needs of urban,
Technology Transfer and Energy Efficiency

At the Rio Summit there was a common presumption of a necessary trade-off between environmental objectives and economic development goals. Countries would incur development costs in their efforts to achieve environmental objectives - especially the 'global' objectives of particular interest to many of the industrially advanced countries. As part of the necessary compensation, increased transfer of technology to developing countries would be needed, especially of advanced 'environment-conserving' technologies.

This perspective is obviously important to many areas of economic activity. But it is not wholly appropriate to the energy sector in developing countries, in which environmental and economic development objectives are frequently complementary rather than conflicting.

This is evident in the industrial sector. Industry commonly accounts for a very large proportion of commercial energy use in developing countries. Raising the energy efficiency of industrial production is not simply a matter of introducing more efficient 'environment-conserving' technologies. There is often a general weakness in operating the technologies already in use - not just the specific 'energy technologies'; but the integrated production technologies within which those energy technologies are inextricably embedded. Strengthening industrial firms' capabilities for improving the overall efficiency of their energy-using production technologies will contribute very significantly to environmental and economic development objectives.

A similar situation obtains in the electric power sector. Low conversion efficiency stems partly from limited investment in the most efficient forms of power generation and transmission and partly from low efficiency in using the technology already installed. This joint inefficiency appears to stem from limited investment in the human and institutional resources required to absorb existing power technology. Again strengthening absorptive capacities (and reducing the constraints on using them) is the key to achieving both environmental and economic objectives.

The need to increase developing country access to capital and technology is there. But how the technology is transferred is just as crucial.

The implication for aid donors is that successful action to achieve energy-related environmental objectives should be two sided. New initiatives of the type given prominence a few years ago, like green investments, are clearly identifiable as 'environmental' projects and programmes and 'Global Facilities' deserve support. But so do much greater efforts than in the past to incorporate support for technology absorption capabilities within a wide spectrum of other aid projects concerned with the primary energy industries and the major energy-using sectors.

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Adjustment and Environment Linkages

Structural adjustment lending has achieved mixed economic success with many examples of undesirable social and environmental impacts. Three-country studies have been done in Côte d'Ivoire, Mexico and Thailand tracing the impacts of structural adjustment reforms in selected sectors of environmental importance (agriculture, forestry, water, industry and tourism).

The experience of Côte d'Ivoire shows that while effective macroeconomic policies are needed to improve the country's overall environmental performance, particular sectoral problems such as rampant deforestation are due to underlying institutional problems which have not been addressed.

In Mexico, adjustment policies have further aggravated the non-sustainability of Mexico's development path, and major market and policy failures in the natural resource sector remain. In Thailand successful macroeconomic adjustment and accelerated industrialisation have been achieved but at great environmental cost. The Thai case demonstrates that sound macroeconomic management is a necessary but not sufficient condition to achieve sustainable development.

More generally, we can say that although structural adjustment reforms seek to correct government policy distortion, they fail to address the inherent market distortions in the natural resource sector. As a result, the overall environmental impacts are mixed, sometimes positive, often negative, but never optimal.

Secondly, successful macroeconomic adjustment often widens income differentials. Government efforts to reduce differentials and alleviate poverty have An international programme of network research with collaborators in more than 17 countries is under way, investigating the growing problems of environmental pollution in mineral-producing countries. The majority of non-fuel mineral reserves and planned new mines are located in developing countries, so there is an urgent need to provide policy analysis and recommendations of use to decision-makers in mineral-producing developing countries in industry, government and community groups for environmentally sound and sustainable development.

The objective of the programme is to analyse enterprise strategies, national policy making and community responses in the context of evolving regulation and emerging environmentally less-hazardous technologies. The programme covers non-fuel minerals (e.g. bauxite, copper, zinc, lead, nickel, tin, gold and silver) and the integrated processes of exploration, mine development, operation and closure as well as mineral processing including smelting and refining. It will extract lessons from the experience of richer mineral-producing countries in North America, Australia and Europe for poorer mineral-producing developing countries, while focusing on the specific social, economic and political problems and challenges of environmental management in mining and mineral processing in developing countries in all regions and at different stages of development.

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**Sustainable Management of Tropical Forests**

The negotiating text for the proposed Global Forest Instrument contained a number of well expressed principles which should underlie tropical forest management systems. Successful management has to satisfy four characteristics:
- maintenance of the harvest of all products at sustainable levels.
- maintenance of essential ecological processes.
- maintenance of biological diversity at ecosystem, species and gene levels.
- satisfaction of the basic needs of people living in or near tropical forests.

The objective of the ‘multiple use’ management systems that foresters practise is to try and arrive at a realistic balance among them. The prospects for success depend also on reframing economic policies that encourage excessive use and transfer of forest to unsustainable alternative uses.

Long experience in Malaysia has demonstrated that, if timber harvesting is properly controlled and executed, forests recover surprisingly quickly. To achieve this involves removal just of mature trees of a limited number of species, minimising the damage to the remaining stand, and interspersing logged areas with undisturbed areas from which animal and plant species can recolonise. If harvesting is too heavy, frequent or disruptive the forest will progressively deteriorate.

The earlier focus on trying to manage tropical forest systems in favour of particular timber species of current value by removing competing species from the stand remaining after logging is now being modified or abandoned. With user technologies and human needs changing at rates which far outpace the rate of growth of tropical forests, unpredictable future demands on the forest must be allowed for. What is important, therefore, is maintenance of the broader productive potential of the forest.

Similar considerations apply to approaches that focus on managing forests just for the apparent cornucopia of products other than timber. Some of these products will prove to have significant developmental potential; many more are currently important as components of local economies. However, many of them represent low-input low-output uses or activities destined to disappear as more robust and attractive alternatives appear. Attempting to restrict use of forests just to such activities risks locking those living there into unstable, marginal livelihood systems.

The management of the tropical forest thus has to adjust to a constantly moving target. This is best achieved by maintaining ecosystems capable of producing a range of outputs - including essential ecological processes such as watershed regulation and nutrient cycling. The difficulty of proving that forests managed in such a less structured but more flexible manner are ‘sustainable’ does not mean that more readily quantified and easily monitored partial solutions are preferable. The aim of harvesting within the forest’s regenerative capacity should not be abandoned simply because sustainability is hard to pin down.

**Rewriting Land Tenure in Mongolia**

Mongolia is embarking on the privatisation of agriculture, where livestock production is the main activity. Privatisation will lead to new land use arrangements (land is now 100% state-owned) and it is expected to increase the share of privately-owned animals from the current 20% to about 80%. The use and allocation of pasture needs to be well controlled and market incentives must favour productivity per animal rather than increasing animal numbers, if a ‘tragedy of the commons’ scenario of over-exploitation is not to emerge.

The main concern for livestock herders is that they are able to respond quickly and flexibly to short-term swings in feed supply, in the first instance through spatial mobility. In most pastoral societies, customary institutional arrangements for land tenure have evolved to safeguard and regulate access at critical moments to key resources such as localised, moist depressions in the landscape or neighbouring forests. Even when Mongolian pastoralism was collectivised, land tenure arrangements probably always represented a hybrid of customary and command mechanisms. For instance, mobility of herds was locally negotiated across administrative (brigade) unit boundaries, supplementing formal organisational arrangements. If land and assets are fully privatised, this kind of adaptation will become problematic. Movements would be charged for and financially weaker units may be expected to find the cost prohibitive. Essential flexibility in land use would be curtailed.

The authorities are faced with a range of possible land tenure options between state ownership at one extreme and individual private freehold tenure at the other. An intermediate system of conditional rolling land leases granted by the state to groups of herders is one suggested option.

Continued from page 1, col. 3.
Health Impact Assessment

Development affects health in both positive and negative ways. Research is demonstrating that health impacts can occur in all sectors and at each development phase. For example, new roads increase HIV infection, and malaria. Rice cultivation accompanied by pig production increases the risk of viral encephalitis. Industrial communities risk respiratory disease, and damage from explosions.

Misconceptions abound here: malaria is not always associated with ‘swampy ground’. Urban water supply can enhance filariasis and dengue transmission. Pesticide is rarely handled safely. The health sector is rarely able to cope with an upsurge in ill-health unless informed well in advance and adequately resourced. National health statistics are rarely accurate enough to detect project-related health changes.

The institutional machinery required to undertake health impact assessment is still quite rare. Procedures are not well established and methodologies are not agreed. Aid agencies’ evaluation units, which seek to learn from previous projects, mostly do not cover evaluation of health impacts.

Screening of projects is the responsibility of the Desi Officers or Project Managers, who are not health specialists. They must have a logical procedure for deciding whether a detailed and expensive health sub-study is required. They have three screening tools: knowledge of health sensitive locations, such as the forest edge in South East Asia; health sensitive actions, such as water resource development; and health hazards experienced on similar projects elsewhere (gained from a desk manual or Guideline such as we are presently compiling for ODA and the ADB, or that issued by WHO), of which there are 5 main types:

- Communicable disease (e.g. malaria, gastrointestinal); Non-communicable disease due to exposure to chemicals, gases and dusts; Injury due to exposure to hazardous machinery and activities; Malnutrition due to changes in food availability and Mental illness due to stress and disruption of culture (information is generally weak on this issue).

The next step is that the health risks associated with the hazards need to be assessed, identifying the vulnerable communities, the environmental factor and the capabilities of local protection agencies. The distinction between hazard and risk is important. A health hazard is defined as a potential for causing harm. A health risk is an estimate of the likelihood that the potential is realised. For example, malaria is a health hazard in Africa, but a very small health risk in the middle of cities because of the absence of mosquitoes there. A project which created rice fields in the city would increase the risk by providing mosquito breeding sites.

Where significant health risks are identified by these procedures a specialist study needs to be done. Without such procedures, development projects will continue to produce unforeseen and indirect health impacts and transfer hidden costs to a health sector which is not prepared for them.

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Continued from page 1, col. 2.

Trade-offs have to be faced in the exploitation of tropical forests, conflicting resource use demands can be acceptably managed within a sensitive definition of ‘sustainability’. Research also shows that the institutional and human resource dimensions are indeed often paramount in effective pursuit of environmental as well as development objectives. Winpenny suggests that, in the water sector, institutional changes are necessary for better water allocation - including local reliance on NGOs and user groups and development of markets for distributing water to priority users - and that this will make unnecessary many of the costly and often damaging attempts to increase supply. Means’ work on the design of land-based resource rights systems shows how important the institutional framework is to sustainable management of the productive base. Lessons need to be learned from customarily ascribed arrangements. However, information on these matters is not usually readily available to policy makers: there needs to be continuing research input to policy design in this respect. As regards international technology transfer, needed, according to Bell, to upgrade, not just ‘environment-conserving’ technologies, but productive efficiency generally, success hinges on the complementary development of skills. Finally, Birley’s work is directed at another aspect of institutional competence: the capability of governments and development agencies in acknowledging and appraising the likely health impacts of interventions.

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Continued from page 3, col. 2.

This could ensure sustainably high levels of production and accommodate customary land use arrangements which worked to that end - as the command system did in practice, but private individual title would not.

The provisions that such a new resource rights system must include, which apply in any ecological setting, are consistent with the principles laid down in Agenda 21. The exercise has to start by specifying the rights and obligations on resource users or resource-using groups. Many different use rights are involved and they must be separately specified, rather than granted as a package. Each of the separate rights must be transferable. Resource users must also be encouraged to make long-term, durable investments (in this case, stockyards and shelters, wells, etc.) to enhance productivity: so they must be given exclusive use of such investments, the relevant political authority must guarantee resource rights, notwithstanding changes in party control, and compensation must be payable. Users must have a guarantee of re-issue of their use rights, so long as they comply with their obligations. When specified use rights are granted by lease, a fixed review period to assess compliance should be built in, allowing 3–4 reviews within the lease and its rolling forward to prevent any incentive to ‘use-up’ resources near the lease-expiry date.

Confronting the Socio-economic Impact of AIDS

AIDS was first reported only ten years ago but the epidemic of the Human Immunodeficiency Virus (HIV) has already reached global proportions. While tremendous progress has been made in understanding aspects of the virus and its transmission and of the disease process, hard facts on the socio-economic aspects of AIDS are surprisingly scarce. It still remains to translate the knowledge we have into strategies for prevention and methods to deal with the social and economic consequences of the pandemic.

By mid-1991, the World Health Organization (WHO) estimated that at least 8 to 10 million adults and about 1 million children had been infected with HIV worldwide. Most, if not all, are expected ultimately to develop AIDS. It is estimated also that already more than 1 million AIDS cases have occurred worldwide. In sub-Saharan Africa, according to WHO estimates, close to 6 million adults are infected with HIV and as many as 800,000 AIDS cases have already occurred. In some cities in East and Central Africa up to 30% of reproductive age are infected while in some rural areas 5% or more of all adults are infected.

In Africa the transmission of HIV is mainly through heterosexual contact. By contrast, in the industrial countries the transmission of HIV has to date mainly been associated with particular risk behaviours, e.g., sex between men and intravenous drug use. The epidemic is already established, with a mixed transmission pattern, in South America, notably Brazil, and it is rapidly gaining ground in various South-East Asian countries.

