A woman wearing a patterned headwrap and a checkered wrap is kneeling on the ground, sifting grain through a large, shallow, circular basket into a metal bucket. The scene is set in a dusty, outdoor environment, possibly a market or a processing area. The background shows other people and structures, though they are out of focus.

# the **OFCD** OBSERVER

**ANTI-POVERTY  
STRATEGIES**

PUBLISHED bi-monthly in English and French by THE ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

**EDITORIAL OFFICES**

OECD Information Service, Château de la Muette, 2, rue André-Pascal, F 75775 PARIS, CEDEX 16.

Individual articles not copyrighted may be reprinted providing the credit line reads "Reprinted from the OECD Observer" plus date of issue, and two voucher copies are sent to the Editor. Signed articles reprinted must bear author's name.

The Organisation cannot be responsible for returning unsolicited manuscripts.

**Signed articles express the opinions of the authors and do not necessarily represent the opinion of OECD**

**Annual Subscription Rates:**

£4.80 US\$11.00 F48.00

Single copies: £0.90 US\$2.00 F9.00

The OECD OBSERVER is produced in microform (microfilm and/or microfiche) by: (1) University Microfilms (Xerox), Ann Arbor, Michigan 48100, USA; (2) NCR Microcard Edition, Indian Head, Inc., 111 West 40th Street, New York, USA; (3) Bell and Howell Co., Old Mansfield Road, Wooster, Ohio 44691, USA.

EDITOR: Jane Bussière

ASSOCIATE EDITOR:

Ulla Ranhall-Jeanneney

ART, PRODUCTION AND LAYOUT:

Marc Delemme

ASSISTANTS:

Rina Maiden,

Gérald Tingaud

PHOTO RESEARCH:

Silvia Thompson Lépot

All correspondence should be addressed to the Editor

## Contents

RECOVERY ALONE IS NOT ENOUGH <i>by Emile van Lennep, OECD Secretary General</i>	3
TOWARDS MORE EFFECTIVE CAMPAIGNS AGAINST POVERTY <i>by Rutherford M. Poats, Chairman of OECD's Development Assistance Committee</i>	5
AID TO FOOD AND AGRICULTURE: A PERMANENT CHALLENGE	12
SUPPORT FOR THIRD-WORLD ENERGY	17
EXPORT CREDITS: REVISED GUIDELINES	19
INTERNATIONAL BANKING: CONTROLLING THE RISKS <i>by Rinaldo Pecchioli</i>	20
THE PROSPECTS FOR SOVIET AGRICULTURE	22
THE GREEK ENVIRONMENT: THE NEED FOR ACTION	27
NEW OECD PUBLICATIONS	34

**PHOTOS:** Cover: Alain Nogues - Sigma; page 8 (top): COI, London; (bottom): F. Mattioli - WFP/FAO; page 9 (top): UNIDO; (bottom): Paul Rimmerfors; page 15 (top): ILO; (bottom): Bundesbildstelle, Bonn; pages 18-19: Alain Nogues - Sigma; page 21: COI, London; page 26 (top to bottom, left to right): B. Kavachkine - APN; Malkhaz Datikashvili - TASS; Adyp Idrisov - TASS; B. Typouh - TASS; page 28: Wilhelm Braga; page 29: Henri Smets - OECD; page 30: Kiriazis; page 32: Jean Mohr; page 33: Wilhelm Braga.

---

# Recovery Alone is Not Enough

by Emile van Lennep,  
OECD Secretary General

---

**T**he conditions for recovery in the OECD area are more favourable today than for several years. But, present economic performance and the outlook for the months ahead are still not entirely reassuring. In particular, the inability to provide employment opportunities for millions of people who would like to work is unacceptable on economic, political and moral grounds.

High unemployment is partly related to the cyclical developments of the last few years. To that extent, the problem may ease as recovery strengthens and spreads. But this is not enough. It is clear that, for Europe in particular, unemployment is increasingly a structural problem reflecting inadequate rates of job creation, and recovery alone will not provide the solution. The need is to focus on restoring durable conditions of higher employment throughout the OECD area and in the European economies in particular.

## Investment and Flexibility: the Links

Two key interrelated elements must be addressed if the strong economic performance required for job creation over the rest of the decade is to be delivered: higher rates of investment and greater economic flexibility.

Quantification of the capital formation required to create new jobs is difficult, as there is no simple relation either between the growth of capital and the growth of output, or between the growth of capital and job creation. Nonetheless, there can be no doubt that a sustained increase in the rate of growth of employment requires a substantial shift in the share of GNP allocated to investment.

Since there is substantial unused capacity, employment growth can be accelerated for a time by a more intensive utilization of existing capacity, rather than new investment. However, after a decade of lagging investment, prolonged recession and important shifts in relative prices and costs, there is considerable uncertainty about how much *economically viable* excess capacity now exists in our economies.

Additional investment is needed not just to create jobs, but also to promote more rapid structural adjustment to changing patterns of comparative advantage among economic activities in OECD countries, and between the industrial economies and the newly-industrializing ones. Investment is also required to take advantage of emerging technological opportunities. Such investment, of course, need not be inconsistent with creating additional net employment.

Any estimate of investment requirements embodies an implicit judgment about how flexible labour and output markets can be made, and in this respect economies differ widely. The importance of this point is perhaps most clearly brought out by recalling the striking fact that, with roughly similar investment trends in North America and Europe during the past decade, employment growth in North America was more than ten times as great. Even when aggregate investment was not particularly high, greater labour mobility, more flexible real and relative wages, and perhaps other factors related to the freedom for entrepreneurial initiative in small or new enterprises led to the rapid creation of new jobs. In Japan, because of the capacity of the service sector to absorb or shed workers and the wage flexibility provided to larger enterprises by the bonus

system, the degree of flexibility has been roughly similar.

There is clearly a trade-off. The more labour markets can be made flexible and responsive, the less daunting the investment requirements. In realistic terms, both flexibility and stronger investment are necessary in all countries. Investment without flexibility would create "jobless growth". Even if flexible labour markets can create jobs, this would entail inadequate productivity and stagnating standards of living if investment failed to keep pace.

Moreover, higher investment and greater flexibility are complementary objectives. Flexibility promotes investment by removing the rigidities that impede the flow of resources to their most valued uses. Conversely, new investment can make both markets and production more flexible and adaptive by embodying technologies better suited to the rapidly changing economic environment.

## Generating Higher Investment

Generating higher rates of investment is not a simple task. It requires, on the one hand, an economic environment in which the demand for investment is strengthened and, on the other, an adequate supply of savings to finance it.

All would agree that, to some extent, investment decisions by firms are taken on the basis of the *confidence* which prevails in the business community. The risk-premia required to support new investment have risen in the past decade as a result of greater instability and uncertainties in the overall economic environment. From this perspective, a key role for policy in promoting investment is to create a climate of

confidence and reduced uncertainty. This suggests the need for pursuing stable policies in a medium-term framework and making it clear that the structural imbalances in the current situation will be dealt with. It also argues for stable growth of monetary aggregates at rates consistent with the gradual elimination from the system of inflation and inflationary expectations.

Economic theory is clear on the importance of *profitability*. Businesses undertake investments to the extent that the return to this investment exceeds the return that could be achieved by alternative uses of funds – for example, holding financial assets. From this perspective, the steady decline in profitability over the past 15–20 years (as measured by realised rates of returns to fixed capital) is an important impediment to stronger investment – compounded, in current circumstances, by high rates of interest on financial assets that make investment in physical capital appear less attractive than financial investment.

It is argued by some that, on this basis, the key to stronger investment is to cut real wages, thereby increasing profits, and so investment. While there is something to the argument that high labour costs are a problem, one must guard against too simplistic a view – for several reasons:

- The downward trend in rates of return on capital can only be partially explained by rising labour costs. It has been almost as marked in countries where labour costs are relatively flexible (e.g. the United States) as in those where wages are more rigid and non-wage labour costs have shown a strong upward trend.
- Profitability depends not only on the level of labour costs relative to prices, but also crucially on the behaviour of productivity. The evidence of the last few years suggests that a principal reason for continued weak profitability, despite a substantial lowering of the trend of real wage growth in a number of countries, has been a parallel decline in the growth of productivity. Although the linking mechanisms are complex and not fully understood, these developments argue against simple conclusions.
- Profitability depends importantly not just on the margin of prices over costs but on the strength of demand for a firm's products. If, in attempting to reduce the growth of wages relative to productivity, insufficient attention is paid to the impact of such actions on final demand, results could well be counterproductive. The empirical evidence is very clear that the level of demand itself is a powerful determinant of investment.

Despite these important qualifications, it appears that, in a number of countries, prevailing labour costs remain too high –

relative both to other production costs and to output prices – to sustain adequate employment and investment. Hence, continued efforts to bring down labour costs relative to productivity growth, and relative to the cost of capital, are essential in these countries if investment is to strengthen, and if the investment that takes place is to be of the sort that promotes creation of new jobs rather than further rationalisation of labour use.

Some encouraging developments have taken place as of late. In a number of OECD countries, social partners, sometimes in concert with governments, have succeeded in moderating the growth of real wages relative to productivity trends. Various changes in collective bargaining processes have also contributed to improved cost-price relationships: for example, greater decentralisation of wage negotiations in some countries; a general weakening of wage indexation processes; new approaches to salary determination in the public sector; and increased flexibility in relating wage settlements to particular economic circumstances in individual enterprises.

Perhaps the central responsibility for legislators is in the area of the so-called non-wage labour costs, particularly the contributions paid by enterprises to finance social security benefits. Their rapid growth in most countries over the past decade has been a major factor in distorting cost-price relationships. They have also tended to squeeze profits. Fiscal policies designed to shift the burden away from enterprises may help somewhat. It is unavoidable that the course of social security benefits will have to be reined back if the fiscal burden on employing labour is to be reduced.

Higher investment must, by definition, be matched by a *greater supply of savings*. The onset of recovery has been marked by declines in household saving rates, and this is certainly to be welcomed in a conjunctural sense as it contributes to stronger demand. But, over the longer term, saving rates will have to rise if higher investment is to be funded. Policies to improve the attractiveness of private savings may have a role; but the most important contribution that policy must make to assuring an adequate supply of savings, beyond that of a stable economic climate, is in generating higher rates of public saving, or less public dissaving.

The appropriate level of the government deficit (or surplus) in the medium term is of course a difficult judgment. But clearly, if higher rates of private investment are desired, the funds will have to come from lower government absorption of domestic savings. An individual OECD country can finance part of its national investment by borrowing from abroad, with a counterpart

current account deficit in the balance of payments. For the OECD as a whole, however, this is not the case. The longer-term pattern has been for the OECD region to be a capital exporter to less-developed regions. This pattern must be re-established. It follows that the call on private savings by the public sector in the OECD economies must be sufficiently low or negative to permit not only the higher domestic investment that is sought, but also the continuing transfer of resources to the developing countries.

Although there was little evidence of a strong relationship between budget deficits and real interest rates during the past decade, recent high real interest rates suggest that this is no longer the case. During the 1970s, world savings were sharply increased in the wake of the two oil shocks, which transferred large amounts of incomes to countries which, at least temporarily, were not able to spend it. At the same time, in the OECD area, household saving rates rose, and investment activity weakened. It is not surprising that, under these circumstances, real interest rates were low, or negative, even though budget deficits in the OECD area increased sharply over the same period.

While recovery is still in its early stages, it can also be argued that *current* deficits are not a major factor in crowding out private investment spending – though the marked decline in household saving rates suggests that this situation may not persist. Furthermore, and this is the key point, the remainder of this decade is likely to be – and we hope will be – quite different from the 1970s. The OPEC surplus has turned into deficit, and this situation seems likely to continue. To the extent that inflation is controlled, as we expect, and consumer confidence remains strong, household savings are unlikely to rebound strongly (though some increase from current very low levels may occur). Thus it is clear that, if large government deficits persist over the coming years, they will increasingly put pressure on the available savings needed to finance investment and the export of capital to the developing countries. Indeed, it is to some extent the perception by markets that such deficits may indeed persist, and thereby cause real interest rates to be high in the future, that is already putting upward pressure on current interest rates.