In populations with a high rate of infection, as in sub-Saharan Africa, the implications are likely to be devastating at the household and macro level. For affected individuals and communities, the consequences may include, in addition to profound psychological effects, a reduction of labour resources resulting in loss of income and food, costly medical treatment, reduced support for the elderly as adult children die, and a growing burden of orphans imposed on the extended family — one estimate is that, in ten central and Eastern African countries 6-11% of all children under 15 years will lose their mothers to AIDS in the 1990s. For an affected society, the effects include significant losses among the productive workforce of all economic sectors which might lead ultimately to a reduction in GNP. In addition, overburdened health services become overwhelmed by patients with HIV-associated diseases.

While this picture is bleak, even in the most severely afflicted countries, such as Uganda, which has a 6 to 8% overall rate of HIV infection in the adult population, more than 50% are not infected. HIV-associated mortality is severe, but net population growth remains positive and is likely to stay so for decades to come. Too often, however, a doomsday scenario is depicted, leaving decision-makers and the public with a feeling of defeatism and hopelessness.

In our studies of rural Uganda, we have observed in males and, especially, females, a strong association between poverty and infection with HIV. Poverty, displacement and social disruption facilitate the spread of HIV because they reduce people's access to information, education and health care (especially, in this connection, treatment of STIDs). Poverty can also induce damaging survival strategies: poorer women may have to barter sex for material goods and women who produce alcoholic beverages — a good source of income in a cash shortage — are expected to have liberal sexual practices. For men, the association between poverty and HIV infection could be secondary to the increased rates of infection among women of the same income stratum. In addition, AIDS appears especially to affect those in rural populations who are integrated into the modern economy and the urban labour force i.e. with the best possibility of bringing extra income into rural communities. Continued on page 4 column 1
Cost of care of HIV related illness
The routine health services in developing countries are affected — in some cases, overwhelmed — by the new burden of HIV-related disease, which comes on top of all the other diseases such as malaria, diarrhoea, and respiratory infections. How can developing countries provide an ethically and medically acceptable level of care for HIV-related illness without jeopardising the quality and quantity of care for other patients?

What is affordable in one country may be completely beyond the means of another. AIDS is now a significant medical problem in countries ranging from Malawi and Zaire with per capita GNP of about US$160 to Brazil with over US$1800. The HIV epidemic has hit sub-Saharan Africa especially hard. Many sub-Saharan African countries are spending much less than US$5 annually per person on drugs in both public and private sectors, and only about one-third of the population has regular access to basic essential drugs such as chloroquine or penicillin.

Treatment costs for HIV disease are mainly in the final stages, which is more costly and less effective than earlier care. Opportunities to intervene early in HIV infection and thereby slow the rapid progression to AIDS are being neglected. While many countries have produced drugs-needs estimates, few have taken account of the needs of HIV-infected patients.

Nine relatively inexpensive drugs, used according to specific diagnosis and treatment guidelines, plus anti-TB therapy, have been shown to provide a high degree of relief for AIDS patients in Uganda.

A 1988 WHO study estimated drug needs and costs for the most common HIV-related conditions, as follows: antituberculosis (TB) drugs, the most expensive at 28-30% of total drug costs (assuming 30% of HIV cases develop TB); followed by anti-fungals (required by over half of patients), at 25%; and the third largest item is the expensive antiviral drug, acyclovir, 10% (even though restricted to that 1% of herpes zoster patients whose eyes are affected).

As the table shows, on average, drug costs for HIV-positive patients are three to four times higher than for HIV-negative patients without TB. The lifetime cost of a home-care programme provided through the hospital, focusing on symptomatic planning of drugs for HIV into the overall drug supply system where there is an established essential drugs programme (which requires information in three areas, i.e. the number of AIDS patients expected to receive care, the number of episodes of each HIV related condition, and a standard treatment regime for each illness); 3) decentralise the care of HIV+ patients to lower levels of the health service or home; 4) develop and use standard protocols and algorithms which should reflect a realistic assessment of the extent to which treatment will produce benefit; 5) seek ways to reduce the cost of drugs, for example by using generic names and bulk procurement; and 6) minimise the economic burden on the patient's family.

<table>
<thead>
<tr>
<th>Status of Patient</th>
<th>Av length of stay (days)</th>
<th>Drug cost per day (US$)</th>
<th>Total av drug cost (US$)</th>
</tr>
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<tr>
<td>HIV+ aTB-</td>
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<td>0.76</td>
<td>8.34</td>
</tr>
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<td>1.45</td>
<td>24.07</td>
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<td>HIV+ aTB+</td>
<td>62</td>
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<tr>
<td>HIV- aTB-</td>
<td>12 months</td>
<td>NA</td>
<td>5.96</td>
</tr>
</tbody>
</table>

Home care patients suspected of having TB are admitted to hospital for further investigation.

Demographic Model of AIDS
The rapid increase in the prevalence of HIV in parts of sub-Saharan Africa has given rise to much concern about the long-run demographic consequences of the epidemic. Our understanding is, however, constrained by our lack of knowledge of the various behavioural and epidemiological factors influencing the rate of spread of the virus (e.g. rates of sexual partner change and the probability of viral transmission through sexual intercourse).

The main tool for examining the consequences is mathematical models of the transmission dynamics of HIV that incorporate epidemiological, behavioural and demographic processes. A number of models have been developed specifically to examine the impact of the epidemic in sub-Saharan Africa. The structure of the models varies greatly depending upon the types of questions they were designed to address. None, however, is capable of making accurate predictions because of the many uncertainties surrounding key parameters. In order to improve the accuracy of the models better information and greater precision in estimates of the key parameters are required.

‘Models show that early prevention programmes are vital’

While the quantitative results of the models differ, they are consistent in drawing attention to the potential impact of the epidemic on demographic patterns in sub-Saharan Africa in the absence of a vaccine or of significant changes in sexual behaviour patterns. The impact includes a decrease in total population growth rates in the longer term in the order of 1-2%, as a result of a substantial increase in mortality rates among adults in their productive ages and infants, and a decrease in life expectancy. The fact that AIDS has already been revealed as the leading cause of adult and infant mortality in some urban centres in Africa supports this conclusion.

The demographic impact of the HIV epidemic will in turn have repercussions on the economic development of a country and the wellbeing of its inhabitants. The HIV epidemic is placing a substantial burden on the health care system of the Sub-Saharan region. The epidemic is likely to increase the demand for health care services and decrease the availability of resources for other health services. The epidemic is likely to increase the burden on the health care system of the Sub-Saharan region.
AIDS in Africa

The doubling time of the AIDS pandemic is currently between 1 and 3 years in some regions in Africa. Unless there is a rapid shift in the sexual practices of the heterosexual population (the main conduit of infection in most of Africa), or an effective intervention, very considerable AIDS-related mortality is inevitable.

Uganda is one of the worst affected countries. AIDS-related illness and death primarily affect women between 20 and 30 years and men between 25 and 35, which foreshortens their role as parents and producers. Expectations of ‘family life’ are increasingly threatened — of young adults having and bringing up children; of children themselves enjoying the security and socialisation provided by parents and kin; of parents having the emotional and financial support of their children in old age; and for all, expectations of a proper burial which helps to secure a place in communal consciousness after death. It is not surprising that in areas worst afflicted, profound stresses are imposed upon family and household relationships.

A major issue concerns orphans. For example, in Rakai District, Uganda (estimated population 350,000), there may be as many as 40,000 children whose parents (one or both) have died. Although the extended family network usually copes very well with looking after orphans the sheer number of such deaths is putting family and community coping mechanisms under severe strain.

There are also significant economic impacts upon the household. Productive labor is reduced by debilitating illness followed by death, thus altering the balance between consumers (the old and very young) and producers. The labour time of spouses may have to be diverted from production to caring for the sick. There may be diversion of cash from the farm to medical expenses and to paying for funeral ceremonies. Children can be withdrawn from school to reduce cash expenditure and increase labour time on the farm. Among the many other adaptive mechanisms we have observed there is an increase in the length of the working day for still-healthy members and switches to less labour-intensive crops.

The impact of AIDS upon different farming systems in Uganda was studied with a methodology replicable for the rest of Africa. We used an algorithm for classifying the vulnerability of farming systems to labour loss, producing a four-fold classification. This was superimposed upon a map of seroprevalence to identify areas most threatened by AIDS.

In Uganda the most severely afflicted areas are, as it happens, those with the most resilient farming systems. There are two rainy seasons and the demand for agricultural labour is well-distributed throughout the year. There are also a number of crops to which households can retreat in the face of labour loss. Systems with marked seasonal peaks of labour demand and without alternative substitute crops (typically in drier areas) will be more vulnerable, although other subsidiary criteria are also applied in the algorithm. There is also growing unpublished information that suggests that labour shortages may shortly affect the plantation sector in Central and Eastern Africa.

There have been responses to the pandemic at the international, national and local level. Especially noticeable are local NGOs and new community organisations, set up to counsel and encourage gainful employment for the sick, and to alter sexual practice through education. Nonetheless, the rapidity of growth of seroprevalence highlights the extremely damaging implications of delay on the part of some governments (inside and outside Africa) in implementing an effective AIDS strategy. Such strategies must look upstream to preventing the spread of AIDS through education, as well as downstream to dealing with its growing socio-economic impact, loss of productive labour, and the disruption of the family.

Preventing HIV Transmission in Thailand

In Asia the level of HIV infection has lagged behind that of other regions, but in Thailand, and perhaps elsewhere, the HIV epidemic has now ‘taken-off’. Projections of HIV infection have strongly indicated that transmission rates are faster — once a pool of infection is established — in societies, like Thailand, where a few people, particularly prostitutes, have very many partners, than in societies where large numbers of people have a few partners. The very large Thai commercial sex industry and needle/syringe sharing among injecting drug users provide a fertile context for the rapid transmission of HIV. The existence of a sex-oriented tourist trade from the more affluent countries in the region also facilitates the spread of the virus internationally.

Although the greatest societal concern in Thailand has been for potential HIV transmission via female commercial sex workers (CSWs), initially the most dramatic rates of infection were detected among injecting drug users. In September 1988 43% of a random sample of injecting drug users attending drug treatment centres in Bangkok were diagnosed HIV seropositive. Thailand has a long history of opiate consumption, which has largely switched from opium smoking to heroin injecting over the past two decades or so.

The large scale of the commercial sex industry — catering mainly to local demand — is inherently related to the cultural double standard for men and women. A line is clearly drawn between ‘respectable’ women who are expected to preserve their pre-marital virginity and prostitutes to whom recourse is taken by males for both pre- and extra-marital sex.

The Thai commercial sex industry spans a wide diversity of institutions, including ‘call girl’ agencies, executive clubs, ‘Go-Go’ bars, coffee shops/tea houses, brothels, ‘streetwalkers’ and even mobile CSWs catering for rural market fairs. HIV serological surveys have indicated rising levels of infection, particularly in low income brothels. High incidence was recorded first in the Northern region (Chiang Mai and Chiang Rai) and laterly in other parts of the country.

The Siriraj Family Health Research Center, in collaboration with the Institute of Population Studies, University of Exeter, has investigated HIV seroprevalence and the psycho-social factors influencing condom use in a (high income) massage parlour and a (low income) brothel in Bangkok. The preliminary findings indicate less than 2% HIV seroprevalence in the massage parlour, but substantially higher levels of infection in the brothel. Whilst one quarter of massage parlour CSWs had engaged in unprotected intercourse at least once in the last week, twice as many of the brothel CSWs had done so. In both places condom use was not linked to level of knowledge about HIV/AIDS (which was low), but to a positive attitude to consistent condom use in general. In the brothel practically all of the CSWs had engaged in unprotected intercourse with customers at some time.

There was virtually no evidence of CSWs being able to persuade non-co-operative customers to use condoms. The crucial point seems to be that the Bangkok CSWs have, at present, no choice but on occasion to accept unprotected intercourse with customers. The clear implication is that a ‘100% condom use in the commercial sex industry’ policy has to be speedily and effectively implemented, to provide the institutional support needed for CSWs to protect themselves.

Continued from page 1 column 2

munities. An AIDS-poverty circle looms, where economic hardship and poverty fuel the AIDS epidemic and the epidemic negatively affects the developmental potential of individuals and countries. It may not be by chance that the African countries hardest hit by AIDS are those which have already gone through a decade of economic and political chaos and decline in living conditions and social services.

What are the implications of all this? First, economic growth is an important tool to counteract the AIDS-poverty circle. It will require strong political will in governments and agencies to recognise that, since AIDS is only one of numerous major economic and health problems, very large shares of available resources should not be diverted towards the AIDS problem.

Nevertheless, prompt action is vitally important. There are convincing arguments that the sooner effective AIDS control measures are implemented, the greater will be the effect on the overall magnitude of the epidemic and the more manageable its socio-economic impact. In the absence of curative treatment or vaccines, AIDS control approaches will have to be based on behavioural change strategies and control of sexually transmitted diseases.

Commonsense pro-active approaches are needed. The distribution of HIV infection within countries is very uneven. Measures have to be area and culture specific, and tailored to groups or parts of countries rather than to countries as a whole. A group of particular importance are women, among other reasons for their vital role in the household and its economy. Available means of protection are often in conflict with cultural values making it extremely hard for women to protect themselves.