## Strengthening Market Forces

The OECD has long recognised that the failure of markets to adjust to changes in the world environment is an important constraint on economic performance. This is most serious when markets fail to perform adequately and when structural

rigidities interact with economic recession.

Positive adjustment policies are important not only in labour markets, but also in product markets. The need for industrial restructuring is considerable in all our economies. But when governments intervene to shelter declining sectors, the actions taken must be strictly temporary and closely linked to the phasing out of excess capacities. Equally, difficult issues are involved in framing the climate conducive to innovation and the development of new industries, without distorting trade or misallocating resources through inappropriate government intervention. It is necessary to strive in the direction of reducing the most inimical and ineffective forms of subsidy and regulation, to free up our economies for growth. The protection received by one enterprise or individual is too often the rigidity hampering another, frequently a more efficient one. This argument applies also to subsidies. There may, for instance, be little if anything to be gained from addressing the problem of low profitability by resorting to public subsidisation – through the taxation system or otherwise – unless those policies encourage a fuller and more effective use of resources of labour and capital.

Clearly the aim should not be to rule out all intervention, but rather to prune it so as to promote healthy growth. This cannot realistically be achieved all at once. Where market structures have become impaired, time will be needed to set things right, and in many cases an internationally concerted approach is required, difficult as that is to achieve. But the clear aim has to be to work progressively and steadily towards restoring conditions in which the normal discipline of the markets can be allowed an expanding role.

This holds not only for national markets but international ones. As OECD Ministers agreed at their last meeting in May, the favourable conditions provided by the economic recovery must be used to reverse protectionist trends and to reliberalise trade. By the same token reversing protectionism will promote stronger growth, less inflation and higher employment.

\*  
\* \*

Our confidence about the future has to be tempered by a realistic assessment of the present. Despite the more hopeful prospects now opening up, no-one should underestimate the political difficulties of persevering with the measures of structural adjustment and financial discipline on which longer-term success depends. This objective must not be frustrated by a loss of nerve, either by policy makers or by their constituents at this critical juncture.

---

# Towards More Effective Campaigns Against Poverty

by Rutherford M. Poats,  
*Chairman of OECD's Development Assistance Committee (DAC)*

---

**T**he global economic illness affected developing countries in a variety of ways, but almost everywhere it evoked a sense of crisis. In many low-income countries, where international development co-operation faces its most demanding tests, the crisis was an extra measure of woe superimposed on at least a decade of disappointed hopes.

In human lives, crisis can be the parent of fresh resolve or of enervating despair. At least it compels attention and reflection. The inherent optimism of those who work to accelerate economic and social development inclines them to draw fresh resolve and practical lessons from a crisis. So it was in 1983 as the overburden of global recession began to be lifted from the poor countries and this external brake on development was eased.

In most low-income countries, the crisis was a time of long-deferred adjustment to their resource limitations. This far-reaching process opened the way to more fundamental reappraisals of economic policies. Thus the climate in many countries became more favourable to objective consideration of lessons of experience. In this light, the current transition from global recession to renewed growth is offering fresh opportunities for more effective development co-operation between low-income countries and their external partners.

Whether 1984 is to be the beginning of a period of strong economic growth, widely shared and sustained, or a missed historic opportunity will depend critically on political leadership, in both industrial and developing countries. It may be reasonable to expect far-sighted political vision in applying the lessons of interdependence to economic relations among the major parti-

cipants in international trade and finance. It is asking much more to expect the political leadership of industrial countries to sustain and increase support for development of low-income countries over the many additional years that most of them need to become self-supporting partners in the global economy. The most important political leadership in the development equation, of course, is that of the developing countries themselves.

The political cost of giving priority to necessarily long-term development interests over competing near-term benefits or anxieties can be daunting. Moreover, the most courageous will and vision cannot overcome severe managerial limitations at the critical points where development is either accelerated or braked. The record of shortfalls in pursuit of bold development goals during the past decade has inspired caution.

Certainly the key to changing political priorities or reality in African villages is not likely to be found in new global goals or slogans. There already are enough unattainable promises outstanding: the 1974 World Food Conference's commitment to overcome the scourge of hunger by 1984, the centrepiece goal of the International Development Strategy for the 1980s to eliminate hunger "certainly by the end of the century", or the global targets for education, health and water. Such international declarations have contributed clarity of purpose and flesh-and-blood meaning to the multi-dimensional process of development. It is questionable, however, whether more joint declarations would have decisive influence on the priorities or performance of developing countries or aid agencies or trade-policy-makers.

What is widely agreed to be needed now

is country-specific action — including national goals where this can help to mobilise and sustain support for national political commitments.

In the disadvantaged low-income countries, leadership is called upon to give development real priority, persistently and with the expenditure of political capital. There can, however, be greater assurance now that their effort will not be in vain. There are now in these countries' own professional ranks and among their farmers and businessmen, as well as in the external development assistance community, more capacity, technical resources and experience for activating development than have ever been properly mobilised. The international systems of economic co-operation, including "South-South" co-operation, also are evolving so as to respond better to the

needs of poor countries. DAC Members and international development agencies have demonstrated their willingness to reinforce promising efforts of low-income countries with increasing aid.

All of these positive factors are only potential forces for development, of course, unless they are activated in a framework of policies and management that only the government of a developing country can provide. Of these requirements, the more demanding, in terms of the time required, is management. In many low-income countries, investment in human capital was inadequate during colonial years and poorly targeted after independence. Its limited product has been wasted in some instances by political upheavals and disaffection or alienated by low government salaries. The attempt of

some governments to solve development problems by controlling and subsidising production and marketing has spawned large bureaucracies doomed to ineffectiveness but difficult to abolish; they impose heavy drains on both the real economy and the budget. In some governments, political leaders have not demanded of ministries and agencies compliance with national policies, co-ordination among elements of the bureaucracy, or responsible budgeting. These and other management deficiencies now are widely recognised and remedial measures have been well defined by experienced officials of developing countries as well as by international development specialists.

Policies are more susceptible to early improvement, drawing on the recent, crisis-driven reassessments and the accumulating experience of national development programmes. Always, however, a proviso must be entered: the critical, difficult policy choices depend on far-sighted political will. The political priority for development is likely to be higher and more constant if the development enterprise is demonstrating increasing effectiveness in reducing poverty and hunger through economic growth. This has become the declared objective of development in many low-income countries. Now the challenge to all engaged in development co-operation is to enhance the effectiveness of efforts to realise this objective.

The key lesson of experience for the predominantly agrarian low-income countries has been that the reduction of poverty and its shadow, hunger, in such countries depend in the long run upon the broadening of popular participation in economic growth, especially agriculture-based growth; income distribution and growth policies can be made fully compatible, but they will not automatically be so. These principles have a bearing on both long-term development designs and the immediate decisions of governments and international agencies engaged in structural adjustment efforts. It is critically important that effective measures to help the poor to become more fully engaged in productive economic activities not be sacrificed in current budgetary retrenchments. As low-income countries re-set their courses for development in the aftermath of the recession, development aid can be especially effective if it facilitates choices of policies and operational measures that serve both to enhance economic efficiency and reduce poverty.

This is not to suggest that a generalised remedy is packaged and ready for all low-income countries to adopt. Each case is distinct. There are, however, basic lessons of both successes and failures that are relevant to the present state of develop-

### THE LOW-INCOME COUNTRIES

	GNP/ capita, 1981 US\$	GNP/ capita, 1971-81 Real growth (% per year)	GNP, 1981 million US\$		GNP/ capita, 1981 US\$	GNP/ capita, 1971-81 Real growth (% per year)	GNP, 1981 million US\$
<b>Least-Developed Countries</b>				Yemen	460	4.8	3,180
Afghanistan	180	2.4	3,500	Yemen, Dem.	510	7.6	970
Bangladesh	140	1.2	12,340	<b>TOTAL</b>	<b>280</b>	<b>-0.5</b>	<b>64,250</b>
Benin	330	1.1	1,010	<b>India</b>	<b>250</b>	<b>1.5</b>	<b>162,000</b>
Bhutan	80	-0.2	110	<b>Other Low-Income Countries</b>			
Botswana	900	8.6	820	Angola	790	-7.3	7,180
Burundi	240	1.1	950	Bolivia	1,140	0.8	7,600
Cape Verde	310	3.8	100	Burma	180	2.3	5,740
Central African Rep.	330	-0.9	680	Egypt	710	5.3	31,750
Chad	120	-4.5	530	El Salvador	720	-1.4	3,430
Comoros	310	-2.7	100	Ghana	1,370	-4.9	21,190
Djibouti	480	-5.3	180	Honduras	670	0.0	2,600
Equatorial Guinea	470	3.7	180	Indonesia	520	4.9	81,760
Ethiopia	140	0.8	4,240	Kampuchea	110	-2.9	740
Gambia	350	0.5	200	Kenya	430	2.2	6,210
Guinea	300	-0.2	1,560	Liberia	540	-1.2	930
Guinea-Bissau	190	1.3	130	Madagascar	330	-2.6	2,820
Haiti	300	1.1	1,570	Mauritania	480	-0.3	710
Laos	100	6.7	360	Mozambique	230	-5.6	2,700
Lesotho	540	8.1	730	Pakistan	350	2.3	29,990
Malawi	260	1.4	1,630	St. Helena	440	-	-
Maldives	270	1.0	70	St. Vincent	520	-0.68	70
Mali	190	1.2	1,140	Senegal	500	-0.2	2,340
Mayotte	220	0.8	10	Solomon Islands	620	2.0	160
Nepal	160	0.2	2,460	Sri Lanka	300	3.4	4,330
Niger	340	-0.4	1,650	Tokelau Islands	550	-	-
Rwanda	250	1.8	1,270	Tonga	500	1.28	60
Sao Tome & Principe	380	-0.3	30	Turks & Caicos Islands	470	-1.58	-
Sierra Leone	320	-1.0	1,120	Tuvalu	550	-2.88	-
Somalia	280	0.7	1,240	Vanuatu	550	-0.78	70
Sudan	380	-0.6	6,720	Viet Nam, Soc. Rep.	180	-1.28	10,150
Tanzania	300	1.4	5,840	Zaire	220	-2.9	5,970
Togo	390	-0.3	870	Zambia	590	-2.6	3,140
Uganda	1,500	-4.2	5,360	<b>TOTAL</b>	<b>440</b>	<b>1.4</b>	<b>231,630</b>
Upper Volta	240	1.8	1,280				
Western Samoa	860	2.5	140				

## THE MAIN ARENA FOR DEVELOPMENT AID

Sixty-six countries, accounting for nearly half of the population of all developing nations, are classified by the OECD as "low-income countries" (see table). They include India and the other large concentrations of poor people in southern Asia (China is outside this universe), about 250 million people in Africa and small numbers in other regions. "Low-income" here means an average GNP per capita of up to \$600 per annum in 1980. The World Bank classes eleven of these countries as "lower middle-income". The Bank's statistics, which are also drawn upon in what follows, have been adjusted for the different definition of "low-income" used here<sup>1</sup>.

Statistics averaging the economic activities of 1.4 billion people in more than sixty countries over ten or twenty years are sure to conceal more than they reveal. But they do provide some comparative indications of the heavier burdens carried by these countries on the road to economic self-reliance.

As a whole, the economic growth rates of low-income countries lagged behind those now classified as middle-income during the 1960s and fell to 3.6 per cent per year in the 1970s. Meanwhile, gains in health, education and food supply caused their populations to grow faster; the average population growth rate was 2.6 per cent per year in the 1970s – excluding India, which reduced its rate to 2.1 per cent. The rate of increase in agricultural production exceeded population growth in the 1960s but declined to about 2.5 per cent in the last decade. Manufacturing growth also slowed in the 1970s. Their exports of manufactures made virtually no gain in the 1970s, with the exception of significant gains late in the decade by India.

Although their shares of world markets are small, the proportion of GDP going into exports in many low-income countries typically is greater than that of most industrial countries. They are generally very dependent on a few non-fuel raw material exports, hence they were more seriously hurt than the more diversified economies by the steep decline (20 per cent in real terms) in non-fuel commodity prices in 1981-1982.

The most alarming deceleration of growth and per capita income losses have been in Sub-Saharan Africa. Twenty-two of the 37 "least-developed" countries (LLDCs) are there. Food production has been barely growing for two decades while population growth has risen to about 3 per cent, the highest in the world. There have, however, been notable exceptions to this common trend.

The International Food Policy Research Institute<sup>2</sup> projects that on past trends the food deficit of Sub-Saharan countries could reach 35 million tons of basic food staples in the year 2000 while Asia would shift from a net deficit to a surplus of more than

20 million tons. Already Africa's food imports have reached 24 million tons in 1981, at a cost of \$8.6 billion. The region has become the largest recipient of food aid – about half of the total as compared with 5 to 6 per cent in the early 1970s<sup>3</sup>.

Important to national development as is the food import trend in Africa, even more troubling may be the impact of low agricultural productivity on the rural-urban terms of trade, on rural industrial and commercial growth and on rural employment. The consequent migration from villages to urban slums has explosive political as well as social and economic implications.

The trend also is drawing sharper class lines in the countryside, with modern large-scale farming by-passing the much larger body of subsistence or small surplus farmers. As the income of smallholders and landless workers in the villages falls behind the modern farming sector, the proportion and absolute numbers of undernourished people may be increasing<sup>4</sup>.

Low-income countries have registered marked progress in the extension of education and health services to rural areas, but a wide disparity between rural and urban services remains. The primary school enrolment ratio, countrywide, doubled for the low-income countries as a whole during the two decades starting in 1960. About one-fifth of secondary school age children were enrolled in 1980, compared with only 6 per cent in 1960. Adult literacy nearly doubled over the 20 years, to above 40 per cent of the total population of these countries. Life expectancy at birth rose from an average of 41 years in 1960 to 51 years in 1980.

DAC Members' aid to low-income countries was about 57 per cent of their total concessional flows in 1981 – a total of \$14.6 billion. Nearly half of this amount went to Sub-Saharan Africa, whose countries account for only 11 per cent of the population of all developing nations. Aid to the Sub-Saharan region equalled almost 40 per cent of its total imports and over half of its total investments in 1981. These proportions were even higher in the Sahelian countries and in Sri Lanka, while they were much lower in the large Asian countries.

1. World Development Report 1983, The World Bank, Oxford University Press, New York, 1983.

2. IFPRI Report 1982, International Food Policy Research Institute, Washington, D.C.

3. Williams, M., Report of Executive Director, World Food Council, Rome, 1982.

4. Conclusions and Recommendations of the World Food Council at its Ninth Ministerial Session, New York, June 1983.

ment in many low-income countries. And there are the implications for development aid and other aspects of international economic co-operation in the proposed policy orientations.

### Some Pervasive Problems

Each country is a special case. A key step towards economic rationality or more efficient government operations may be feasible today in one country and premature in another.

### Food price controls

Take the pervasive problem of food price controls. Nowhere is there reasonable doubt today that the protection of consumer interests and/or the government budget through food-price controls and indiscriminate subsidies has been excessive and self-defeating. In extreme cases crops have been extorted from farmers at below production costs. In many cases producer prices imposed by state market monopolies have been a disincentive to smallholder production of surpluses for the domestic market. Their effect has been to suppress

agricultural growth and rural non-farm development – the fundamental means of overcoming poverty in agrarian countries. This now deeply implanted error is easier to acknowledge than to correct.

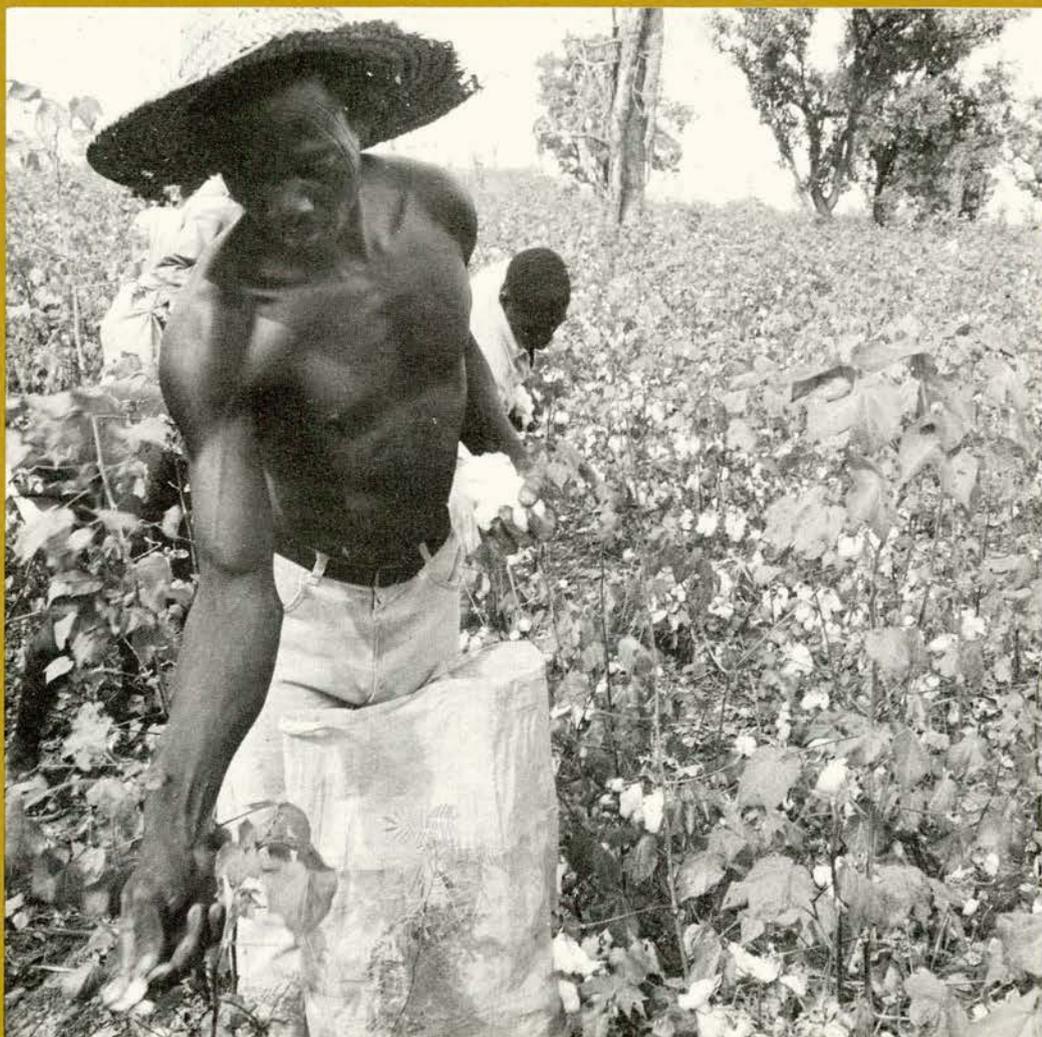
The widely recognised better alternative is some form of food subsidy targeted on the market-dependent poor, along with either de-control or gradual adjustment of official prices on domestic crop collections to international levels plus transportation. The administrative and political difficulties of this reform were manageable in Sri Lanka, using food stamps, but they are

daunting in the Sahel where the poor are the majority. These governments have tried to raise official producers' prices to incentive levels, but they have not budgeted adequately to buy all offered grain. Aid donors can help to facilitate such crucial reforms through well designed food aid and technical and financial support for national food strategies.

### **The small farmer**

Another recurrent problem has been systematic neglect of small and less innovative farmers by official credit and extension services. This discrimination has been justified by a belief that concentrating limited funds and staff on the more innovative, prominent farmers would create local examples of successful practice which smaller farmers would copy. This theory proved to be contrary to village psychology in some countries. Wider disparities of income resulted. Efforts to correct this bias are under way, but they require not only firm leadership and management down the line but more and better government agency staffs and priority for smallholder production in budget allocations. Even where this is possible, small farmers may shun the risks of change or may lack confidence in government agents. A promising means of mitigating both the resource and communication problems was used during Kenya's popularisation of hybrid maize. Extension advice was channelled through village organisations composed of elected representatives of clusters of farmers.<sup>1</sup>

Farmers' co-operative organisations have been instrumental in many success stories of development. They nurture private initiative, flexibly respond to the felt needs of farm households, stimulate local development of commercial and light industrial enterprises, and generally promote a sense of participation in deciding one's fate — a basic human need. Yet, in many African countries, the perhaps unintended effect of government actions has been to suppress the growth of farmers' associations or the adaptation of traditional village systems to commercial agriculture. Instead, governments resorted to state corporations and controls, motivated by impatience and distrust of private initiative in the absence of a developed legal system to prevent abuse of market power. The result has been a sort of indigenous colonialism, extracting surpluses from the peasants for urban or industrial uses. African commentators are increasingly calling for changes in these attitudes and



1. House, W.J. and Tony Killick, *Social Justice and Development Policy in Kenya's Rural Economy*, in *Agrarian Policies and Rural Poverty in Africa*, D. Ghai and S. Radwan, editors, ILO, Geneva, 1983.