Finally, mechanisms must be put in place to alleviate the physical and emotional suffering of individuals and the effect on families, for example, the care of orphans. In developing countries with high seroprevalence rates this burden will often fall upon communities, but NGOs could play a major role in enhancing the coping capacity of communities. In some areas of developing countries support for changes in agricultural production methods may also be necessary to reduce labour demands. And in populations with high rates of infection among white collar and skilled workers, the timely education of replacements will be essential.

Dr Daan W. Mulder, Head, MRC (UK)/ODA Programme on AIDS in Uganda, c/o Uganda Virus Research Institute, PO Box 49, Entebbe, Uganda.

Development Research Insights is published jointly by the Overseas Development Institute and the Institute of Development Studies. The Overseas Development Administration has given financial support for a trial period through its Economic and Social Division. The Editor alone is responsible for the contents of each issue, the Directors of ODI and IDS acting as editorial consultants. Neither the ODI, IDS or ODA take responsibility for the views expressed in this publication.

DEVELOPMENT RESEARCH INSIGHTS
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Production and Distribution by the Overseas Development Institute. Printed by The Russell Press, Nottingham
Trade Policies Today

The world economy is in a sorry state, and rife with uncertainties. Economic growth has seldom been more sluggish; unemployment is widespread; near chaos reigns in Russia and Eastern Europe; competition for concessional finance has never been greater; the Uruguay Round of trade negotiations staggered from one impasse to another.

If the Uruguay Round fails, the world economy would not collapse but it would certainly be worse off. Protection would increase, business confidence would fall further and some developing countries, moving tentatively towards trade liberalisation, could recoil into their protective shells, the world recession would be prolonged.

For developing countries to choose outward-looking policies over inward ones in these circumstances takes great courage. In earlier GATT negotiating rounds most developing countries were conspicuous by their absence. But from the start of the Uruguay Round they seem to have realised that much is at stake in these negotiations in terms of greater market access for their exports, in preserving a rule-based, multilateral trading system and in defending their interests in the new issues of trade in services, intellectual property (TRIPS) and trade related investment measures (TRIMs). They have participated actively and to good effect, to judge by the draft settlements on a number of issues such as textiles, tropical products, services and TRIMs.

Their involvement has certainly also affected the direction and volume of economic research. The Uruguay Round discussions have been better informed by economic analysis and econometric research than any other set of international negotiations. Issues have been clarified, economic interests identified, new measures of the costs of intervention, such as producer subsidy equivalents (PSEs), developed and the likely effects of changes in protection and subsidies quantified.

One example is the avalanche of articles on trade in services, an area previously neglected by most economists. Liberalisation of trade in financial services, according to Ryan, might provide opportunities for the NICs, but other developing countries are likely to find this a difficult field to enter without a protected home market. Another is the burgeoning of computable general equilibrium models to capture and measure the complex responses to changes in commercial policies. Page et al. draw on several such models in assessing the effects on the developing countries of what they judge to be the likely outcome of a moderately successful Uruguay Round.

The gains and losses reflect differences in trading structures which characterise different groups and regions. Reform of the Multi Fibre Arrangement brings large gains to Asian countries who dominate textile exports, but all regions do gain. That conclusion is reinforced by Moore's detailed study. In agriculture the net gains to developing countries together are zero — significantly positive for several countries in Latin America, but negative for much of Africa. Effects in other areas are too difficult to quantify, but are generally likely to benefit developing countries. Increases in world income resulting from more efficient resource allocation and the macroeconomic gains from increased confidence in new business investment will bring them further gains. But in one area, TRIMs, according to Balaubramanyam, developing countries may have had good reasons for resisting industrial countries' proposals.

The European Community's rapid moves to complete the Single European Market have also triggered much research. Davenport and Page, in another ODI study, deduce small potential trade gains for developing countries. But they also point up serious risks of investment diverted to Eastern Europe, of raised standards and of other threatened barriers to EC exports arising from the dislocation of structural adjustments within Europe. One reason for continued resistance to further trade liberalisation on the part of

Continued on page 4 column 2

How Trade with the South Affects Workers in the North

The adverse effect of imports from developing countries on workers in developed countries is often dragged into debates over trade policy. Liberalisers argue that such effects are small, protectionists that they are large. Each of these views is half true. The impact is not small — but protectionism is the wrong response.

Everyone agrees that trade with the South benefits some Northern workers, and hurts others. For example, those who manufacture clothing and those who are unskilled. Earlier studies concluded that the hurt was small, involving hundreds of thousands rather than millions of jobs. However, the methods used in these studies had serious downward biases.

New estimates suggest a larger impact. During 1960-90, between 6 and 12 million unskilled jobs were lost in Northern manufacturing as a result of the changing division of labour with the South — although the relocation of labour-intensive activities was partly offset by expansion of skill-intensive ones. Moreover, many Northern manufacturers survived only by finding new ways of producing with less unskilled labour. Including the effects of such defensive innovations would probably double the estimated loss of jobs in manufacturing. Including the effects of trade on sectors other than manufacturing might require a further doubling. The impact was spread over three decades, but not evenly: about

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Trade Liberalisation in Financial Services

The rapid rise of Japanese banks’ share of world assets from parity with the USA in 1984 to more than double the US level a mere three years later is frequently attributed to Japan’s very high aggregate savings rate. By contrast, the growth of the US international banking sector during the late 1960s is thought to have come about as US banks sought funds abroad for US borrowers. Domestic regulations held down rates payable to depositors and limited the funds banks could raise locally. These factors explain only why Japan should be a net lender and the USA a net borrower of funds — not in international financial intermediation.

Two possible explanations for comparative advantage in this field are simple factor endowments (particularly capital) and increasing returns to scale. However, since capital is extremely mobile in this market and evidence of returns to scale is weak, neither argument is satisfactory in this case. The situation is better explained by regulatory patterns. Japan’s prudential regulations on banks have been comparatively lax, allowing Japanese banks to hold proportionally lower amounts of low or zero interest domestic assets and to gain a competitive advantage by operating on low margins; the US decline is similarly attributable to the costs of domestic bank regulations. The harmonisation of regulations, whether under the auspices of the Bank of International Settlements or the GATT, ought to remove these anomalies.

The reasons for the reluctance of the developing countries to liberalise lie elsewhere in the specific factor endowments needed to trade competitively. International financial services are intensive users of skilled labour. The NICs do have highly educated populations. But ‘learning by doing’ may be a more important factor than human capital per se. Past regulatory practices have underwritten long periods of corporate ‘learning by doing’ by existing market leaders. Countries not presently active in this field would have considerable difficulty entering and building up a competitive position if trade were liberalised.

Thus, the US and European banks perceive that harmonisation of regulations and freer trade will constrain Japan. They also believe that the high initial manpower requirements and long learning curve remove any threat of competition from the developing countries and will serve to entrench the position of the industrialised countries indefinitely in this sector.

Contact: Dr. Gillian Ryan, Department of Economics, University of Birmingham, Edgbaston, B15 2TT, Tel.(021) 414 6645, Fax.(021) 414 6630. Publication: Ryan, C. (1990), ‘Trade Liberalisation and Financial Services’, in The World Economy, 13 (3).

International Trade in Textiles and Clothing

Current international trade flows in clothing and textiles are not consistent with production cost differentials between developed and developing countries. In particular, West Germany and Italy, much higher cost producers than the developing countries and than other European countries such as Portugal, are both net exporters of textiles, and Italy is a net exporter and Germany only a small net importer of clothing. This can be explained partly by these countries’ specialisation in certain types of textiles (Italy in wool, Germany in synthetics). But it is mainly due to marked imbalances in regional trade.

Within the framework of the Multi Fibre Arrangement (MFA), the West European countries, USA and other industrialised countries — with the exception of Japan — have negotiated a series of separate systems of quotas and restraints on imports from developing countries. As the table shows, the EC’s arrangements have been the most discriminatory. Only 21% of European textile imports and 38% of clothing imports come from developing countries. By contrast, the USA and Japan obtain respectively 51% and 67% of imports of textiles and 87% and 84% of imports of clothing from developing countries. At the same time, most barriers to trade within the EC have been removed and Italy and Germany have become the dominant suppliers.

<table>
<thead>
<tr>
<th>Origin of Imports (%) Textiles</th>
<th>West Europe</th>
<th>USA</th>
<th>Japan</th>
<th>De/Gr CoS</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. Europe</td>
<td>79</td>
<td>3</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>31</td>
<td>6</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>26</td>
<td>7</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Origin of Imports (%) Clothing</th>
<th>West Europe</th>
<th>USA</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. Europe</td>
<td>62</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>USA</td>
<td>10</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>13</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

The distribution of industrialised countries’ imports of textiles and clothing by region, 1988

Confirmation of protection in the European clothing market is given by the sums paid by producers in developing countries for market access. In most developing countries MFA quota export licenses are allocated by government, but in Hong Kong, they are sold by auction. Producers paid up to 26% of the export price for product-specific quotas to European markets in 1988.

Phasing out of the MFA, particularly its European version, is long overdue. Its suspension would lead to greater imports of natural fibre textiles and of some, but not all, items of clothing from developing countries. Although production of clothing is likely to remain labour intensive (despite the technical possibilities of automation of production), because retail chains ask for short runs of high fashion items, high quality standards often cannot be met by the lowest labour cost countries without technical assistance. Wage levels have been rising rapidly in those countries which have attained such standards and had strong export performance to date. Wages are already higher in Taiwan, South Korea and Hong Kong, than in Turkey and Portugal. This suggests that industrialised countries will not necessarily lose aggregate market share in clothing. It may help explain the relaxation of the stand for the MFA in the Uruguay Round.

How will the GATT Settlement affect Developing Countries?

For the first time developing countries have participated in force in multilateral trade negotiations. In the Uruguay Round of the GATT, they had clear objectives for their agricultural, textile and clothing exports, and some wanted to protect their positions in services, intellectual property, and laws affecting foreign investment. Their moves to liberalise their own trade had also increased their interest in strengthening a rules-based international trading system. As the negotiations end, an ODI study has examined how the likely outcome will affect them.

In the traditional GATT subjects, especially tariffs on manufactures other than textiles and clothing, and in traditional primary commodity exports, there is little left for any country to gain because barriers have come down so far already, and the Round will not reduce tariff escalation. Changes will come mainly from adjustments in relative preferences. Average effects will be small. The important effects come in those agricultural products which compete with subsidised and protected EC, US and Japanese agriculture and from the dismantling of the Multi-Fibre Arrangement. For exporters of these products, higher volumes (and, in agriculture at least, prices) will affect them.

The estimates look low for two reasons. They make no explicit allowance for the increase in world income, and therefore trade by all countries, which is the objective behind trade liberalisation. This will be positive. Similarly, the increased transparency and enforceability of trade rules ought to be beneficial to developing countries. GATT's new Trade Policy Review Mechanism, already producing informed analysis of countries' trade regimes, is an achievement. The study also identifies potential hazards. The agricultural and MFA agreements will be stag­red, with the most valuable benefits at the end, Round gain most.

Putting TRIMS to Good Use
Trade-related investment measures (TRIMS) have long been a feature of the regulatory framework governing foreign direct investment (FDI). TRIMS are legitimately included on the agenda of the Uruguay Round, for their exclusion would remove a substantial part of FDI-induced trade from the purview of the GATT. But the effects on trade, though complex, are incidental and probably on balance neutral.

Two of the most common TRIMS are local content requirements and equity ownership regulations. Local content requirements may well entail short term costs (through shaming of cheaper imports) for the host economy — but these are willingly borne: they can help to unmask local international comparative advantage and reduce transfer pricing. Foreign firms tend to accept the provision: they would in any case seek viable low-cost, local suppliers and the regulation merely hastens the process.

Equity ownership regulation is usually tied to market orientation (i.e. majority foreign ownership of equity is only allowed when all or most output is exported). It is a subsidy to firms to enable them away from the profitable domestic market. With the exception of a few multinationals, which constitute as a tax on profits that they can avoid by changing the global distribution of their investments, foreign firms appear also to have acquiesced in this policy.

The lure of majority ownership can be an effective way of inducing established foreign firms to diversify into difficult and risky export markets. In India, it induced Unilever to move into the development priority sectors of chemicals and fertilisers, out of its traditional stronghold of soaps and detergents.

The crucial issue is how best to design TRIMS in pursuit of their primary objective — maximisation of gains from FDI, primarily in technology transfer. Both local content and equity regulation are effective in this respect and with some simple refinements could be made even more so.

Local content requirements should be made to rise progressively over time for FDI firms, or else all firms (FDI or not) should be subject to increased levies of taxation but with rebates linked to local purchases. As to equity ownership, the best policy is for governments to reduce the degree of domestic protection and adopt tax policies maximising revenues from FDI, but tying equity participation to market orientation is an acceptable second best.