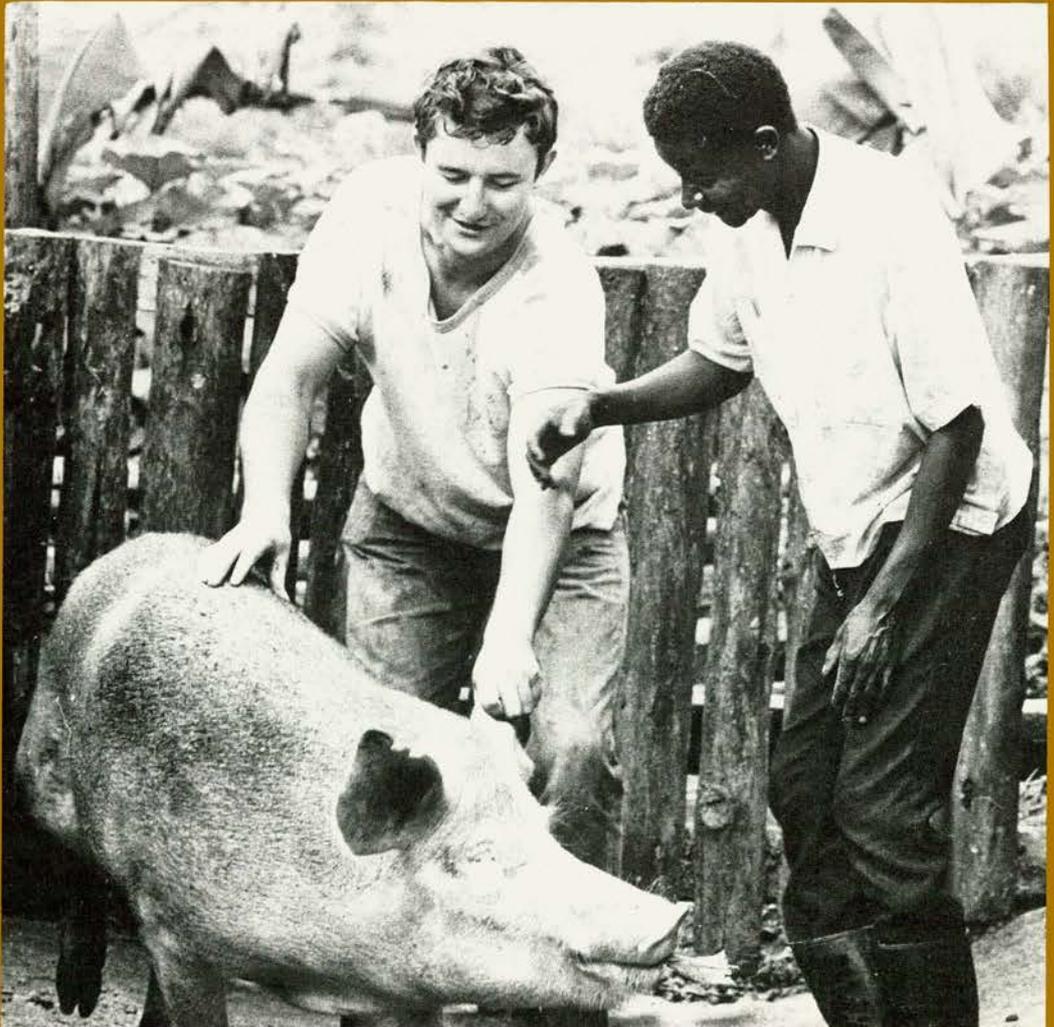
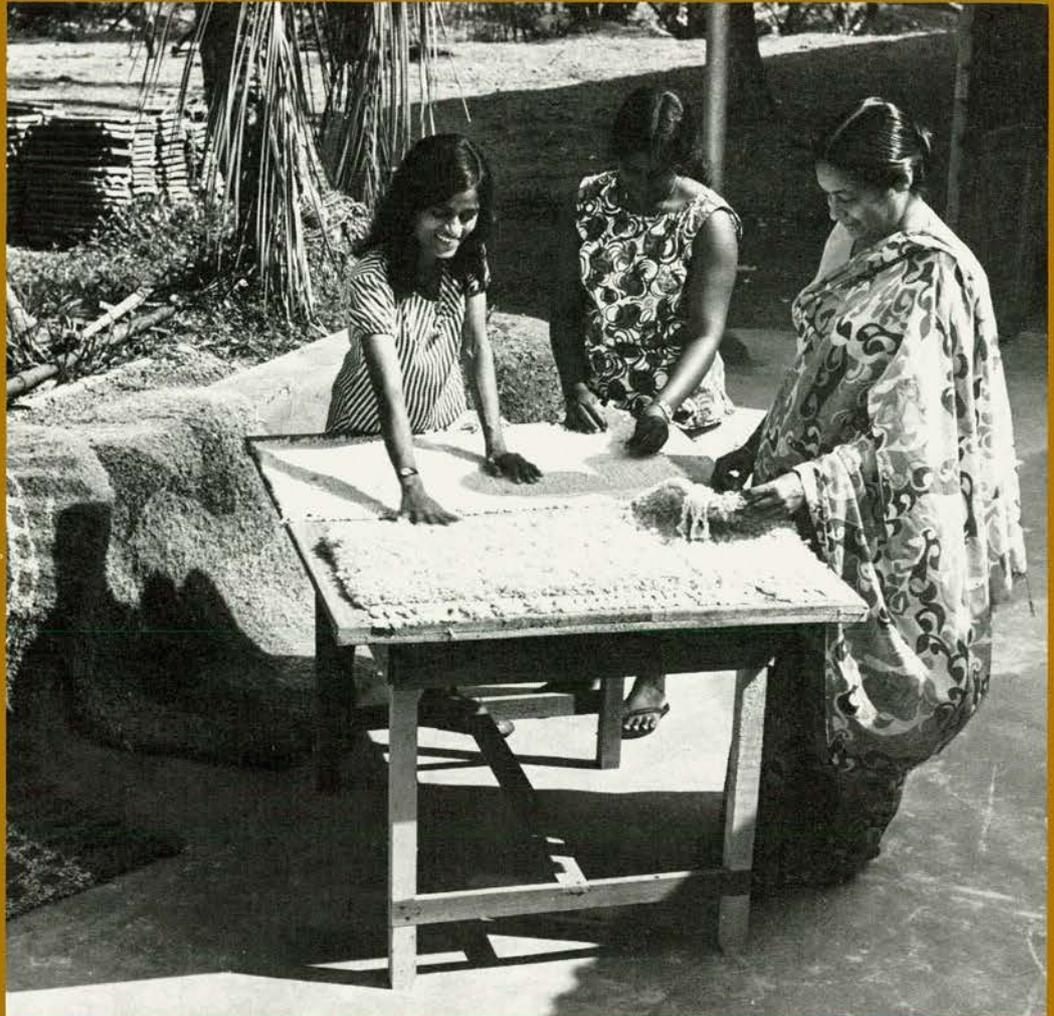
## FOUR ANTI-POVERTY STRATEGIES<sup>1</sup>

**Kenya.** A star development performer in the Sixties, Kenya saw the economic tide turn in the early Seventies. By the end of that decade, alleviating poverty had become the central objective of government planning: 30 per cent of the inhabitants were below the poverty line, almost all in rural areas. The key in this strategy is economic liberalisation – less protection and more reliance on the market. With the highest fertility rate in the world – 8 children per woman on average – farm employment must grow rapidly. Top left: the Embu Agricultural Institute started with aid from the United Kingdom.

**The Sahel.** Of the 30 million people in the eight countries of West Africa that make up the Sahel, perhaps half are perennially undernourished and the problem has been compounded by drought and global recession. The joint goals of the eight governments, grouped into the CILSS, and the aid donor's group, the Club du Sahel, are food self sufficiency and ecological equilibrium. This implies more rapid growth in production of food and livestock than of population, slower migration to the cities, more rice production for the burgeoning urban population, higher rural incomes, less dependence on imports and an end to the overgrazing and excess fuelwood collection which lead to erosion. On all counts the gap between goals and achievements is widening. The only exception to the bleak story is a five fold increase in cotton yields. Social indicators have registered gains but from a very low base. Bottom left: Cotton growing in Upper Volta.

**Sri Lanka.** A leader according to almost any social indicator since its independence in 1948, Sri Lanka (top right) is however dependent on a few raw material exports – tea, rubber and coconut oil – which have suffered from the world recession. In 1977, a new government initiated a sweeping economic liberalisation to promote export-led industrial growth and agricultural expansion. The results were spectacular: growth doubled, unemployment was cut in half, aid commitments rose, and Sri Lanka began exporting textiles and clothing. But a drought in 1980 compounded balance-of-payments problems while rising prices, less cushioned than before by subsidies and controls, reduced real incomes resulting in emergency adjustment measures, taken with the help of the IMF. Serious structural problems remain – insufficient production of rubber and tea by government-owned plantations, a failure to shift resources to private investment or to develop agro industries.

**Zambia.** Fifteen years ago President Kaunda defined Zambia's goals for its rural majority in very specific terms that foreshadowed the "basic human needs" approach. In the days of copper-based economic boom, rural development seemed relatively painless. But from 1974 on, investments and services in rural areas had to be severely restricted. The discrepancy between goals and achievements was due in part to the diversion of resources from agriculture to large-scale industry and the cities. Subsistence farmers, who account for seven out of eight rural households, have not been given sufficient attention, and their real incomes have deteriorated. In the Eighties, there have been substantial increases in the price of maize and other agricultural products, reduction of subsidies and elimination of price controls on consumer goods, expansion of primary health care and an increase in agriculture's share of the government's capital budget. Bottom right: a Swedish rural development project.



1. A detailed analysis of these strategies is presented in the DAC Chairman's report.

roles of the state. Changes to give greater scope for smallholder initiative could be undertaken without dismantling parastatals and marketing boards, but fundamental changes in attitudes and roles would be required. In this field, particularly, distinctive land tenure practices and other cultural factors as well as national political choices will determine how and how fast change occurs. Professional research and international seminars, mainly among Africans, could facilitate the process of change, and there may be appropriate roles for such international groups as the CILSS-Club du Sahel and the Southern African Development Co-ordination Conference in supporting studies of the problem and its remedies.

## Ten Guiding Principles

These and other politically charged obstacles to development in low-income countries are most susceptible to pragmatic remedies where the overall objectives of national development are clearly articulated. In eastern and southern Africa and parts of Asia this increasingly is the case. To be sure, there are inconsistencies between objectives and policies and between these and budget allocations; often priorities are not binding. However, it now can be said that about half of the low-income countries have made the reduction of poverty their primary objective and the acceleration of agricultural growth the primary means to that end.

There is still lack of precision in the formulation of objectives, and as in industrial countries, some confusion between ends and means. But less and less are political shibboleths or such doctrines as "modernisation through industrialisation" or "economic independence through import substitution" diverting attention from the practical agenda. Within the basic framework of the anti-poverty campaign, there are differences among countries and debates within them on political choices, such as the weight to be given to income generation versus income distribution; domestic food self-sufficiency versus food self-reliance through a combination of export crops, domestic food production and imports; or the appropriate allocation of capital among national infrastructure, large industrial development and rural industrial and service development.

The most striking and hopeful fact, however, is the pragmatism that developing-country and outside professionals are bringing now to the business of development problem-solving. If the professional literature and positions taken by developing-country specialists at international seminars are reasonable indicators of trends, a growing measure of consensus

can be found on some important development options.

No general principles are applicable everywhere or universally agreed, but there is a high degree of support among strategists for the following lines of approach in a low-income agrarian country whose government formulates basic development objectives as "growth with equity", or "reduction of poverty" or "reduction of hunger" or "assurance of basic human needs":

- Sustainable gains can be made with the greatest efficiency and equity by increasing employment and incomes where most people live and where poverty is most common, i.e., the rural areas. Both farm and non-farm employment – productive employment – must increase faster than population. All economic policies and programme priorities should be tested against this paramount requirement.

- In such countries the key to a sustainable reduction of rural poverty is the greater participation of small farmers in producing for the market – and at rising productivity. The extension of smallholder farming and more intensive cropping (multiple cropping and technology-aided practices) reduce poverty directly and generate demand for farm labour and for non-farm production of goods and services. In most cases, farm household and labour incomes so expanded are the only reliable support for expansion of non-farm employment. Small farmers are more likely to spend their cash incomes locally than are large private farmers and farming corporations.

- Small-farmer production of marketable surpluses of traditional food staples can make a contribution, but the primary guide to crop-selection should be income and employment creation, i.e. economic efficiency. In some circumstances, the most efficient crop selection will be export crops because of higher productivity and hence higher income generation plus foreign exchange generation. (There is some disagreement on this point.)

- Simultaneously with shifts toward market-based or less controlled pricing of agricultural produce, governments must ensure that extension services, credit and transport effectively reach small farmers, including women, who seek to create marketable surpluses, as well as presently defined "commercial" farmers. Otherwise price inducements will often fail<sup>2</sup>. Research, extension and training should focus on raising the productivity of small farmers and of basic food crop varieties, with immediate attention to reducing the gap between potential and actual yields of major food crops using existing technologies.

- In areas of private land ownership, security of ownership or tenure should be

ensured so as to encourage farmer investment in productivity, improved living conditions and ecological conservation.

- The marketing system must ensure that small farmers receive prices announced by government as guaranteed. The market also must provide efficient supply of both production inputs and consumer goods. Government should not monopolise or otherwise discourage private or co-operative development of marketing systems, but government should guard against private abuse of economic power and be prepared to act as a marketer of last resort or producer price guarantor. (There is some disagreement on the latter point.)

- The expansion of rural non-farm economic activity – marketing, construction, administration, transport, processing, small-scale manufacturing and crafts, education, health and financial services, as well as other rural activities such as mining and forestry – must provide one-quarter to one-half of the additional jobs plus increased cash income for subsistence farmers. Farm income gains are the major basis for this growth, but governments can reduce constraints to the necessarily rapid non-farm development by providing supporting infrastructure, training, technical services and credit to small entrepreneurs and community organisations. If national macro-economic policy and government construction management are rational, the technologies employed in non-farm activity are likely to be labour-intensive.

- In both farm and non-farm development programmes, including the provision of social services and infrastructure to villages, government agents should encourage local community organisations (involving women to an increasing extent) to take leading roles in the design, execution, maintenance and, to the extent reasonable, financial support of projects.

- Policies and programmes (including commercial and aid-financed food imports) affecting urban food supply and prices should encourage rather than discourage domestic food production. (There is disagreement as to whether this warrants government intervention through tariffs, quantitative restraints or offsetting subsidies in order to promote national food self-sufficiency.) Food subsidies, whether applicable to imported or locally produced food, should be targeted on the poor, including rural non-farm people.

- Other nutritional measures should be integrated into the national food and agricultural development strategy. This implies, among other things, encouraging the use of domestic crops in nutritional pro-

2. Streeten, Paul, "Food Prices as a Reflection of Political Power", *Ceres*, March-April, 1983; also *Development Perspectives*, Macmillan Publishers Ltd., London, 1981.

grammes. Simple and cheaply extended preventive health and curative practices — notably the four-point UNICEF/WHO scheme for home treatment of infant diarrhoea, identification of infant malnutrition, inoculation against childhood diseases, and breast-feeding — effectively improve nutrition of vulnerable people and relieve other burdens of poverty.