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Summary of Quantifiable Uruguay Round Effects on Developing Countries by Region (% exports)

<table>
<thead>
<tr>
<th>Region</th>
<th>Total</th>
<th>Asia</th>
<th>America</th>
<th>Africa</th>
<th>ACP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tropical and Temperate agriculture</td>
<td>2.9</td>
<td>3.6</td>
<td>0.9</td>
<td>1.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Textiles and clothing</td>
<td>-0.1</td>
<td>-0.1</td>
<td>0.1</td>
<td>-0.7</td>
<td>-1.1</td>
</tr>
<tr>
<td>Tariffs'</td>
<td>-0.1</td>
<td>-0.1</td>
<td>0.1</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>2.8</td>
<td>3.5</td>
<td>1.5</td>
<td>0.5</td>
<td>1.3</td>
</tr>
</tbody>
</table>

The distribution of the benefits among countries will provide some significant benefits. Some food importers will have higher costs, but these will be low relative to total trade. For developing countries as a group these should be outweighed by the gains. The table summarises the results. Taking the most favourable assumptions about liberalisation and supply responses raises the average static gain from 3% to 6%; low estimates give 1%.

The distribution of the benefits among products means that gains go mainly to Asia (clothing exports, with some gains also from other tariff reductions), second to Latin America (food exports), and least to Africa (few relevant exports, food importer, potential loser on trade preference erosion). This skewed distribution of benefits calls for other measures of support for the losers. But an important finding is that those countries which have participated most actively in the Uruguay Round will have the best policy is for governments to reduce the degree of domestic protection and adopt tax policies maximising revenues from FDI, but tying equity participation to market orientation is an acceptable second best.

Europe: 1992 and the Developing World

Building models of the impact of 1992 is in fashion. Even so, little attention has been paid to the impact the Single European Market programme may have on the developing countries.

It is difficult to quantify the effects in view of the many complex and often interrelated channels through which 1992 will affect real merchandise trade flows, the terms of trade, trade in services, foreign direct investment (FDI) and so forth. Moreover, a number of assumptions are required. The most important concerns the impact of 1992 on the Community economy itself, still an area of considerable controversy, which is crucial to the developing countries.

The Commission’s own studies estimate that aggregate GDP in the EC will probably increase by about 5%. On this basis we calculate trade gains (creation, diversion and terms of trade) to the developing countries of 3.7bn ecus. There would be some additional gains from the elimination of bilateral trading regimes between EC states and individual developing countries (particularly important in horticultural goods, bananas and textiles and clothing), and of EC excise taxes on tropical beverages and from more trade in services. All in all, the quantifiable gains come to less than 7bn ecus in total, about 6% of current developing country exports to the EC. (The distribution of these gains will however vary considerably among different developing countries.)

It is possible that the unquantifiable effects could be much more important. These include the diversion of FDI from the developing countries to the EC to take advantage of easier intra-Community trade and higher standards might be applied to imports into the EC, particularly on plants and cut flowers (a new growth sector), fish and meat. But the threat of a protectionist ‘Fortress Europe’ comes mainly from the tendency to look for foreign scapegoats to adjust problems arising from structural change. Regional and sectoral distortions will occur well beyond January 1st, 1993, and, with them, pressures to adopt ‘administrative’ measures, antidumping actions, voluntary export restraints and so forth, against ‘unfair’ (i.e. competitive) imports. The developing countries are vulnerable to such neo-protection because the least able to threaten retaliation. Already 1992 has had identifiable effects within the Uruguay Round, pushing negotiations into new areas, such as services, with technical standards a candidate for the future. But for the developing countries there are dangers, in particular the threat to multilateralism. Within the context of 1992, the EC has realised hitherto unexploited power to negotiate bilaterally (e.g. with Japan over cars). With the emphasis placed by the US on bilateral ‘crowbar’ liberalisation, this could, especially if the Uruguay Round were to break down, weaken the influence of the GATT and the important safeguards it affords to the trading interests of the developing countries.

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Continued from page 1 column 3

70% of it occurred in the 1980s. The effects have not been gender-neutral. Within manufacturing, sectors employing a high proportion of women have been among the hardest hit. However displaced females have been more successful in finding other jobs than displaced males. So the share of females in the manufacturing labour force has not declined in most countries. However the reduction in the share of manufacturing — a male-dominated sector — in total employment has improved the relative economic position of women.

The main losers from the changes in trade with the South have been unskilled workers. The demand for people with only a basic education, relative to that for people with more skills, has been reduced by 20-25%.

In the US, and to some extent in the UK, this has widened the gap in wages between skilled and unskilled workers. Elsewhere in Europe, where wages are more rigid, the problem has emerged mainly as a rise in unskilled unemployment.

Northern governments should take more action to help unskilled workers. Protection would be the worst way of doing so. It is more costly than other approaches, and it hurts much poorer workers in the South. But until there is recognition of the size of the problem which trade causes for unskilled workers, and better approaches to solving this problem are implemented, political pressure for protection will remain hard to resist.

Improvement of education and training — to shrink the supply of unskilled labour — must be an important part of the solution. But this is bound to be slow. For the next decade at least, other measures will also be needed. There should be more redistribution of income through the tax system from skilled to unskilled workers, especially in the UK. In Europe, the demand for unskilled labour should be boosted by public employment schemes and by a progressive wage tax on employers.

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Wood finds that truth lies between. Such increased trade does displace significant numbers of workers and lowers the real wage of unskilled labour. This finding does not strengthen the case for protection, which remains the worst possible response - the most harmful for the South and the most costly for the North.

Alasdair MacBean, University of Lancaster

Development Research Insights is published jointly by the Overseas Development Institute and the Institute of Development Studies. The Overseas Development Administration has given financial support for a trial period through its Economic and Social Division. The Editor is responsible for the contents of each issue. The Directors of ODI and IDS act as editorial consultants. Neither the ODI, IDS or ODA take responsibility for the views expressed in this publication.

DEVELOPMENT RESEARCH INSIGHTS
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Production and Distribution by the Overseas Development Institute. Printed by The Russell Press, Nottingham
Democratising Development

Northern-based NGOs are reorienting themselves towards influencing key aspects of the development process rather than seeking to control micro-development projects from beginning to end. They are having first to change their strategy towards the State.

They have three choices. They can oppose the State, complement it or reform it but they cannot ignore it.

Opposing the State means using all available channels to frustrate any government plan which is negative for the poor. It may entail organising protests, using the law courts, joining forces with the political opposition or popular movements or making widespread use of the media.

Complementing the State means filling gaps in government services. For example, in Eastern Zambia Oxfam provided vehicles (mainly bicycles) and training for government primary health care workers. Also in Zambia nutrition groups have made widespread use of the media.

Reforming the State entails collaboration with government departments to help them improve the services they provide. The NGO does not take responsibility for service delivery but helps to strengthen existing systems. In Karnataka, India, an NGO consortium assembled evidence on the failings of a government-implemented social forestry programme and persuaded the foreign funders as well as many local officials of the need to make changes.

The degree to which NGOs choose to and are able to influence governments depends on the local State regime. In military and other dictatorships, NGOs are likely to side with — or be — the political opposition, although there may be some scope for collaboration with ‘good’ departments. In other single-party states, the government may have an overall pro-poor development approach, but with serious blind spots e.g. on human rights, gender and environmental issues. NGOs can play an important role in such situations, supportive but constructively critical. In liberal democracies, NGOs may collaborate with government on some programmes, challenging it in others. An NGO might find central government sympathetic but local government officials hostile. Or it might even be endorsed by the State, which can bring problems to NGOs jealous of their independence and lines of access to foreign donors.

In all cases, however, there is scope for NGOs to have some interaction with government and ‘scale up’ their activities. There are alternative methods available: NGOs can aim at project replication (help in the mounting of other NGO and official programmes); building grass-roots movements; influencing reform in government and official aid agencies’ policy and practices; and international advocacy (building coalitions of northern and southern NGOs to raise public awareness and to lobby for reform).

In their new ‘influencing’ mode, NGOs from the north need also to reconsider their relationship with those from the south. Access to official information and to decision-makers and networks, skills of communication, lobbying and research are becoming more important to southern NGOs than funds. Northern NGOs which cannot offer ‘software’ appropriate to the ‘information age’ may find their erstwhile partners seeking out new allies, such as environment pressure groups of the north.


Global Integration and Social Democracy

The world is moving in the direction of a single market — preeminently in capital, but also (despite continuing protectionism) in goods and services, and in technology and skills. The value of international transactions has vastly expanded in all these dimensions since the second world war. In the developing world, although reform packages under structural adjustment vary in their pattern and depth by country and region, overall they have reinforced economic liberalisation and added to the globalisation of the economy.

Global integration of economic activity goes along with a tendency towards convergence of policies in such fields as taxation and social security and welfare, to norms set by the major economic powers. There is increased competition to attract foreign capital and technology; and continuing reinforcement of the power and influence of multinational enterprises, international financial institutions and large industrial countries. All these forces act to undermine developing country governments’ control over domestic social and economic policy.

At the same time, the imperatives of social policy have become more pressing. Income and wealth inequalities have been intensified nationally and internationally, in industrialised as well as poor countries.
NGOs and the State in Bangladesh: a case study of the Land Reform Programme

In 1984, the Bangladesh government promulgated a Land Reform Ordinance for the distribution of government-owned land among the functionally landless. Late in 1986, it asked NGOs to assist in programme implementation. Initially, those involved were all large, nationally-recognised agencies based in Dhaka, although the NGO Land Reform Coordination Council they established later included local and regional NGOs among its 60 members.

A lack of resources in the Land Ministry was identified as the main constraint to progress and a Land Reform Cell was set up in the Ministry with NGO funding, staffing and support. Its first task was to draw up a policy document for implementation of the programme. Among other measures this provided for Land Distribution Committees at local government level with NGO and landless representatives. Thus, two layers of NGO-government cooperation were established — centrally in the Land Reform Cell, and in the field, with NGO membership of local committees.

Official records stated that 40% of the available land was distributed within two years. However, an evaluation identified numerous irregularities in procedures. Many applicants were not given receipts for applications, few of those who received an allocation of land on paper actually got physical possession, and hardly anyone managed to complete full land registration. Poor applicants were harassed and land was misallocated.

On the government side, top-level authorities instigated the venture but the local government officials charged with implementation were neither motivated nor ready with the required skill, experience or manpower. Staff were frequently transferred and were poorly trained, supervised and monitored by district and central government officials. Decision-making in the Land Distribution Committees was dominated by the local Council Chairman and village leaders. Neither could the NGOs locally assist. Although there was good NGO-State cooperation at the centre, cooperation in the field was undermined by the traditional antagonism between NGO leaders and the village elites which dominated local government, although well-established local NGO representatives had more influence than branch representatives of national agencies. Insufficient coordination within the NGO community meant that abuses identified locally by NGO representatives were not fed up to the Ministry via the Coordination Council, as intended.

There are lessons here for other centred attempts involving NGO-government cooperation. Poverty-focused programmes must be fully cognisant of prevailing local power structures if they are to have any impact.

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Evaluating the impact of NGOs

As part of an ongoing series of sixteen in-depth evaluations of the impact of NGO rural poverty alleviation programmes focused on credit, income generation and skills training, researchers at the ODI have been devising simple but effective methods of participatory evaluation for use by NGOs. These methods were developed in collaboration with local NGOs during the course of fieldwork in Bangladesh, India, Uganda and Zimbabwe, within a flexible framework which provided common parameters for the in-country evaluation work.

The approach rests on two basic premises. The first is that in view of the limited availability of quantifiable data for most NGO projects, the point of departure for the evaluations should be the degree of consensus that exists between evaluators, the NGO and project participants over the extent to which the overall objectives have been achieved. The second is that the indicators used to determine project impact derive from the ways in which the intended beneficiaries perceive change to have taken place, both economic and social. Data gathered from interviews with grassroots organisations, focus groups and individuals provide a rich

Continued on page 3

NGOs in Technology Development and Dissemination

This research is exploring cases of collaboration between NGOs and governments in developing and disseminating agricultural techniques relevant to the needs of the rural poor in 20 countries in Asia, Africa and South America.

In Bangladesh, four NGOs have compiled information on their activities: BRAC, on irrigation and poultry; Proshika, on social forestry and livestock; Friends in Village Development Bangladesh (FIVDB), on duck rearing; and Mennonite Central Committee, on new crop variety development. They illustrate the variety of contexts in which collaboration has occurred and highlight factors which have either facilitated or undermined the ventures.

The most successful collaborations have been based on improving service delivery of scarce state-controlled inputs (e.g. vaccines). But they have tended to be small-scale and local, often based on relationships between key individuals; the potential for training has often not been followed up by government. By contrast, relationships centred on people’s access to common property resources, such as forest lands, have been less successful since they threaten vested interests.

Examples of complementary work between NGOs and government are rare. This seems to be partly because of contradictory views on technology development. Should NGOs develop technologies and governments replicate, or vice versa?

FIVDB’s experience perhaps represents grounds for future collaboration. FIVDB has pioneered duck rearing in Bangladesh as an income-generating activity for poor women and has imported new varieties and established a hatchery.

The NGOs’ distinctive contribution has been in identifying the landless as partners in research and development and focusing on technology development relevant to the needs of low income people. They have also developed new forms of ownership of technology. There is no single model for collaboration; its form varies with the aims and scale of the NGO and with the state agencies involved. The fundamental challenge is for NGOs to try and influence the public sector research agenda further towards the needs of the rural poor.

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Local Institutions for Watershed Management

A watershed management approach is being tried out in India which involves villagers in lengthy participatory appraisal and planning before any commitment is made to spend resources. Comparisons of the programme (Aga Khan Rural Support Programme in Gujarat) with control villages come out strongly in its favour.

The major findings are:

**Investments in the watershed.** Investments in participatory programmes by the community are more than half of the total cost while the community contributes hardly 2% of the costs in other programmes in a similar area.

**Unit cost of the watershed.** The unit cost of watershed development was Rs 1340 per hectare for village planned programmes compared to Rs 3000 to 7000 per hectare for externally generated plans.

**Cost of the support institution infrastructure.** The overhead costs of the support institution as a percentage of the total programme cost were 9% in the case of locally managed programmes compared to 29% for other programmes.

**Effectiveness of the support institution.** The cost of preparing a treatment plan per acre fell from Rs 130 in case of externally prepared plans to Rs 10. This amount was in any case contributed by the community and the plans prepared by the local village cadre of para-professionals.

**Efficiency of the support institution.** Each support professional was able to cover an area of 220 hectares in participatory programmes as compared to 40 hectares for other programmes.

**Productivity, income generation and profitability.** The participatory programmes resulted in significant income increases in a three year time frame, strengthened by capacity developed in the community to analyse, monitor impact and take decisions based on the analysis.

**Multiplier effects.** The village communities were able to save significant amounts from their income increases. They initiated credit programmes and pooled marketing of produce to get better prices. In other projects investments were only made in the physical infrastructure.

**Sustainability.** Environment sustainability has increased due to prevention of soil loss. Productivity increases have been sustained for a longer period of time.

**Productivity increases have been sustained for a longer period of time.** Investment by farmers on their land has increased by 40-50% for the programmes. Financial institutions consider the farmers in these programmes more creditworthy than other farmers. The extent of out-migration has significantly decreased.

**Developing local capacity and scaling up.** Community managed programmes are managed by a cadre of village extension volunteers and village institution functionaries working in teams in diverse areas of village resource appraisal, planning, watershed management, dryland farming, forestry, credit, marketing, monitoring and evaluation. They are now taking responsibility for rapid scaling up of the programme, e.g. by giving technical assistance to newly joining villages.

The nature of support provided to the community is the most significant factor in the effectiveness of watershed management. There is a strong case for the support institution spending a lot of time (2-3 years) at the beginning of its interaction with the community in participatory appraisal and planning and in helping to build a strong village institution.

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*Continued from page 2*

and detailed picture of impact, enabling one to highlight the contribution of factors external to the project to improved economic status and the distributional effects of targeted interventions.

Such a method provides greater rigour than many existing NGO approaches to evaluation, but retains a degree of flexibility in its application. Unlike conventional project evaluation methods, the approach builds upon people's perceptions of change rather than starting out with prescriptive indicators devised externally. In view of the limited availability of baseline and longitudinal data, the approach has to rely on recall methods which can generate imperfect or inaccurate information, which makes it difficult to calculate economic impact with any degree of precision. For the purpose of most NGOs, it offers a sufficiently rigorous approach which can be applied at a low cost and understood relatively easily.

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SSE Promotion in Question

The rationale for small business development is that it raises incomes, boosts self-reliance and broadens participation in asset ownership. But there is uncertainty in the field about the best method of support, coupled with particular concern about the cost effectiveness of current interventions.

There has been growing awareness since the 1970s that small scale enterprise (SSE) is integral to development. In the 1980s, governments turned to the private sector as a vehicle for growth, aid agencies established SSE programmes and a new breed of enterprise development expert was created. But a contrary perspective also took shape. It claimed that investment in SSEs could be a misuse of resources, to the extent that SSEs had a high failure rate, were not efficient users of capital and labour and often failed to increase output and absorb new labour. The empirical evidence on these matters is, however, very mixed.

The fact remains that SSEs constitute a large part of developing economies. What is the most effective way to promote them? Governments and agencies have been investing vast resources in 'supply side' measures, through a range of support agencies including credit schemes, marketing organisations and industrial estates. In reality such support, intended to be interactive and complementary, became enmeshed in a range of different institutions, often run by people with little business experience and hidebound by restrictive legislation and bureaucratic procedures. Furthermore, support for SSEs became a missionary movement, confused by sentimentalism and with little regard for costs and benefits. Some evaluations even suggested that SSEs which had not received any support did better than those that had.

In reaction to these findings a 'minimalist' perspective has emerged, favouring supply of credit — as the missing ingredient — but no other form of assistance. Successful support programmes can be characterised in the first instance by what they lack: they are not run by any government institution, few foreign 'experts' are used and the temptation to grow large is resisted. Indigenous NGOs seem to be the best organisations to provide services appropriate to SSE needs. The ground rules for credit schemes are also becoming clear. They need to provide working capital, have a decentralised, local loan granting facility, charge interest rates high enough to cover transaction costs, have a sound institutional structure, handle a large volume of lending and ensure adequate repayment rates.

Dominating everything is the fact that it is the wider policy environment that holds the key. Government policy and bureaucratic constraints have greater influence on the viability of SSEs than any amount of finance, training or technical assistance. In many countries, policy towards the sector is also primarily driven by political considerations, specifically by discrimination along ethnic or racial lines to encourage some groups' involvement in SSEs and the prohibition of others. The increasing politicisation of the enterprise development process has meant that enterprise development specialists have to look beyond immediate economic factors if their programmes are to flourish.

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Development Research Insights is published jointly by the Overseas Development Institute and the Institute of Development Studies. The Editor alone is responsible for the contents of each issue, the Directors of ODI and IDS acting as editorial consultants. Neither the ODI, IDS or ODA take responsibility for the views expressed in this publication.
Structural Adjustment and the Poor

In an area where hard facts are in short supply, one thing is clear: adjustment programmes alter the distribution of income: shifting resources in favour of tradeables; influencing product and factor prices and employment levels; squeezing government spending. They can also worsen poverty. The extent to which they do so will depend, inter alia, upon the economic characteristics of the poor — the extent to which they are integrated into the modern economy, their sources of income, whether they are based in the rural or urban economy. These characteristics will vary from country to country, which is why it is difficult to generalise about the effects of adjustment. One frequent outcome, however, is that the urban labour force, and its dependants, is particularly at risk — from job losses, subsidy cuts and erosion of social services. On the other hand, some of the rural poor stand to gain, especially if their livelihood is derived from export crops. In fact, and despite their potential dangers, it is easy to exaggerate the likely impact of adjustment programmes on the poor:

(1) The counterfactual is often ignored: what would have happened to the welfare of the poor in the absence of adjustment? Typically, programmes are adopted because the economy is in crisis. An involuntary adjustment holds greater poverty risks because the overall costs are greater.

(2) Evaluations of the effects of IMF and World Bank adjustment programmes point up how ineffectual they often are. Governments have proved adept at avoiding (or subverting) policies which they oppose, particularly in the fiscal area.

(3) The very plight of the poorest protects them from some of the adverse effects of adjustment measures. They do not have jobs to lose. They are not reached by subsidies or social services. They are so marginalised from the modern economy that they are largely recession-proofed (except in the sense that they may have to increase labour effort, to cover increased prices of consumer goods). It is the not-quite-so-poor (as well as some of the rich) who are more at risk.

Moreover, while they may harm the vulnerable, adjustment programmes also have the potential to reduce poverty, at least in the longer term. This will happen if the programmes stabilise the economy in a sustained way, reducing inflation and easing foreign exchange constraints, and raise the efficiency of resource use. These results will encourage investment and stimulate the growth that is essential for tackling poverty in a poor economy. The adoption of an adjustment programme further provides an opportunity for reviewing economic policies in the round and for consciously including anti-poverty provisions.

This assumes that governments give priority to protecting the poor — but government indifference is in many countries the largest problem. One difficulty here, as Norton argues, is the conflict between the distributional measures needed to sustain political support for adjustment measures — to placate relatively powerful, usually urban-based groups — and measures to protect the poor — politically weak, usually rural-based.

Policies are available to reduce the risks to the poor, even in the short term. Stewart argues that increases in fiscal revenue are desirable and often attainable, and summarises the ways in which government social expenditures can be modified to increase the welfare of the poor. However, all such anti-poverty measures are in some degree problematical, not least because of the difficulties that official agencies (indeed, even NGOs) have in reaching the poorest. Seabright’s research, for instance, indicates that credit schemes, often advocated by NGOs and official donors, may not be a good mechanism for direct relief of poverty in very poor communities.

As to the actual impact, Howell’s work on African farmers demonstrates that, despite the complexity and mixed nature of the effects of adjustment policies on...
Summary experience with macro-choices in adjusting countries in the 1980s

<table>
<thead>
<tr>
<th>Good</th>
<th>Bad</th>
</tr>
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<tbody>
<tr>
<td>Growth in per capita incomes</td>
<td>+</td>
</tr>
<tr>
<td>Change in rural government expenditure per head</td>
<td>+</td>
</tr>
<tr>
<td>Expenditure ratio</td>
<td>+/−</td>
</tr>
<tr>
<td>Tax ratio</td>
<td>−/−</td>
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<tr>
<td>Budget deficit</td>
<td>reduced</td>
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<td>large cuts in expenditure:</td>
<td>reduced</td>
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Examples

- Botswana
- Cameroon
- Argentina
- Turkey
- China
- Bangladesh
- Indonesia
- Zambia
- Costa Rica
- Jordan
- S. Korea
- Sri Lanka
- Libya
- Sierra Leone
- Tanzania
- El Salvador
- Venezuela
- Costa Rica
- Hungary
- Kenya
- Malawi
- Dominican Rep.
- Uruguay
- Bolivia
- Russia
- Malawi
- Nicaragua
- Brazil
- Mali
- Nigeria

6.9 percent in 1980 to 14.5 percent in 1987, and several other adjusting countries in Africa and Latin America have also succeeded in increasing revenue. However, adjustment tax reforms emphasise indirect taxes, which tend to be regressive. More attention needs to be paid to increasing direct taxation.

Second, the level of government expenditure need not be tied to GNP growth. During the 1980s, while some countries cut per capita expenditure despite GNP increases, some others with negative growth managed not only to raise the expenditure ratio but also to increase real expenditure per capita (Ghana, but also Bolivia, Costa Rica, Jordan, Zimbabwe).

In this group, policy action helped offset the negative welfare impact of falling incomes during economic contraction.

Third, changes in the composition of expenditures can improve the welfare of the poor, whether or not total expenditure increases (of course the changes can be made more easily in a context of growth). Theory and evidence on the impact of different types of expenditures on the poor point to several clear guidelines:

— a ceiling should be set on interest payments on international debt to conserve funds for developmental expenditures. The squeeze on the share of the social sectors in the budget in the 1980s was largely due to a big rise in the share of interest payments.

— public funds should be reallocated across and within sectors towards areas with high social returns where a large share of those returns accrue to the poor. Data from Sri Lanka show that expenditure on social services benefited the poorest 20 percent of the population the most while transport benefited them the least; expenditures on health, food and primary education were also quite progressive.

— public social services can be rationalised but a number of conditions must be met: financing of recurrent inputs must not be neglected; public sector wage cuts may be preferable to reduced employment, but wages must be high enough for efficiency; it is better, however, to support productive employment (e.g. in efficient public works) than to maintain excess employment in the civil service; and targeting of programmes is best done by geography (poor areas) or by commodity (subsidising 'inferior foods' not consumed by the rich), to easily identifiable groups (pregnant women and young children), and in 'food for work' schemes (with real wages set low and young children), and in 'food for work' schemes (with real wages set low to attract only the really poor). Targeting is least effective through means testing and earmarking of individuals.

— the privatisation of most social goods or the introduction of substantial user fees should be avoided, as this usually leads to harmful social differentiation and inadequate provision for the poor, quite apart from generating little net revenue to the service concerned (or even less if revenues are turned over to the finance ministry).

All types of proposed expenditure should be classified as either: high priority for protecting the poor and promoting growth, low priority or intermediate. Only in this way can the distribution of public expenditure cuts (or increases) be done rationally, rather than as the haphazard result of bureaucratic struggles.


Compensation Programmes

A 'family' of social compensation programmes, multi-donor initiatives, with the World Bank as coordinator, has been launched in Ghana (PAMSCAD), Bolivia (ESF), Uganda, Cameroon, Chad, and Malawi to date. Problems are becoming evident with their design.

Programmes are set up on the premise that certain 'poor and vulnerable groups' suffer acute, essentially temporary, problems under adjustment. Hence, time frames are short (two to three years). This generally cannot allow for institution-building components. But poverty alleviation programmes require considerable institutional capacity — often very limited in adjusting countries. Poverty-alleviation measures also need to be integrated into a medium/long-term strategy; ad hoc institutional arrangements may draw off resources from other, potentially more effective interventions.

The practicality of the programmes is also at risk. Short time-frames for social action projects mean that many are likely to be unfinished at the end of the supposed funding period. And programmes often fail to take into account the likely slowness of donor response; donors are not able to use emergency contingency funds, the usual mechanism for rapid response. Programmes aim to broaden support for adjustment policy through, first, poverty alleviation and, second, enhancement of the political sustainability of adjustment policy. This was an explicit goal in Ghana where 'high visibility' was one of the PAMSCAD project selection criteria.