The foregoing covers probable elements of a national food strategy or anti-poverty strategy, although its specifics would vary. It is not offered as a complete list of orientations that would improve the focus and effectiveness of development efforts in most low-income countries. That would be much longer, covering national institutions and services, multi-sectoral campaigns such as manpower development and family planning, industrial and export development, fiscal, trade and other economic policies. On these there is much less agreement as to inter-sectoral linkages and trade-offs.

## Implications for Development Aid

The development assistance community has recognised the priority of low-income countries by its allocation of concessional aid to them. Their share of DAC Members' total official development assistance (ODA) was 57 per cent in 1981, a total annual level of \$14.6 billion. DAC Members that allocate significantly lesser portions of their aid to low-income countries are being challenged on this issue in the Committee's aid reviews.

At this writing, the critical pending test is the donors' decision on the level of the next replenishment of the International Development Association (IDA), the centrepiece of the collective international aid effort in low-income countries. In the words of the agreed UNCTAD VI resolution, this replenishment should be "at a substantial level, taking account of the need to accommodate an expanded recipient community (a reference to China's claims on IDA) and the desirability of reversing negative growth rates in IDA's most distressed borrowing countries". The "soft windows" of the regional development banks and the International Fund for Agricultural Development (IFAD) also are essential partners of the low-income countries.

Donors whose multilateral programmes are relatively low as a proportion of their total aid effort or their contributions to these multilateral lending programmes have a special responsibility to support their adequate replenishment.

### *Aid for short-term adjustment and maintenance*

The aid community has been adapting

the forms and emphases of aid programmes to the needs of low-income countries and planning further changes in response to their concurrent fiscal and balance-of-payments difficulties. Countries undertaking rigorous structural adjustment in association with the IMF and/or World Bank may be unable in the near term to undertake large new capital projects, even if substantially financed by foreign assistance, but they urgently need technical and budgetary help in maintaining vital services and in financing production inputs, which have been starved by recession and retrenchment, as well as assistance in getting small quick-gestating production projects under way.

### *Aid for long-term development*

Our survey of the longer-term development record and prospects of low-income countries indicated five broad areas requiring more systematic effort for many years ahead by their governments and their external partners in development:

- *Comprehensive development strategies focussed on smallholder agriculture and food security for the poor.* Unless these fundamentals of development are consistently addressed by national policies and operating priorities, the contribution of aid to the reduction of poverty in most low-income countries will be limited. Unless the key institutions that must carry out such a strategy are capable of playing their roles, the best conceptions and financial assistance will avail little. Hence, development co-operation must deal in an integrated way with both the conceptual and institutional aspects of national programmes. External advisers to low-income countries engaged in a comprehensive rural development effort must be of at least as high competence and motivation as those assigned to more advanced countries.

- *Co-ordination in each assisted country,* focussing domestic and aid resources on the country's development priorities. The many interdependent parts of an effective programme to achieve food security and reduce rural poverty must be orchestrated both internally and with external agencies. Coordination can help to make coherent choices between new investments and support of existing functions. Co-ordination, while offering high returns, places large demands on the more broadly competent manpower of both the assisted government and development aid institutions.

- *Improvement of management of economic and technical organisations* in both the public and private sectors. Many failed plans can be traced to inadequate management, especially of public services to small farmers and rural communities. The World Bank devoted much of its *World Develop-*

*ment Report 1983* to an assessment of the characteristics, causes and corrections of management weaknesses in developing countries. This is a field in which DAC Members' public and private institutions can make valuable contributions through advisory work on management aspects of new investments and through collaboration in the maintenance or strengthening of existing institutions or functions. Successful modes of aid in this field have included "twinning" arrangements between counterpart institutions, in-service management training at specialised institutions, and short-term reinforcement of agencies or enterprises by contract teams, seconded individual experts or retired executives from industrial countries.

- *Long-term investment in development of human resources.* Acute shortages of skilled manpower often are critical constraints in low-income countries, especially in rural operations. In order to reduce this constraint, governments, aid donors and private investors increasingly are building training elements into all types of projects. Large benefit "multipliers" also can result from aid to both formal and informal educational systems in the design and testing of low-cost methods of developing skills required by particular development programmes.

- *Research to give poor people better means of improving their lives.* Unless research in such fields as traditional food crop production and fuelwood production and combustion yields practical technological aids adapted to local factors, efforts to raise rural incomes and living conditions in low-income countries, especially in Africa, will be severely handicapped. Operationally oriented agricultural economic research also can point the way to greater effectiveness. Aid donors can provide the critical stimulus, orientation to operational needs, and additional funds that research often needs to give it sufficient scope and practicality.

These suggestions for improving the effectiveness of development co-operation in low-income countries amount to a formidable set of demands on aid institutions as well as on the countries concerned. They are not unrealistic demands, however. Now, far more than at the outset of the 1970s, the partners in development can draw with confidence on a pool of intellectual capital derived from experience. In this respect, at least, the prospect for securing the continuing support of people in both developing and industrial countries for development is more promising than in the past. With demonstrated effectiveness in reducing poverty through sustained economic growth in poor countries, development assistance should gain increased support in DAC countries.

---

# Aid to Food and Agriculture: A Permanent Challenge

---

*The development of agriculture and the improvement of nutrition are, more than ever, priority issues for Third-World countries, especially the poorest ones. In Africa, the annual rate of growth of agricultural and livestock production per person was low in the 1960s and became negative (-1.1 per cent) in the 1970s. In southern Asia, despite marked progress due to the "Green Revolution", the increase of agricultural output has only kept up with population growth over the last two decades.*

*Matters have not improved in the 1980s: in 1982 the increase in food production in the developing world was well below that of 1981, largely because of drought that afflicted Africa, particularly Zimbabwe, Swaziland, Botswana, Zambia and other parts of Southern Africa. In India, the food situation has deteriorated again, after some years of improvement. In addition, and particularly in Africa, the real prices of most commodity exports have slumped badly. Lastly, imports of food products by the poorest developing countries have declined, despite malnutrition and hunger, because these countries lack the necessary foreign exchange.*

*After a brief review of current and future trends in aid for food production and agriculture, the 1983 Annual Report<sup>1</sup> of the Chairman of OECD's Development Assistance Committee (DAC) examines some of the difficulties encountered by donors in this sector and how food strategies can help as well as the implications of such strategies for aid.*

**T**here was a quite remarkable increase in aid for agriculture<sup>2</sup> between 1973 and 1978 (more than 18 per cent a year at constant prices, see table 1), but that rate of increase subsequently slowed down, reaching only 2.5 per cent a year between 1979 and 1981. In the latter year, bilateral and multilateral official commitments amounted at current prices, to \$12.2 billion, or 23.5 per cent of total aid commitments. Of this amount, official development assistance (ODA) accounted for a little less than two thirds.

The slowdown in the increase of aid to this sector after 1979 reflected decreases in both bilateral and multilateral ODA.

Several comments can be made about this trend:

- After the very rapid growth of *bilateral and multilateral ODA* between 1973 and 1979 (more than 14 per cent a year in constant prices), a slowdown could be expected. But it was both very sharp and very sudden: the increase between 1980 and 1981 was only 4 per cent (a higher rate of growth however, than that of bilateral ODA to all sectors).
- Analysing changes in aid volume from one year to the next is not always very significant. Between 1980 and 1981, the appreciation of the dollar introduced further distortions into the figures recorded for *bilateral ODA* programmes. Some pro-

grammes increased in terms of national currency, but the conversion of that currency into dollars made them appear to have fallen (e.g. Belgium, Italy, Norway and Sweden) or to have increased only a little (Denmark and France).

- While the overall tendency is towards a levelling off, there is great disparity among the various *bilateral ODA* programmes of the DAC Members (table 2). Some programmes have been and still are expanding very rapidly (Canada, the EEC, Denmark, Japan and Switzerland) while others are declining (the United Kingdom, Germany and the Netherlands), although the increase in the last two countries had previously been very strong.

- There was also a halt in the expansion of *multilateral ODA*, but not as strong as for bilateral ODA. Following a sharp decline between 1978 and 1979, commitments of the World Bank's soft window, IDA, progressed from 1979 onwards to reach \$1.7 billion in 1981. At the same time, loan commitments on concessional terms to agriculture by the special funds of the regional development banks and the International Fund for Agricultural Development (IFAD), which had been growing strongly since 1976, stopped rising in 1981, though there was no change in the policy of those organisation which continue to give high priority to food and agriculture in their programmes. Finally, the commitments of the United Nations bodies (in particular the FAO and UNDP) for food and agriculture have been increasing steadily since 1978.

- Despite the crucial importance of human resources in developing agriculture and improving food and nutrition, traditional bilateral technical cooperation (scholarships, technical advisers, teachers, etc.) has been stagnating.

- As to geographical distribution, there is a gradual – but evident – redirection of aid to food and agriculture towards the low-income countries (table 3) and towards Africa.

---

1. Development Cooperation: Efforts and Policies of the Members of the Development Assistance Committee, 1983 Review, to be published shortly.

2. Contrary to the definition of aid for the other sectors where aid includes only Official Development Assistance (ODA), "aid" for agriculture includes all public sector commitments – i.e. Official Development Assistance (ODA) and other official flows (OOF) from the DAC on a bilateral basis, from multilateral organisations and from OPEC, to eighteen subsectors. These include all activities contributing to agricultural development directly (irrigation, supply of farm inputs agricultural services, etc.) or indirectly (integrated rural development projects, rural infrastructures, manufacture of agricultural inputs, agro-food industries, regional and river-basin development programmes, etc.). This definition excludes food aid.

## 1. AID FOR AGRICULTURE... BY SOURCE AND TYPE OF AID

Official commitments at constant and current prices, 1973-1981 (\$ million)

Commitments by Source and Type	1973		1978		1979	1980		1981	
	A	B	A	B	A-B	A	B	A	B
<b>ODA</b>									
DAC bilateral + EEC <sup>1</sup>	1,594	810	3,633	3,270	4,304	3,809	4,228	3,839	4,261
Multilateral	1,533	725	2,761	2,402	2,503	2,969	3,266	3,083	3,299
OPEC	69	34	307	276	243	179	199	346	374
1. Sub-total	3,196	1,569	6,701	5,948	7,050	6,957	7,693	7,268	7,934
<b>OTHER OFFICIAL FLOWS</b>									
DAC bilateral + EEC <sup>1</sup>	351	172	403	353	329	237	265	527	569
Multilateral	902	442	3,275	2,872	2,319	2,621	2,935	3,376	3,646
OPEC	63	31	49	42	99	79	88	96	103
2. Sub-total	1,316	645	3,727	3,267	2,747	2,937	3,288	3,999	4,318
<b>TOTAL OFFICIAL ASSISTANCE</b>									
DAC bilateral + EEC <sup>1</sup>	1,945	982	4,036	3,617	4,633	4,046	4,493	4,366	4,830
Multilateral	2,435	1,167	6,036	5,274	4,822	5,590	6,201	6,459	6,945
OPEC	132	65	346	320	342	258	287	442	477
<b>Total (1 + 2)</b>	<b>4,512</b>	<b>2,214</b>	<b>10,428</b>	<b>9,211</b>	<b>9,797</b>	<b>9,894</b>	<b>10,981</b>	<b>11,267</b>	<b>12,252</b>

A = at constant prices, 1979 = 100

B = at current prices

1. EEC aid managed by the Commission and by the European Bank of Investment.

## 2. ...BY DONOR

\$ million at current prices

	1976	1980	1981
Australia	7	43	82
Austria	22	66	27
Belgium	9	21	18
Canada	170	167	395
Denmark	17	98	99
EEC <sup>1</sup>	156	386	(423)
Finland	5	17	21
France	308	478	534
Germany	186	729	489
Italy	32	33	128
Japan	90	524	932
Netherlands	304	379	289
New Zealand	14	13	17
Norway	43	70	69
Sweden	88	209	204
Switzerland	9	46	115
United Kingdom	70	135	117
United States	363	1,079	981
<b>Total DAC Members</b>	<b>1,893</b>	<b>4,493</b>	<b>4,830</b>
Total Multilateral Agencies	2,715	6,201	6,945
Total OPEC	424	287	477
<b>GRAND TOTAL</b>	<b>5,032</b>	<b>10,981</b>	<b>12,252</b>

1. EEC aid managed by the Commission and by the European Bank of Investment.

• Analysis of non-concessional flows for food and agriculture reveals a steady rise between 1979 and 1981 (a rise of more than \$1 billion in constant prices between

## 3. ... BY RECIPIENT<sup>1</sup>

(%)

Recipients by Income Level	ODA		ODA + OOF	
	average 1977-1978	average 1980-1981	average 1977-1978	average 1980-1981
Low-Income Countries	71	79	47	57
of which:				
Least Developed Countries <sup>2</sup>	22	27	14	17
Other	49	52	33	40
Middle-Income Countries	21	17	32	26
Newly Industrialising Countries (NICs)	6	3	21	15
OPEC	2	2	.1	2

1. Commitments only. Official development assistance (ODA) and other flows (OOF) of DAC Members, the EEC and international financial institutions.