There is a clear trade-off between these potentially contradictory objectives, one broadly 'social', the other broadly 'political'. The former objective requires selection of beneficiaries from among the poorest and most vulnerable, by definition relatively powerless. By contrast, sustainability involves addressing discontented groups with a higher political profile who may be direct 'losers' in the adjustment process (retrenched workers, for example) but are not necessarily poor.

The trade-off between the two objectives may have other dimensions. The political value of a 'national programme' is much greater than that of a 'regional programme'. This can militate against attempts to direct resources to poorer geographical regions, often an effective instrument for poverty targeting.

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Male Bias and Structural Adjustment

Male bias is an obstacle to efficient allocation of resources, just as much as bureaucracy and monopoly. The conventional economic models used in the design of structural adjustment programmes are biased because they ignore the unpaid work of daily care of household members, which is performed almost exclusively by women.

Urban men made redundant from construction, inefficient import-substituting industries or the public sector are not reallocated to export industries such as garments and electronics, because most of these jobs are ‘women’s work’. But nor do they readily undertake domestic duties. Instead more and more urban women undertake paid work to maintain family incomes in addition to their household duties. Thus in practice, adjustment programmes create unemployment for some and over-intensification of work for others. The rising female participation rates in many countries in Latin America and Africa in the 1980s often, in the circumstances of adjustment, represent ‘distress sales’ at falling rates of remuneration and/or deteriorating conditions of employment.

In the rural areas farmers are expected to benefit from higher agricultural prices, but gender inequality within farming households means that often these incentives do not reach women. Even when they do, women tend to be denied access to the complementary resources needed to increase output and improve productivity. In both rural and urban areas, poorly designed cutbacks in public expenditure tend to add to the demands on women’s time, as women have to make up shortfalls in public provision of education, health, transport and water services.

Policy-makers can take various steps to diminish gender distortions. Expenditure cuts can be screened for their implications for women’s time and women empowered as users of public services by giving them a voice in the design of public services and making public officials accountable to women for the quality of service delivery. Market institutions, especially in credit and labour, need re-regulating as well as de-regulating; and women need training, not only in vocational skills, but in accounting, business planning and access to business information networks.

Developing countries would benefit from a wider range of advice on these matters, particularly from bodies not party to loan negotiations, such as UN agencies, the Commonwealth Secretariat and DAWN. Policy Framework Papers (produced jointly by governments, the World Bank and the IMF) should be used to illustrate how removal of gender distortions could assist adjustment.


Quantitative Analysis of Gender

Analysis of household data sets, such as those becoming available from the World Bank SDA Project Living Standards Surveys in African countries, can give nationally representative empirical content to the idea that there is gender skewness in economic activity.

In many poor countries the food producing sector is largely non-traded and also uses predominantly female labour. Standard adjustment policies would tend to redistribute income from women to men in this scenario. The onus for mobility falls onto women, who would have to devote more time to traded sectors to improve their position. But women tend to be less mobile than men: discrimination by employers, lack of education, lack of access to credit, or child-rearing obligations all inhibit women from relocating. Such ‘lock-in’ effects worsen existing gender inequalities in the distribution of income and impede the efficacy of adjustment as a whole. Data from Kenya illustrates the magnitude of the effect such constraints can have. Following a 1975 boom in beverage prices, female headed farm households were only half as likely to adopt tea as male headed ones.

National datasets can also be used to investigate the argument that the pattern of household expenditures is sensitive to women’s incomes. An analysis of Ivorian data concluded that the gender distribution of income within a household was a significant determinant of the expenditure shares of different types of goods. A doubling of the proportion of cash income accruing to women would lead to almost a 5 percent rise in the budget share of food expenditures and a fall of 20 and 11 percent respectively in the budget shares of alcohol and cigarettes. These results suggest important consequences of the systematic redistribution of income by gender which structural adjustment may entail.


Credit and Poverty Alleviation

Public action that seeks to alleviate poverty by targeting subsidised credit must rely on the ability of borrowers to identify productive investments. ESCOR-funded research in two villages in Southern India showed that participants in India’s Integrated Rural Development Programme made substantially less productive livestock investments than a control group of privately-funded livestock farmers.

The main reason is price discrimination: in the purchase of livestock, participants in the scheme purchased milk animals at inflated prices not compensated by higher livestock quality. Such imperfections in the markets for livestock assets may undermine the efficacy of intervention to alleviate imperfections in the credit market that hamper the accumulation of capital by the poor. But increasing returns at low levels of production may be partly to blame; also participants were more likely to have had to withdraw labour from alternative occupations in order to care for livestock. Therefore the identification and financing of productive rural investment should not be confused with the direct relief of poverty: credit may be appropriate for achieving the former, but entitlements to steady incomes are a better means of achieving the latter.

Under the IDRP subsidised credit was administered through producers’ cooperative societies, many of which sprang into existence to take advantage of subsidies only to collapse again. The prospects for survival of cooperatives were highest in areas of relatively poor marketing and transport infrastructure where competition from private traders was weak. This suggests that cooperatives may be at best a useful stop-gap to provide infrastructure in areas of intermediate development, where economic returns are not so low as to make farming absolutely unprofitable, but not so high as to make private trade relatively competitive. And where communities had a history of successful cooperative activity involving the groups concerned, cooperatives were more likely to survive, showing that cooperation can be — in some sense — habit-forming.

Structural Adjustment and the African Farmer

Structural adjustment programmes in Africa are designed to have a major impact on the levels of production from smallholders. They are also likely to have an impact on their incomes and welfare, even where production itself may not be especially affected.

In this study the impact of adjustment on small farmers, and the rural poor more widely, has been assessed. In five countries—Kenya, Madagascar, Niger, Malawi and Ghana—research was undertaken to identify different groups within the agricultural sector and to examine how changes attributable to structural adjustment have had an impact. These were changes in markets, especially in prices in product markets and in labour markets, in infrastructure spending and in the management of agricultural services.

The net effects of these changes on rural households have been both positive and negative. There is evidence of a strong supply response among smallholders producing tradable commodities for export; those dependent on subsistence crop production or stock keeping have seen a decline in real incomes increases in the demand for labour; and some cases of significant improvements in access to agricultural inputs and services.

African Wages under Adjustment

Up to the mid 1970s formal sector wages rose substantially in most sub-Saharan African countries, usually far faster than agricultural output or per capita incomes. The trend was reversed in the 1980s: wages fell in almost every country, in some cases (Ghana, Tanzania, Sierra Leone) dramatically. Overall, real wages halved between 1970 and 1985. This was a much more severe decline than in any other region of the developing world. In the public sector, wages for low level public sector jobs also fell more rapidly than GDP per capita in many countries. Differentials narrowed markedly between the highest and the least paid.

Falling real wages in sub-Saharan Africa since the mid 1970s are mainly a consequence of changes in exchange rate policy under World Bank-IMF conditionality. Devaluation-imposed inflation rates were not compensated fully by public sector wage/salary increases, which were prevented by curbs on public spending. This represented a substantial (though possibly only temporary) change in wage policies. Pre-adjustment, wages above the market clearing level were encouraged to provide urban incomes adequate to sustain a standard of living above that of the rural population.

This has meant that there have been politically based limits to the downward flexibility of wages under adjustment. This was demonstrated most clearly in Zambia, where urban food riots led to the abandonment of the adjustment programme. The onset of austerity has not substantially changed the relative bargaining power of previously privileged groups. Furthermore, throughout the region, shortages in the supply of skilled labour have persisted over the years in the face of large private incentives to higher education. Reliance on downward wage flexibility alone could thus prove inadequate with respect to the labour supply response and sometimes counterproductive with respect to the sustainability of adjustment programmes.


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Policy Reform and Conditionality

The dramatic changes in international prices, interest rates, financial markets and trading conditions in the 1970s created a set of new realities to which all economies had to adapt. ‘Structural adjustment’ became the order of the day.

Its broad purpose was to put ailing economies on a sustainable development path. At first it concentrated (some would say excessively) on stabilisation, to achieve balance in basic macro and monetary variables. Some of the stabilisation measures acted also on incentives, especially the relative advantage of exporting. Then there was a move into deep-seated problems: reform of state-owned enterprises, enhancement of the role of market signals, encouragement of the private sector and trade and financial liberalisation. Latterly the call has come for even more profound change — institutional reform, capacity-building, and ‘governance’.

‘Origins of Conditionality’

There were reasons on both sides for developing country governments to accede to, and development institutions to promote, policy-based lending.

Governments recognised that things could not go on as before. Growth and development were not taking place. Typically, overvalued exchange rates, negative real interest rates and price controls were contributing to inefficiencies and giving rise to extensive rent-seeking behaviour; loss-making public sector enterprises worsened budget deficits; monetary expansion to repay the domestic deficit intensified inflation — there was hardly any area of public policy that was not in distress. The need for comprehensive reform was evident.

The impetus to change to adjustment lending also came in part from the nature of development finance. With economies in recession and installed capacity substantially underutilised, there was little point in continued project-lending on a large scale. Inflows of flexibly usable foreign exchange were needed, which programme lending could provide.

Donors had additional reasons for moving into adjustment or policy-based lending. There was widespread dissatisfaction with the results of past aid. Some of the fault lay with the design and implementation of projects, but many donors believed that much lay with the policy environment. Structural adjustment lending was embraced by the donors (not without misgivings) as a more powerful instrument with which to promote development. If successful it would benefit recipient economies, and also make traditional forms of aid more effective.

As the dangers became apparent of donor programmes being seen to share responsibility for macroeconomic performance — also as the outlines of macro-policy reform were put in place — emphasis began to shift to sectoral lending. Projects had often been accompanied with advice or conditions for sector policy change. But sector loans could accomplish more, with greater leverage, and building on the relative strength of aid agencies’ technical understanding of sector issues.

Finally, the political changes of the 1980s brought conservative critics of aid into prominence. Evaluations were showing how much of aid in Africa was unsuccessful. And the public could see on their television screens that development disasters were rife. It was hardly surprising that aid should seek new forms.

The Record

The aims of adjustment in the 1980s were only rarely being achieved. Where improvement has taken place, has it not in any case been due to the influx of foreign exchange supplied under conditional-lending, rather than to the reforms that were implemented? (Opinion is mixed).

What was going wrong? The failings might be divided into errors of estimation, errors of judgement, and errors of strategy. The overall failure has been the attempt to correct deep-seated problems in too short a time.

The estimation issues concerned the rapidity with which domestic and external deficits could be brought under control. The frequently acrimonious discussions about exchange-rate devaluations related

Do World Bank Loans Help Policy Reform?

By the end of the 1980s, the World Bank was devoting nearly one-third of its new lending to programme loans containing specific policy reform conditions. Around 50 developing countries had taken this sort of adjustment loan.

Why? It is not accurate to speak of the Bank ‘imposing’ policy reforms on countries. Some countries (like Turkey and Thailand) were committed to policy reform before they went to the Bank for money. At the same time, not all countries really ‘owned’ their reform programmes. Some like Bolivia and Guyana never took the reform conditions in their adjustment loans seriously. Many more saw adjustment lending as an area for bargaining with the Bank. Could they secure more money in exchange for fewer reforms?

Such bargaining took place behind the scenes, and amidst considerable uncertainty about the effects of policy reform. Early advocates in the Bank held out high hopes that it could reverse economic decline and stagnation. It is clear ten years later that such claims were too ambitious. The external economic environment markedly worsened in the 1980s. The impact of policy reform was weak, by comparison, and the effects mixed (see Table p.3). The main benefit was a boost in exports, and through this, an improvement in the foreign balance. But this had only a small or negligible impact on overall growth.

Government budgets have improved but with a fall in the share of output going to investment, which may have adverse consequences for re-starting growth, depending on the productivity of the projects that have already been sacrificed. Private investment remains shy. Public and private investment
'Political Sustainability'

All economic reform measures have political consequences. Many governments have been unwilling to implement prescribed economic reforms because of fears of political reaction. Over the past fifteen years, opposition of various kinds, including popular protest in the form of mass demonstrations and 'food riots', has indeed frequently materialised, threatening the implementation of economic reforms and even the governments concerned.

Some of the non-economic factors explaining differences between predicted and actual outcomes under adjustment have been examined—notably by Mosley and others, reported in this issue—but mainly with reference to interactions between governments and lending institutions. Other research on the politics of adjustment has tended to look only at an assumed potential for cooperation between various different vested interests and supposed beneficiaries of adjustment programmes.

This research on the politics of structural adjustment in north Africa and the Middle East suggests that the factors involved in 'political sustainability' are complex and shifting. The structures and dynamic of vested interests (whether social classes or other social groups) specific to time and place may mean that conflict rather than cooperation takes place between them in response to policy changes. Expectations as well as the (possibly different) concrete effects of policy changes determine a group's position. Moreover, the same measures are received differently by different sets of vested interests with varying capacities to apply pressure to their own advantage; and responses to 'the same measures' will vary over time as the balance of power changes among vested interests.

Politics is crucial to the outcomes of adjustment and in assessing the likely level and kind of conflict. Attention paid at the outset, and along the way, to the nature and timing of the political consequences of policy changes may provide crucial information and help improve the viability of the programme.

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Fiscal Constraints on Adjustment

Developing countries rely heavily on trade taxes for fiscal revenue, largely because the collection costs and administrative difficulty of more efficient revenue sources like income taxes and value added taxes are too great.