2. 31 countries.

1980 and 1981) especially those coming from the multilateral financial institutions.

## Future Prospects

Despite general acceptance of the need to attach greater importance to food and agriculture if malnutrition and under-nutrition are to be overcome, the prospects for increasing aid for agriculture are not bright.

So far as multilateral aid is concerned, a period of consolidation rather than continued expansion of resources is to be expected, and this cannot fail to have an impact on aid to the agricultural sector, which already accounts for a large share of commitments. The negotiations for the seventh replenishment of IDA (one of the

main sources of finance for agriculture) are likely to drag on. IFAD is having difficulty in mobilising the amounts already agreed upon for its first replenishment; and the prospects for the second one, due to take place in 1984, are not encouraging. The regional development banks have plans to increase their lending from their ordinary capital resources.

As to their concessional funds, however, only the African Development Fund is in a position to increase significantly its lending in real terms in the immediate future. There is also a possibility of expansion in the fifth European Development Fund (EDF), which is planning to allot 40 per cent of its resources to agriculture (compared with 35 per cent in the previous EDF). The period of rapid growth of United Nations' resources also appears to be at an end.

UNDP contributions are likely to stagnate, and the growth in the FAO's extra-budgetary resources is beginning to decline.

The trend of *bilateral* aid is still more difficult to forecast. What is expected at present is a slight rise in overall ODA. Some countries might significantly increase their commitments for food and agriculture, i.e. Canada, with 45 per cent of its total commitments to be devoted to this activity compared with 39 per cent in 1981, Belgium, with its recent voting of a new Third World Survival Fund of \$200 million, Italy with its \$500 million programme for the Sahel, and France, in the context of its overall efforts to raise ODA to 0.7 per cent of GNP. Although some countries, such as Germany and the Netherlands, might return to a moderate rate of increase in their agricultural commitments, others – Japan and the United Kingdom – have announced that it will probably be difficult to maintain the present volume of aid to this sector.

### Obstacles to Efficiency ...

Action aimed at making more effective use of the resources placed at the disposal of the developing countries is therefore becoming urgent. However, the agricultural sector remains one of the most difficult for the aid agencies to tackle. It is much easier to build a road than to contribute to the development of millions of peasant holdings, since decisions affecting these plots are not made by those responsible for promoting development. After several decades of aid and despite some progress (the Green Revolution in Asia and certain cash crops in Africa) there have been many setbacks, particularly in subsistence farming and rural infrastructures. The reasons for these setbacks include:

- *The complexity of agricultural development.* Although isolated aid projects may be successful in the long run, aid to agriculture can be effective only if national policies focus on development and the effective use of aid. All economic parameters (prices, taxation, exchange rates, marketing and outlets, transport, communication systems, etc.) need to be taken into account but rarely are.
- *Recipients' absorptive capacity* leaves much to be desired, due to the lack of institutions able to serve as a link between the central government and the farming population or to supply the essential services and inputs. There is also a scarcity of competent technical staff at local and national level: it is difficult to attract such staff to the rural areas with their harsh conditions of life and even more difficult to keep the trained people on the spot once aid is withdrawn. The problem of human resources is a crucial one for rural development.

- *The quality of expertise in certain aid agencies* is not up to the mark.
- *There may be insufficient financial resources*, especially for maintenance.
- *Western technologies may be ill-adapted* to local conditions, particularly in Africa.
- *Aid is budgeted for too short periods.* Progress however, has been made towards solving this problem, especially in the United States. Aid should not be brought to a halt abruptly but by degrees.

### ... And How to Overcome Them

Analysis of these obstacles highlight possible lines of approach:

- *Expand technical assistance*, with an emphasis on training more qualified, motivated and responsible staff.
- *Support institutions* in a responsible and

consistent way closely linked to the development actions undertaken or planned.

- *Encourage local producers* and their organisations as well as national development agencies to take much of the responsibility. The aid agencies should limit themselves to ensuring that the project is logical and coherent but not make the detailed decisions.

- *Make aid more flexible* by facilitating the carry-over of funds from one year to the next, for example, and by integrating evaluation and follow-up measures into the project from the start. Aid must be allocated to cover recurrent as well as capital costs.

- *Deal with problems of aid to agriculture in more comprehensive fashion*, as part of development plans or food strategies, an approach espoused by the World Food Council and being adopted by a growing number of countries.

## FOOD AID

*Some Members of the DAC have large-scale food aid programmes. Such assistance is not included in the usual definition of aid to agriculture<sup>1</sup>, yet to these countries it is an essential part of their programme of aid to agriculture and food production.*

*Between 1974 and 1981, the value of the food aid provided by DAC Members increased regularly by an average of 10 per cent per year in current prices, which is less than the ODA for agriculture (14 per cent). In tonnes, the annual growth rate was still lower, i.e. 7.9 per cent a year. Since 1977, however, the quantities provided have progressed considerably, and 1981 was a record year with 9.5 million tonnes of food aid, a figure close to the minimum objective of 10 million tonnes fixed by the World Food Conference, particularly if one takes into account the fact that total food aid provided included not only aid from DAC countries but also that supplied by non-member countries (about 400,000 tonnes a year).*

*During the same period, several important trends have been evident: The United States continues to provide the largest share – about 60 per cent – of the food aid granted by DAC and EEC members. Since 1980, Japan has provided the second largest amount of aid after the United States. The role of the World Food Programme (WFP) has increased considerably. On the other hand, Canada's share has declined since 1978, as Canada chose to give priority to aid for agriculture over food*

*aid as such. The share of food aid in total bilateral and multilateral aid provided by DAC countries has varied somewhat over the period, falling from 13.5 per cent in 1974 to 11.6 per cent in 1981. However that average was considerably exceeded by the United States and above all by the EEC, where food aid represented 40 per cent of the total disbursements of ODA in 1981.*

*The worsening food situation in Africa is one reason why this region has become the main recipient of world food aid. Between about 1955 and 1975, Africa received only 5 or 6 per cent of total food aid against nearly two thirds for Asia. In 1976, Africa's share reached 27 per cent, and it has grown continuously since then, amounting to 51 per cent in 1981, i.e. 4.3 million tonnes. This amount was distributed equally among the countries to the north and the south of the Sahara.*

*In recent years food aid has focussed more on development. The recipients are increasingly aware of the risks inherent in food aid in the absence of any guaranteed continuity of delivery and the need to achieve greater self-sufficiency while the donors insist on integrating food aid into the programmes of agricultural and rural development and particularly into food strategies. Food aid should thus be geared both to avoiding disincentive effects on food production and to promoting more broadly based development.*

1. See note 2 page 12.



In an agricultural country, a food strategy may be identical to the national economic development plan. Above: Harvesting millet in Mali... and (below) a vegetable-drying factory in Kenya. These are the two African countries whose food strategies are considered most fully developed.



## Food Strategies: A Conditional Hope

To what extent can food strategies provide a response to the difficulties mentioned above? What advantages do they have over other promising approaches. A food strategy is an integrated and multi-sectoral approach covering the whole food system from the producer to the consumer. The main objective is to give priority to satisfying the food requirements of a given country by mobilising all its available resources. This summary definition explains both the advantages and the difficulties of the undertaking.

While integrating many facets of other types of aid, a food strategy provides a national framework for taking into account all the major inter-linkages: food security, nutrition, and farm and non-farm employment. This framework has two other essential advantages:

- *Town and country.* The link between the food problems of towns and the provision of edible commodities by the farms is at the heart of food strategies.
- *Nutrition and food security.* A food strategy must be concerned with establishing a balance between the surplus and deficit geographical areas and to that end should develop not only food production but also

marketing and the possibility of raising incomes. Jobs must be created in the secondary and tertiary sectors as well as the primary. The increase in income can stem from both cash and subsistence crops as the sharp distinction between the two types of farming is out of date.

### *How to succeed?*

There are certain pre-conditions for a successful food strategy.

- It must embody the political will of the government *at the highest level* (at least ministerial) to give priority to feeding the country's population. The key factors in a food strategy are the mobilisation of poli-

tical leaders to participate in drawing up a project which they will then fully support, the setting of unambiguous priorities and reconciliation of contradictions (political, administrative, etc.). Until a food plan receives governmental support it is only an academic document.

- It must be closely integrated into the national economic plan. In countries that are mainly agricultural, a food strategy may be considered as the focal point of the plan or even constitute the entire plan.
- It must contain consistent and realistic criteria for choosing investment projects and programmes and present a coherent framework of action for the relevant national and international bodies. Aid requirements – including food aid – should be clearly indicated.

Obviously the approach outlined is an ambitious one, and a food strategy is in the last analysis a *long-term, slow and difficult process*, that can only be realised in stages.

#### **A tentative balance sheet**

According to the World Food Council, about 40 – some would even say 50 – developing countries, of which some 30 are in Africa, have prepared or are preparing food strategies. In fact, few strategies are actually operational, even though a growing number of countries evince a desire to have one.

The most fully developed examples of food strategies are probably to be found in Asia (e.g. in the Philippines). In Africa, Kenya and Mali are the countries most often cited in this context. Mali has just set up five sub-committees (on prices, marketing, food aid, livestock and agricultural inputs) to study the measures needed to transform options into action. A food plan for Zambia is also being worked out with the help of the Netherlands, and despite some difficulties should soon be incorporated into the operational production plan for the country's food crops. The strategies of Gambia and Mauritania exist on paper but have not yet been approved by their governments. Nigeria, on the other hand, has already completed a first stage of its strategy, with the help of the World Bank, and Morocco should have its first strategy by the end of the year.

In Latin America, the Mexican Food system which showed so much promise, has been at a standstill since 1982 (a new government came to power in the interim and there have been balance of payments problems, etc.), but a "food production plan" will be included in the framework of the national economic development plan. Strategies are being prepared for Nicaragua and Honduras. The IFAD completed the first version of a food strategy for Guyana at the end of 1982.

These few examples, which do not exhaust the list, show that, although the seeds have been sown, the harvest has not yet been reaped, partly because of the usual difficulties entailed in aid to agriculture, but also because of the obstacles specific to food strategies:

- Giving priority to food and agriculture may cause difficulties for a government whose existence often depends on the support of the cities.
- It is difficult to co-ordinate various ministries (planning, rural development, finance, etc.) and obtain recognition of the need for reforms in areas, such as farm price policies and land reform, which involve many key and often divergent interests.
- Food strategies require sophisticated analysis, but the developing countries often lack the expertise and even the basic statistics. Inadequacy of institutional and human resources is a major obstacle to the preparation and execution of strategies. Further down the road there is a problem of financial resources.
- Governments need short-term results to justify their actions, and it is difficult to transform political, strategic and economic options into practical results in the short term.
- A gap too often exists between the administrations at national level and the farmer – whose action is decisive at the implementation stage. How can he be helped to participate in working out the strategies?
- The international monetary and financial crisis and the foreign trade problems that directly affect the economies of the industrialised countries are considered by some as a major obstacle to carrying out food strategies. How the effects of these international problems can be mitigated must be kept in mind when working out the strategies.

### **Implications for Aid**

#### **Financial resources**

Will the use of food strategies call for further aid, or a different kind of aid? It is difficult to answer this question in the abstract, as it is the socio-economic context of the country and the ambitiousness of its strategy that largely determine the reply. It is generally thought that a food strategy does not *ipso facto* call for new resources. It does indicate the most blatant gaps. Thus, even if a food strategy does not necessarily imply additional aid but merely a different and better integrated aid, this in turn may give rise to a need for further resources.

#### **Technical assistance**

A large amount of technical assistance

has already been given by aid agencies for the preparation of food strategies, but the agencies have to make sure that these strategies are drawn up by the recipient. The ideal technical assistant should be a catalyst capable of giving ideas to the strategists. The aid agencies should also try to reinforce national bodies that can help to work out and implement food strategies – a problem to which too little attention has been paid – but not bolster up unwieldy and inefficient administrations or bloat the bureaucracy so that it acts as a screen from the farmer. To sum up, food strategies will call for more technical assistance and a different kind of aid over a long period but not necessarily more people. The main need is for motivation, responsibility and skills.

#### **Coordination and discussion**

If the developing countries must commit themselves to back food strategies to the hilt, policies of the donors must be consistent with the options laid down in these strategies. Frequent meetings between donors and recipients, especially at local level, to prepare these strategies, should facilitate mutual understanding of the needs, the constraints and the resources available to each.

Lastly, food strategies should facilitate co-ordination *between* donors; for example wider circulation could be given to the studies carried out by the various aid agencies so that analyses need not be repeated. This in turn should reduce the number of on-the-spot studies by experts who have no clearcut responsibility and whose conclusions commit no-one to anything.

What machinery should be used to provide the basis for such improved co-ordination? A number of solutions can be envisaged. Existing machinery may be strengthened: on the national level, the committee bringing together representatives of the main ministries concerned, and on the international level the groups of the World Bank, representatives of the UNDP, Club of the Sahel, or more recent organisations such as the Sudan Group and the new FAO food security machinery. Ad hoc machinery can also be set up, such as the EEC "special working parties" already functioning in Mali, Kenya, Rwanda and Zambia and which most countries consider a test for the implementation of food strategies.

\*  
\* \*

Thus food strategies appear to offer a real alternative to more sectoral approaches, but much will depend on the willingness of donors and recipients to move from intentions to action.

---

# Support for Third-World Energy

---

**T**he need to step up energy production in the developing countries has become critical since 1973 and the subsequent oil price shocks. Under the impact of the second oil price rise, the net cost of oil imports of the developing countries shot up to some \$60 billion (in 1981), about 5 per cent of their GNP and 27 per cent of their imports. Subsequently, these costs declined (to about \$50 billion in 1983, 4 per cent of GNP and 20 per cent of imports) as a result of lower oil prices, slower growth, stepped-up energy investment, increases in the efficiency of energy use, and more rational energy management. The adjustment process, however, is far from over. The development of indigenous energy resources remains a policy goal of high priority for the economic growth of the Third World and for balanced world energy markets.

The World Bank has estimated<sup>1</sup> that developing countries need to invest about \$130 billion annually (in 1982 dollars) in energy development over the next decade. This would mean increasing the share of energy investments in GNP from 2-3 per cent during the late 1970s to an average of 4 per cent over the next decade. Roughly a half of these energy investment requirements are in foreign exchange – about \$65 billion per year. Since, according to World Bank estimates, the actual flow of external resources for energy development in developing countries was about \$25 billion in 1982, these funds would have to increase annually by about 15 per cent in real terms to meet the projected foreign exchange requirements. These projections, of course, are very uncertain. However, even if the international oil price declined by about 20 per cent (to around \$25 per barrel), the bulk of the projected energy investments would remain economic.

While creditworthy developing countries will continue to be able to attract significant amounts of market resources, the poorer nations must rely mainly on aid funds. Most importantly, developing countries need to mobilise adequate local

resources for their energy development. Stepped-up domestic energy investment must be combined with strengthened policies to ensure a rational use of scarce energy resources.

## The Aid Component

Official development assistance from all sources<sup>2</sup> for energy development in developing countries has already risen rapidly in recent years. Between 1976 and 1980, total ODA commitments increased from \$1.1 to \$3.8 billion (see table), an average annual growth rate of 28 per cent. Aid from DAC bilateral donors grew from \$0.5 billion to \$2.2 billion (34 per cent a year), while aid from multilateral sources rose from \$0.3 billion to \$1.3 billion (31 per cent a year), and OPEC assistance fell back to \$0.3 billion after its peak of over \$1 billion in 1978. In 1981 – the latest year for which detailed data are available – aid for energy from DAC donors fell slightly, from the World Bank's soft window, the International Development Association (IDA) dramatically, while aid from OPEC donors rose again somewhat.

Notwithstanding the general upward trend in energy assistance, year-to-year changes have been rather erratic, due in large measure to the "lumpiness" of energy aid which goes mainly to large projects.

The main DAC donors of bilateral energy assistance in recent years (1979/1981) were Japan (32 per cent of the DAC total), Germany (20 per cent of the DAC total), as well as the United Kingdom, the United States and Canada (which together accounted for 24 per cent of the DAC total). Energy assistance from France (9 per cent of the DAC total) has risen on average by 55 per cent a year since 1976.

Multilateral energy assistance was, until 1980, dominated by IDA contributions (almost 90 per cent of multilateral energy aid in 1980 – over \$1 billion) and fell sharply in 1981 to \$403 million, reflecting the serious difficulties which IDA encoun-

tered in replenishing its resources. Preliminary indications suggest that, in 1982, IDA support rose substantially again.

The extent to which DAC Members are focussing on energy development is shown by the rise in energy aid as a share of their total aid commitments – from 4.9 per cent in 1978 to 8.7 per cent in 1981, a remarkable increase, given the strong competing claims on scarce aid funds from other high priority sectors. But the proportion ranges from over 30 per cent for Austria and 20 per cent for Japan and Canada, to under 5 per cent for Australia, Belgium, Finland, France, Italy, the Netherlands, Sweden, Switzerland and the United States.

Multilateral financing institutions have consistently focused much more on energy than bilateral programmes. The share of energy aid in their overall aid programmes reached a peak of 23.5 per cent in 1980, followed by a drop to 9.2 per cent in 1981, when IDA assistance collapsed.

## Non-Concessional Flows

Virtually all types of non-concessional funds finance energy development in the Third World: export credits, direct investment, bank and bond lending, multilateral "hard window" loans, and commercial OPEC credits. However, the available statistical data permit an analysis of only three kinds of these flows (see table).

- *DAC countries' official export credits (with a maturity of one year or more), and official guaranteed private export credits (with a maturity of five years and more).* Since no sectoral breakdown exists for officially guaranteed private export credits with a maturity of under five years the figures shown cover only about two-thirds of total officially supported export credits for energy development. On a 3-year (1979-1981) average, the main source of export credits were the United States (30 per cent of the DAC total), Japan (18 per cent), Germany (15 per cent) and France (12 per cent).

- *Multilateral non-concessional flows.* Lending by the World Bank, the regional development banks and the Common Market's European Investment Bank. Such lending is dominated by the World Bank whose energy support programme more than doubled, from \$0.9 billion in 1978 to \$2.2 billion in 1980, but dropped to \$1.6 billion in 1981.

- *OPEC Non-Concessional Flows.* Known OPEC non-concessional support for energy

---

1. The Energy Transition in Developing Countries, World Bank, August 1983.

2. Aid from CMEA countries is not included in this analysis since no detailed information is available on its country or sectoral distribution.

# 1. ENERGY RESOURCES FOR THE DEVELOPING WORLD, 1979-81

\$ million

	AID <sup>1</sup>			NON-CONCESSIONAL FLOWS <sup>2</sup>		
	1979	1980	1981	1979	1980	1981
<b>DAC MEMBERS</b>	<b>1,854</b>	<b>2,239</b>	<b>2,109</b>	<b>6,718</b>	<b>7,651</b>	<b>5,109</b>
Australia	15	7	6	4	—	1
Austria	4	22	131	6	33	309
Belgium	..	3	8	6	2	132
Canada	194	93	160	658	79	290
Denmark	20	37	—	—	—	—
EEC	66	(216)	89	—	—	—
Finland	1	5	3	—	51	3
France	74	157	188	730	788	765
Germany	397	277	589	961	1,455	503
Italy	—	2	23	251	250	42
Japan	460	902	613	1,120	1,217 <sup>3</sup>	1,215
Netherlands	70	74	32	219	771 <sup>4</sup>	13
New Zealand	4	5	5	—	—	—
Norway	24	26	15	—	49	2
Sweden	15	44	26	5	397	48
Switzerland	3	2	8	312	211	115
United Kingdom	296	217	59	88	303	215
United States (FY)	211	150	154	2,358	2,045	1,456
<b>MULTILATERAL INSTITUTIONS</b>	<b>661</b>	<b>1,259</b>	<b>403</b>	<b>2,137</b>	<b>2,811</b>	<b>2,609</b>
World Bank	506	1,101	123	1,148	2,159	1,576
Inter-American Development Bank	86	42	127	553	229	571
African Development Bank	15	9	9	45	28	23
Asian Development Bank	54	107	144	265	275	336
European Investment Bank	—	—	—	126	120	103
<b>OPEC</b>	<b>383</b>	<b>325</b>	<b>517</b>	<b>7</b>	<b>21</b>	<b>13</b>
Bilateral	299	208	410	—	—	—
Multilateral	84	117	107	7	21	13
<b>OVERALL TOTAL</b>	<b>2,898</b>	<b>3,823</b>	<b>3,029</b>	<b>8,862</b>	<b>10,483</b>	<b>7,731</b>

1. ODA commitments for energy, development by individual DAC Members, multilateral development financing institutions and OPEC donors.

2. New exports credits (guaranteed private credits, maturity over 5 years, and official credits, maturity over one year) extended by individual DAC countries and non-concessional commitments by multilateral development financing institutions and OPEC sources for energy development.

3. Includes \$292 million by the Japan National Oil Corporation.

4. Gas pipeline in Argentina.

development is all in multilateral form. Commitments decreased from \$50 million in 1978 to \$13 million in 1981.

In addition there is foreign direct investment in energy, which is estimated at about \$2.8 billion a year or 20 per cent of total investment flows from DAC to developing countries.

## What Kind of Energy?

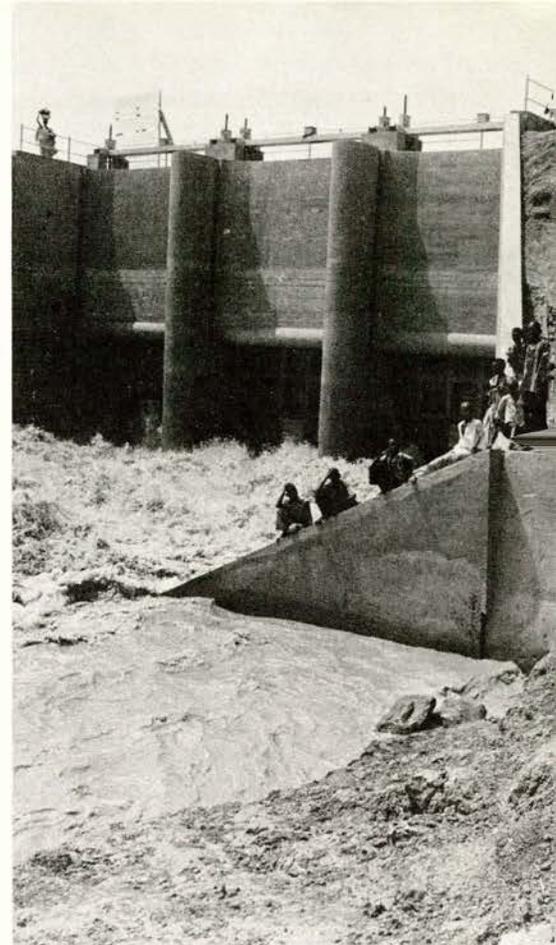
Only 7 per cent of DAC bilateral energy aid goes to oil, but oil accounts for 15 per cent of multilateral energy aid and 29 per cent of DAC export credits to the energy sector. Thus oil depends mainly on financing by non-concessional flows, both private and official. However, for poorer developing countries with small oil reserves, aid can help to support oil exploration activities which do not attract foreign oil companies.