A common ingredient in structural adjustment programmes is tariff reform—both restructuring and liberalisation. In the process of negotiating trade reforms governments are understandably sensitive to the possibility that trade liberalisation results in a tightening of government budget constraints by depleting tax revenues. If this happens commitment to the conditions of the lending programme is likely to weaken.

The actual effect on government revenues depends in fact on a number of different factors—the initial tariff structure; whether tariff liberalisation is accompanied by other measures; what happens to the exchange rate after liberalisation and so on.

Trade liberalisation can enhance tax revenue.

A recent study has examined in detail the relationship between structural adjustment lending and fiscal yield in a number of developing countries. In some countries in the sample, revenue enhancement followed liberalisation whilst in others revenue depletion followed. The outcomes depended on the interaction of tariff cuts with other changes such as alterations to tariff exemptions; replacement of quotas with tariffs; the provision of export incentives. The analysis has important implications for the timing and sequencing of policy reforms. First, close attention needs to be paid to initial tariff rates and, in particular, collection rates. Second, in the early stages of reform, reduced tariff exemptions are a vital source of fiscal enhancement. Third, where quantative restrictions are eliminated, careful consideration should be given to their replacement with some form of tariff surcharge.


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appear to be complementary in poor countries rather than competitive.
Since the results of policy reform were uncertain, some borrowers, while promising the Bank reforms, were reluctant to push them through. This showed up as slippage in the implementation of reforms. The Bank puts slippage at a maximum at 40 per cent. This looks somewhat optimistic. It excludes the effects of countervailing action. This occurs when a government undertakes the reform which the Bank has stipulated, but simultaneously takes another measure which cancels out the reform’s effect. For example, Turkey cancelled the effect of some budget cuts by setting up non-budgetary funds. Slippage also occurred because implementation capacity was sometimes weak (as in Ghana).

The Bank has learned to offer smaller packages.

When low commitment was the problem, the Bank initially had trouble in dealing with it. The loan packages were too large to start with; each had up to a hundred separate conditions, critical and trivial alike; and the Bank has a strong incentive to disburse, come what may. On top of this, the Bank only made adjustment loans to countries with IMF programmes with different, and occasionally conflicting, conditionalities. Recent design changes strengthen the Bank’s ability to control deliberate slippage. But the pressure to disburse remains.

Would-be borrowers should be aware that policy reform will bring some, albeit modest, economic benefits. Also, that the Bank in the 1990s is better prepared to deny loans to those who promise reforms, but who do not intend to perform.

Economic liberalisation without political liberalisation appears a self-deceiving mirage.

Malawi and Ecuador. Thus the case for authoritarian regimes to speed up reform is not so much weak as perverse. More often than not, authoritarian regimes themselves create rents to use as political patronage, because they lack basic legitimacy. Economic liberalisation without political liberalisation now increasingly appears as a self-deceiving mirage.

But the recent talk of using the leverage of aid to promote political liberalisation may not be fully founded. If countervailing action can undermine conditionality in economic reform, there seems little reason why it could not do so even more powerfully for political reform.

Evaluations of Structural Adjustment: Summary Results

<table>
<thead>
<tr>
<th>EVALUATION METHOD</th>
<th>Real GDP growth</th>
<th>Real export growth</th>
<th>Investment GDP</th>
<th>Balance of payments</th>
<th>Unemployment</th>
</tr>
</thead>
</table>
| Tabular comparisons with control:  
Mosley, Harrigan, & Toye (1991) (MHT) | weak-ve | +ve | -ve | +ve | -  |
| World Bank (1988) | neutral | +ve | -ve | +ve | -  |
| Econometric analysis:  
MHT (multiple regression) | weak +ve | week -ve | +ve | neutral |
| MHT (Model based simulations) | Malawi | ambiguous | +ve | +ve | neutral |
| Morocco | +ve | +ve | neutral | neutral |


Gulf Crisis Oil Price Increases

The world crude oil price doubled at the beginning of the Gulf Crisis last year, rising from $20 in July to $40 at the peak on 10-11 October. A price disruption of crude oil or petroleum products such as this does not have a generally similar impact across developing countries — the poorer countries tend to fare worse. The reasons are both structural and institutional. An analysis in these terms helps to indicate how developing countries might be made more resilient in the face of oil price shocks in future.

First, and quite basically, even if world market prices are being paid, the impact of the price change varies with the composition of imports, because the price of products does not move in step with that of crude.

Moreover, the volume response to price changes, as well as the differences between the various spot markets must be considered to make any general statement on the price impact plausible. And the significance of an economy of any particular price change is a function of the terms of trade and the growth rate.

Some poor, large developing countries, including Egypt and India, fared particularly badly from the differential price movements between crude and products. They rely heavily on kerosene for cooking and heating. The price of kerosene almost tripled during this period, largely because Japan is a major user and bought up supplies to secure its own position.

And then there are institutional factors at play. The Brazils and Bangladeshes of the developing world do not have the same exposure to price fluctuations of crude and of products.

To a degree, all developing countries face credit restraints and function with a weak financial infrastructure, but the institutional framework varies considerably in its degree of development across countries. Countries like Brazil have better access to risk management instruments in world trade and more diversified access to supply sources. Some countries have the advantage of secure, long term contracts, and some may even have been cushioned by the holding of large oil stocks. Others, however, were the first to be forced on to the spot markets and the first to have had their term contracts abrogated in times of crisis.

Contact: Robert Mabro, Director, Oxford Institute of Energy Studies, 57 Woodstock Road, Oxford OX2 6PA, Tel. 0865 311377, Fax. 0865 310527, Telex. 838771 ENERGY G.
The Financial Sector and Economic Development

Domestic financial systems in Africa and many other parts of the developing world need to be extended both in size and diversity. Several new ideas extend and complicate the policy recommendations in this area.

The increasingly acknowledged need for greater responsiveness to international conditions in developing economies requires financial institutions which can mobilise and allocate scarce savings in a flexible way. An important part of this is that financial institutions deny further financial support to activities whose underlying financial viability is in doubt. This is the reverse of the practice often in place. Thus the general challenge is to restructure financial systems, often designed originally to support central allocation, at the same time as enacting price liberalisation, trade and other more commonly discussed reforms. The sequencing issues here are of the essence, and no clear answers have yet emerged as to how financial sector and real reforms are best married together.

The internal debt crisis, characterised by widespread insolvency and illiquidity in developing country banks, has had limited public recognition as compared to the parallel external debt crisis. However, the consequences of such financial distress are extremely serious. Both lenders and borrowers can face distorted incentives when widespread banking sector distress is present. Corroborated high real interest rates can and do arise when desperate borrowers encounter either desolate banks or for whom the threat of bankruptcy is ruled out by the implicit or explicit underwriting they receive from the central bank or the government. In this type of system the social support function of the banking system can dominate its allocative function. The losers are invariably 'crowded-out' productive activities which require borrowed funds for viable projects but which are unable to contemplate the excessively high real interest rates generated by the unstable competition for finance.

The link between macroeconomic stabilisation reforms and the financial behaviour of the productive sector is also important. Can credit restraint and higher interest rates be effective when company motivations relate not so much to profit maximisation as to diverse factors such as the survival of the management team? If this short-circuits the effects of standard instruments, the normal view that macroeconomic stabilisation should preclude efforts at restructuring enterprise behaviour seems misplaced. Similarly, once the importance of financial distress is recognised, then an amended view is required about both which instruments of macro-stabilisation can sensibly be used (e.g., liberalised interest rates will be a bad idea), and the quantitative magnitudes to be set for macroeconomic targets such as credit ceilings. Finally, the simple policy prescriptions from the earlier literature—e.g. that interest rates should normally be positive in real terms—are less robust in the context of serious macroeconomic instability. A high domestic interest rate sustained for any length of time would be a signal that other aspects of the stabilisation programme lack credibility, for example, it would signal expectations of high future rates of devaluation.

The Transition from Socialism

This research considers price decontrol, financial liberalisation and trade liberalisation in Zambia, Tanzania, Angola and Kenya.

When price controls are wide-ranging and at least partially enforced, their removal produces an abrupt jump in the commodity price index. To an extent this is spurious because the commodity price index is likely to be biased by the existence of price controls. However, there is a genuine element due to the previous accumulation of real money balances in response to shortages: once market-clearing is restored, households choose to hold less money relative to expenditure. This is an unavoidable, one-off effect, the magnitude of which can be predicted, but it is easily confused with an upturn in persistent inflation.

When interest rates are raised within the government. In effect, the banks are not financial intermediaries but shops for the sale of variable interest rate government debt. Higher nominal interest rates raises government expenditure and thereby causes a larger budget deficit and higher inflation. This inflation tax falls on holders of money. Hence, higher interest rates merely achieve a transfer from holders of non-interest-bearing money to holders of interest-bearing money: real interest rates fall for the former in order for them to rise for the latter. This is likely to be distributionally regressive without in any way stimulating savings. Positive real interest rates are necessary for genuine financial liberalisation, but they need to be brought about primarily by reducing inflation.

Trade liberalisation achieved by devaluation may encounter two types of problem: the budget may deteriorate and the reform may also not be thought credible and encounter speculation. The budget deficit increase would be due primarily to the rise in the domestic currency cost of debt service after devaluation. Work on Kenya and Zambia, however, suggests that in those cases the budget actually improved. Even so, both countries experienced speculative hoarding of imports at some stage in anticipation of policy reversal, to the detriment of the trade balance.

The Overseas Development Administration has given financial support for a trial period through its Economic and Social Division. The Editor alone is responsible for the contents of each issue, the Directors of ODI and IDS acting as editorial consultants. Neither the ODI, IDS or ODA take responsibility for the views expressed in this publication.
New Guidelines for Industrial Policy

The record of industrialisation in the developing world is very uneven. There are startling successes, unprecedented for their speed and range, like South Korea, Taiwan, Hong Kong and Singapore. There are dismal failures, with industry draining national resources rather than leading a process of sustained structural transformation, as in much of Sub-Saharan Africa. And there is a diversity of experience in between. The traditional model of industrialisation — large, imported plants set up to serve protected, often small, domestic markets — has not worked for many countries. What then are the lessons of the success stories? And how do they apply in a world of rapid technological and organisational change? These are the most significant, large issues facing researchers and policymakers on industry.

The Limits of Market Liberalisation

The industrialisation strategy espoused on both sides of the Atlantic and embraced by institutions like the World Bank, is that the success of Asian NICs has been based on liberal, outward-oriented strategies. 'Liberal' in this context is interpreted not just as equal incentives to sell on domestic and export markets ('neutrality' of this sort is the strict definition of outward orientation), but also low and uniform protection to domestic industry, free inflows of foreign capital and technology, fully competitive domestic markets for products, labour and capital, and a general lack of intervention in markets. This is the basis of structural adjustments now being undertaken by many countries.

The industrial success of the Asian NICs is undeniable, as is their export-orientation. The most important issue for industrial strategy is whether export-orientation implies 'liberal' policies in the sense just described. The mounting weight of empirical research shows that it does not. The four NICs differed sharply among themselves in the degree of intervention practiced. Korea achieved the most diversified, heavy, high-technology industrial structure, and intervened most heavily. Hong Kong intervened the least: as a result, it has a narrow manufacturing base, essentially assembling light consumer goods, without much technical depth. Korea's success was based on breaking many of the guidelines of neo-liberal economic policy.

The Principles of Intervention

A careful reading of the NIC experience thus suggests that the lessons are somewhat more complex than has often been assumed. Most economists would agree that the creation of skills and the building of various technology, financial and other institutions call for government intervention. But that is not enough: entry into complex, heavy industrial activities, which have long 'learning' periods, requires protective (or promotion) to enable the initial costs to be borne. The deepening of the industrial structure, in other words, calls for selective intervention or picking winners), although the trade regime generally should be neutral in terms of incentives in domestic and export markets.

Many countries have tried to pick winners, often with conspicuous lack of success. Yet the few that have succeeded show how it should be done. A few activities must be chosen at a time, and protection should be tailored to learning needs, and counterbalanced by pressures to export. The best technology (for organisation and production) should be made available, but strongly supported by local effort to assimilate and build upon imported knowledge. The requisite base of skills and training must be created in advance. Closely interlinked activities (suppliers, subcontractors, consultants) should be promoted in tandem. It is a complex package of measures, and few governments have managed it efficiently. The unifying emphasis on getting prices

The Eclipse of African Industry?

While official commitment to industrialisation remains in Africa, the radical strategy that predominated from the 1960s, advocating import substitution behind protective trade barriers, is no longer taken seriously because it is seen to have been very costly as well as largely ineffective.

Current policies focused on market liberalisation and price reform pay no heed however to any special considerations to preserve growth of industrial capacity. The high costs and inefficiencies of African industry are attributed entirely to the previous policy of trade protection. Not that trade liberalisation will automatically lead to the expansion and deepening of the industrial base. Indeed, 'industrial restructuring' in this book does not rule out 'de-industrialisation'.

This study of industry in seven African countries (Botswana, Cameroon, Côte d'Ivoire, Kenya, Nigeria, Zambia and Zimbabwe) found much of the manufacturing capacity that has been built up since independence might be lost if adjustment policies continue to be dominated by macro-economic policies which place maximum emphasis on trade liberalisation and give minimal importance to interventionist approaches to boosting efficiency. Growth of industrial capacity was significant in the 1970s, comparing well with the performance of developing countries in general, even with middle income countries in particular. It was only in the 1980s that low rates of manufacturing growth became widespread, and, in some cases, contraction occurred. The 1980s also saw the absence of new private overseas investment and withdrawal of manufacturing investment along with capital flight.

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The Sequencing of Trade Policy Reform

The Bretton Woods institutions put into practice the standard argument on the sequencing of trade policy reform which suggests that import and foreign exchange controls should be converted into equivalent tariffs and the tariff rates then lowered. This route towards a liberalised foreign trade regime may not always be the most efficient.

There are both technical and political difficulties and drawbacks in the standard procedure for trade policy reform. First, because of the difficulties in estimating the tariff equivalents of import controls, it is in fact very difficult to know what the reformed tariff rates should be. This makes extremely unreliable any estimate or prediction of what an appropriate new equilibrium exchange rate should be, whether or not it is to be administrated.

Second, this makes it difficult to prevent capital flight early in the reform process, particularly when capital market restrictions remain intact. Firms may then use the removal of import restrictions to facilitate movements of capital internationally.

Officials may act responsibly in opposing removal of quotas through manipulation of the prices charged on sales of inputs and outputs between branches of the same firm located in different countries.

Third, the removal rather than reform of quantitative import controls may mean that a vital trade policy instrument for selective trade and industrial policy intervention is lost.

The combined force of these considerations is likely to provoke quite unified opposition in government to standard trade policy reform. Responsible and capable officers of finance ministries and central banks may find themselves in alliance with 'rent-seeking' elements of other ministries and their political masters against the removal of administered quota allocations.

Under an alternative sequencing of reform, the 'rents' from quotas could be allocated to firms according to their export capability or foreign exchange saving performance, provided this can be implemented by a reform coalition within government which excludes rent-seeking interests. In East Asia, particularly Taiwan and South Korea, the control mechanisms were reformed in this way to selectively target industries for import substitution and export promotion, but also then used as a means of organising two-way information flows between central government, sectoral institutions and firms to facilitate coordination and the development of marketing and technological capabilities at the enterprise level. Such measures may be sufficient to improve the allocation of strategic inputs and obtain improvements in the efficiency of the foreign trade regime in other situations regardless of the market orientation of the industrial sector.


The other large NICs by contrast committed themselves to high levels of self-sufficiency. Their autarkic industrial policy was launched with overvalued exchange rates that constrained exports, discouraged saving and limited profitable investment. The inherent anti-export bias eroded the primary sector's capacity to generate foreign exchange while labour-intensive manufactured exports grew far more slowly than in Korea. The autarkic approach also encouraged too many entrants at suboptimal scales of operation (partly in pursuit of regional policy). It increasingly favoured established firms rather than new entrants and bred inefficiency economy-wide, which detached all firms from world standards of productivity. It degenerated in practice into a rent-dispersing system that resisted reform and was associated with mounting polarisation of incomes. It proved especially costly for the low-income NICs like India and China which experienced declines in investment efficiency and could ill-afford the resulting consumption foregone.

Contact: Richard Aust, Lancaster University, Lancaster, LAI 4YB, Tel. 0524 65201 Fax. 0524 63806 Telex. 65111 LANCUL 9. Publication: 'Creating Competitive Advantage in HIC', Project RPO 675-41, IENIN, World Bank, Washington DC.

The Design of Remedial Interventions

The most important issues currently on the research agenda thus concern what 'correct' prices mean (it is usually better to get prices right than wrong, but right prices may include intervention with free markets), and what supporting measures are needed to bring a proper supply response to these prices. How, given the establishment of a non-discriminatory trade regime, are the design and costing of remedial interventions to be improved?

All the research work featured in this issue addresses, in different ways, the scope, context and feasibility of remedial interventions when markets are deficient. Riddell's work demonstrates the dangers to African industrial prospects of over-reliance on price reforms and suggests appropriate complementary measures. Auty investigates the basis of South Korea's success in developing heavy industry. Evans echoes his findings in suggesting changes to the sequencing of trade liberalisation reforms and to the functions of the trade controls which are to remain in place. The analysis of 'flexible systems' proposes new forms of support for industry in a world of exchange rate instability and market fragmentation. Finally Stewart presents the case for encouragement of small scale industry and recommends appropriate measures for sub-Saharan Africa.

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Heavy Industry in Large NICs

Heavy and Chemical Industries (HIC) sectors must mature technologically in five to ten years if the discounted stream of benefits is to be large enough to compensate for the costs of support to the industry in its infant years. Korea established 'best practice' rates of less than eight years for steel and under ten years for auto assembly. Brazil took more than two decades. Maturation rates for Mexico, India and China have been longer still.

Korea out-performed the other large newly industrialising countries (NICs) partly because it had macro policies which sustained rapid domestic demand growth and an exchange rate which facilitated competitive exports, and a 'competitive dualistic' industrial policy. This preserved existing competitiveness while creating new comparative advantage and was distinctive for concentrating incentives on new entrants rather than on established operators. It reduced uncertainty for new entrants by collating information, planning sectoral targets, negotiating technology transfer and providing a time-constrained set of incentives. In return, the favoured firms were required to reach international standards of technology and competitiveness very rapidly.
Expanding Rural Industry in sub-Saharan Africa

An early economic model of the development process suggested that rural industry faces inevitable demise, as its products are displaced by superior imported substitutes. This research indicates that, on the contrary, rural industrialisation could contribute to African industrialisation, helping to alleviate rural poverty, and increase African farm productivity and being economically efficient.

An Asian success story illustrates the contribution that rural industry can make. In Taiwan, most industrial enterprises are located in the rural areas. In 1980 67% of total manufacturing employment was in rural areas and more than 60 per cent of total rural household income came from rural non-agricultural activities. Rural industry has high productivity, significant export capacity, mainly in processed agricultural products (e.g. canned mushrooms and asparagus) and strong links with the urban based export processing zones and bonded factories — showing that export-oriented industrial production need not always be of the 'enclave' variety. Agricultural technology was upgraded through widely dispersed low-level mechanization and asparagus — showing that export-oriented industrial production need not always be of the 'enclave' variety. Agricultural technology was upgraded through widely dispersed low-level mechanization conducive to linkages with local industry, while elsewhere the pattern was of labour-displacing, import intensive tracto-

In sub-Saharan Africa, the current share of rural industry in employment and income varies quite widely. It accounts for between 17 and 47% of non-agricultural primary employment. In providing between 20% and 30% of total rural incomes, it contributes significantly towards sustaining poor households, especially among marginal farmers and the landless. Rural industry is also, encouragingly, relatively efficient: small firms generate more output as well as more employment per unit of investment than large firms, despite the generally technology. Most of the fixed capital of African rural enterprises is in traditional craft home-based activities.

Most rural industrial production in Africa is of consumer products bought out of agricultural income. Growth of agriculture will therefore be the single most important factor. Recent reforms have been concentrated on prices; there also have to be better policies towards rural infrastructure and institutions, improved and institutions, improved extension and supply of inputs for agriculture and improved technology.

Recent reforms have been concentrated on prices; there also have to be better policies towards rural infrastructure and institutions, improved extension and supply of inputs for agriculture and improved technology. Without these, price reform is likely to have only limited effect and increases in aggregate agricultural supply are unlikely to be forthcoming. But equally important on the supply side, appropriate inputs to raise agricultural productivity are also normally the sort of input that can be made and repaired locally, and thus linked in to the growth of rural industry.

As far as rural entrepreneurs themselves are concerned, supply problems appear dominant. Most formal credit institutions currently lend only to large firms to finance fixed capital assets, when the greatest need of small businesses seems to be finance for working capital. The bias against small scale enterprises in access to foreign exchange (as in other markets) has persisted with market liberalisation: in Zambia's foreign exchange auction rural enterprises lacked the finance to bid competitively and received almost nothing. What is needed are structured markets in which a certain proportion of resources of every kind is reserved for the rural sector.


Eastern Europe and Development Studies

The Eastern European revolution caught the development profession unpre- pared. Immediate reactions were that the implications for the South were negative. Increased competition for export markets, finance and for the political attention of OECD states would more than offset any rise in demand for the exports of the South.

Whilst there are grounds for such fears, it is preferable to focus on the process of transition in Eastern Europe on which the ultimate effects will depend. The development profession has much to contribute, and to learn, from the attempt to transform centrally planned into free market economies.

This scenario is familiar to students of structural adjustment in the South. In some respects, Eastern Europe starts from a more favourable base of income and skill and structure of production. But it lacks the range of rules well-established even in states with much lower levels of economic development. Hence, the reform of institutions and markets is central to structural adjustment.

Perhaps the most important shared characteristic is that in Eastern Europe, as in the South, sequencing is one of the most critical issues to resolve. Privatisation, price reform, liberalisation: which comes first?

Eastern Europe will also provide lessons for the South. It will test the criticism that, whilst technically correct, adjustment requires a level and duration of austerity, that, given the volume of external funding, cannot be supported politically. It is unlikely that any Third World country would attract more substantial financial support than is being offered to the East, or that it could generate more public acceptance for the costs of reform than has Poland.

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Flexible Production Systems

The development of flexible industrial production may be the critical factor if developing countries are to meet new forms of competition on domestic and world markets.

The government of Cyprus has switched its industrial policy from the support of low cost, low quality mass production to ‘flexible specialisation’ geared to high quality, non-standardised products for the low cost, low quality mass production to new forms of competition on domestic and world markets. If developing countries are to meet ‘flexible specialisation’ geared to high quality, non-standardised products for the low cost, low quality mass production, it is industrial policy from the support of low cost, low quality mass production to new forms of competition on domestic and world markets.

A Cypriot clothing firm which adopted this strategy found that it cut working capital requirements, freed up to 28% of factory space, lowered throughput time from 9 to 3 days, and increased sales per worker by a third. It produced once-off net savings of 7% of sales.

To complement restructuring within firms there also needs to be a sector-wide strategy and new institutions, particularly where firm size is small. Following Italian practice, a group of Cypriot furniture makers established a retailing consortium, which led to agreed inter-firm specialisation, longer runs, co-operation in production and purchasing, and entry for the first time into export markets. Sector associations have been discussing with government the setting up of sectoral centres of real services to provide market and technical information, as well as access to quality control and computer-aided design equipment. And nationally the government is promoting industrial design, changing incentives to encourage investment in software and expanding development banking. A similar policy reorientation is under way in Jamaica.


A six-week course on ‘Flexible Specialisation: a new strategy for industrialisation’ (SS127) will be held at IDS from 8 April-17 May 1991.

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Proportionally greater than from Latin America. There have been extreme variations in performance among firms within particular sectors — which gives the lie to the idea that protective trade regulations caused industrial weakness. Moreover, in some places competitiveness increased even when the level of protection became greater.

Low wages are now far less important in determining investment than other factors, such as support services, telecommunications and information processing facilities. More generally, comparative efficiency rather than short-run cost advantage is the basis for sustained success of firms, whether in import substitution, local resource-based production or capacity to export (all of which have made significant contributions to manufacturing growth in the past). Firms’ relative competitiveness was shown to rest on: management and engineering skills, market knowledge, and strength of product variation and packaging.

The study suggests that the future prosperity of sub-Saharan Africa would be enhanced by giving more prominence to industry than advocated under orthodox adjustment approaches. It advocates a three-pronged approach to industrialisation. Policies to promote non-traditional exports and a more systematic approach to further import substitution need to be vigorously implemented, not in isolation but in conjunction with policies which seek to raise the efficiency of existing manufacturing enterprises. Specific Incentives and industrial promotion activities are required, needing at least medium-term financing for which international support is necessary, as well as price reform. Foreign aid could also fund and perhaps help execute sectoral and firm-based studies of inefficiencies, particularly of inter-firm differences, identifying weaknesses and assisting in training and development of technical and financial (investment) skills and helping pinpoint gaps in ranges, quality and packaging of products and monitoring current and anticipated trends in world trade in manufactures.

Finally, in view of the success of some countries, such as Botswana, in approaching particular companies, there is scope for donors to help encourage the inflow of appropriate private foreign investment.


ODA R & D FUNDING

Economic and Social Research

The aim of the British Aid Programme is to promote sustainable economic and social progress and alleviate poverty in developing countries. ODA’s funding of economic and social research contributes to this objective by generating policy-relevant research on current development problems facing the poorest countries which implies concentration on sub-Saharan Africa and South Asia.

The research should inform policy-making in less developed countries, ODA and other donor agencies. It should also contribute to the wider understanding of the development process. A complementary objective is the building up of research capacity in areas relevant to the development process, particularly in less developed countries. Our two inter-related themes are promoting sustainable economic and social progress and reducing poverty and gender biases. In these areas much can be gained from inter-disciplinary research between economists, sociologists, social anthropologists, political science, physical planning, management studies and the physical and biological sciences.

Why not write for further details to: Ms C Coppard, ESCOR Secretary, Overseas Development Administration, Multilateral Agencies and Research Group, Economic and Social Division, Bland House, Stag Place, London SW1E 5DH.