There is obviously scope for expanded oil exploration in oil-importing developing

countries. It has not increased much in recent years (the number of wells hardly exceeds 3 per cent of the world total) and has remained highly concentrated on a few developing countries, mainly because of competition from some developed countries and an unfavourable legal and contractual framework in Third-World countries.

Although about 50 developing countries, including 30 oil-importing countries, have *natural gas* resources, there has been little exploration or development as yet and virtually no DAC bilateral aid. Despite some constraints — a lack of comprehensive energy planning and supporting infrastructure, market considerations, and the site-specificity of gas development — gas production has a large potential domestic demand, and its development is relatively inexpensive.

*Coal* is produced in over 30 developing countries (China is the world's third largest producer), virtually all for domestic use.



Fom Gleita Dam at Kaedi in Mauritania is being finished.

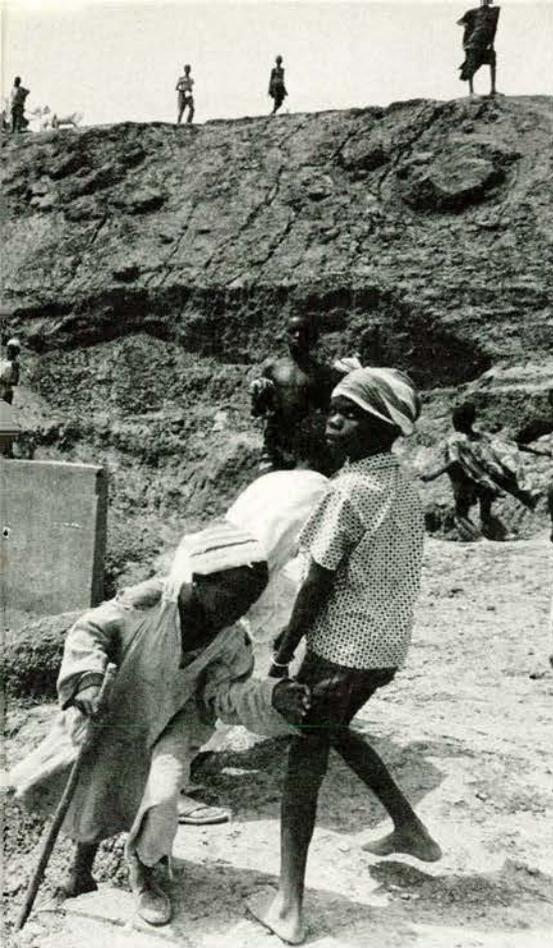
Notwithstanding the important competitive advantage of coal over oil for electricity production and many industrial uses, most coal-producing countries have not yet taken full advantage of this energy source. By the same token only a little bilateral aid supports coal development, whereas 13 per cent of multilateral energy funds (notably those of the World Bank) go to this sector.

*Nuclear* energy (uranium mining and power plants) has figured significantly in DAC export credits accounting for 11 per cent of such credits to energy projects.

Most aid for energy focuses on *hydro-power production* and *electricity distribution* which, together, absorb around a half of the energy support provided by DAC Members, multilateral organisations and OPEC donors.

Hydro-electricity production in developing countries has grown by over 9 per cent a year over the past decade, but still only a small part of the hydro-power potential has been tapped. Thus, though investments are large and site-specific, they involve well-tried technologies and offer scope for external funds.

The importance of *fuelwood* for many developing countries can hardly be overemphasized. The number of people living in areas with acute scarcity is steadily growing while the forest base is diminishing — with grave consequences for economic, social, human and environmental development. While efforts are underway to attack this problem on a broad



ced in large part by the European Development Fund.

front, so far only a small amount of aid has been used for this purpose, given the fact that technologies for saving fuelwood (such as use of stoves) are only reluctantly accepted by the inhabitants of developing countries.

Among the new and renewable sources of energy, *mini-hydro*, *biogas*, *alcohol*, *solar* (especially photovoltaic pumping), *geo-thermal*, and *wind* are being aided by limited amounts of external support.

### Where Are the Funds Going?

Low-income countries which are dependent on oil imports, and have been hard hit by higher oil prices, have only limited scope for short-term resource reallocation to favour investment in energy or commercial borrowing. Such countries as Benin, Bhutan, Ethiopia, Guinea, Guinea Bissau, Haiti, Kenya, Liberia, Madagascar, Mali, Mauritania, Niger, Senegal, Sierra Leone, Somalia, Sri Lanka, Sudan, Tanzania, Togo, Upper Volta and the two Yemens import three quarters or more of their commercial energy. For most there is no quick way to increase domestic production. At the other end of the scale, India, also a low-income country, is successfully attacking the energy problems on a broad front: domestic oil production is being raised, large-scale hydro-electricity production accelerated, and oil-fired electricity-generating plants are being replaced by coal-fired ones.

Low-income countries have been the main beneficiaries of DAC bilateral ODA programmes, (54 per cent in 1981) total OPEC flows (71 per cent) and multilateral energy aid (68 per cent) and non-concessional flows (23 per cent). In contrast, 58 per cent of DAC export credits went to upper-middle-income countries.

The main recipients of DAC aid among the least developed countries were Sudan and Bangladesh and of OPEC aid Bangladesh, Yemen and Niger.

India has been a major, though declining, recipient of external energy support.

Among other low-income countries, the main recipients of DAC bilateral energy assistance were Indonesia, Sri Lanka, Egypt, Burma and Pakistan, while multilateral energy support benefited mainly Indonesia, Egypt, Pakistan and Honduras. OPEC energy aid to the other low-income countries was highly concentrated on Pakistan. DAC export credits went mainly to Indonesia, Egypt and Liberia.

Among the upper-middle-income countries, Turkey was a large beneficiary of DAC aid and Argentina and Brazil of multilateral flows.

# Export Credits: Revised Guidelines

**A** new agreement on export credits has been reached by the 22 OECD countries which apply the "Arrangement on Guidelines for Officially Supported Export Credits".

The new agreement has three main features:

- A revised matrix of minimum rates of interest for export credits extended with official financing support. The new matrix, applicable from 15th October 1983 until the time it is further adjusted under a new mechanism, is as follows:

Classification of country	Maximum Repayment Period (number of years)					
	2-5		Over 5-8.5		Over 8.5-10	
	%		%		%	
	new	old	new	old	new	old
I. Relatively rich	12.15	12.15	12.40	12.40	n.a.	n.a.
II. Intermediate	10.35	10.85	10.70	11.35	n.a. <sup>1</sup>	n.a. <sup>1</sup>
III. Relatively poor	9.50	10.00	9.50	10.00	9.50	10.00

n.a. not applicable

1. For countries reclassified in July 1982 from Category III to Category II, the maximum repayment term will continue to be 10 years with minimum interest rates for repayment terms of over 5 to 8.5 years.

Thus there is a reduction of 0.5 to 0.65 percentage points in rates for the intermediate and relatively poor countries.

- An automatic adjustment mechanism for these minimum rates of interest. The minimum rates will be adjusted automatically every six months (January/July) in accordance with changes in a representative international weighted average interest rate, provided that such movements are at least equal to 50 basis points (100 basis points = 1 per cent) since the preceding change. A complementary adjustment, involving upward adjustments amounting to 65 or 50 basis points, will be implemented between July 1985 and July 1986 to bring minimum interest rates for Category II and Category III countries closer to market levels. In the case of downward adjustments to the general level of minimum rates of interest, the complementary adjustment procedure will be accelerated.

- Generally applicable rules for the extension of export credits with official financing support in "low rate" currencies, i.e. currencies where the commercial lending rates of interest are below the relevant minimum matrix interest rates. According to agreed guidelines, commercial interest reference rates (CIRRs) have been established for "low rate" currencies. These rates are circulated to all Participants in the Arrangement. Export Credits in such currencies can be extended with official financing support provided that the interest rate charged is not less than the relevant commercial interest reference rate plus 0.2 percentage points per annum.

# International Banking: Controlling the Risks

by Rinaldo Pecchioli<sup>1</sup>

**A** major consequence of the rapid growth of banks' international business over the past two decades has been to underline the risks associated with such forms of banking activity and the need for an appropriate adaptation of the regulatory framework. Supervisory authorities in OECD countries have followed the development of international financial markets closely to ensure that the international diversification of banking does not result in a dilution of control and supervision<sup>2</sup>.

A review of supervisory practices in banking shows that, by and large, there have been few new statutory exposure limits or formalised measures of control. Supervisory procedures are more flexible for international than domestic business in the majority of Member countries, and there is more leeway for the exercise of individual judgment. Bank management is still considered to have primary responsibility for the appraisal and control of the risks associated with international operations, while supervisors' initiatives have focused on ensuring that bank managements enforce their internal controls, irrespective of marketing considerations or competitive pressures. However, the closer analysis of banks' internal control practices that has been made possible as a result of new statistical material has given supervisors greater insight into the international risks of bank exposure and has led to the strengthening of such controls. The need to ensure a proper balance between adequate supervision and undue interference with banks' operational decisions is a delicate matter in international banking where the environment is highly competitive and there is a risk that too rigid application of controls will stifle financial innovation.

## Three Types of Risk

Since the mid-Seventies, banking authorities have concentrated on three types of risks specifically associated with international business: foreign currency exposure,

*In the current public discussion of international debt, one of the issues is whether tighter supervision of the international banking system might have avoided some of the current crisis situations or could prevent future problems. The question is among those raised in the following article.*

country exposure and maturity transformation.

### Currency Risk

If there are unanticipated movements in exchange rates, banks expose themselves to losses because claims and liabilities denominated in foreign currencies do not match. The methods used to control banks' currency exposure vary greatly from country to country, but everywhere supervision has been tightened since the shift towards flexible exchange rates. It would be impractical to try to eliminate currency risk entirely by prohibiting banks from carrying open positions in any foreign currency. First, such a prohibition could not be enforced and, second, it would impose a significant opportunity cost on banks. Thus most countries permit banks to take open positions but within fixed quantitative ceilings or, more frequently, within prudential ratios that allow for the size of the bank. Other countries either have no formal regulation at all over currency dealings or impose limits on banks' aggregate foreign-currency positions rather than currency-by-currency limits, relying on periodic reporting to monitor banks' exposure. Final responsibility for the prudent management of currency dealings nevertheless resides with the bank's own managers, and the

authorities' main task is to ensure that bank managements exercise effective control over their foreign exchange departments.

### Country Risk

This is a relatively recent concern and comprises two risks in one: the much discussed "transfer risk" involved in a debtor country's willingness or ability to repay and service its external debt and the "local currency risk" arising in the case of local currency indebtedness to a foreign bank. Supervisory authorities have two choices:

- Taking the responsibility out of the hands of the banks by laying down regulations based on a country-by-country credit-rating system and limits on lending to specific countries; this approach entails innumerable problems as to the criteria, political, economic and social, to be applied.
- Leaving it to the commercial judgment of individual banks.

The latter option requires banks to devote adequate resources to country-risk analysis, including periodic reviews of the credit-worthiness of debtor countries. It calls on the authorities to assist banks by disseminating information that banks can use as well as to verify that banks' exposure is not excessive in relation to their capacity to meet losses.

### Maturity Transformation

Though a traditional concern of supervisory authorities, the riskiness of mismatching asset and liability maturity has been enhanced by the high level and volatility of interest rates. Interest rate risks have been reduced by the use of the rollover technique, entailing a periodic review of the rates on outstanding loans with reference to an agreed indicator. But not all lending takes the form of rollover credits, and banks' exposure to possible interest-rate losses has increased in recent

years as a result of aggressive asset and liability management policies. Significant progress has been made recently in monitoring such mismatching in international business, but this is an area in which further work by supervisory authorities would seem warranted at both national and international level.

*The hub of international banking – the City of London*

## Transparency

There is ample evidence of an effort, both national and international, over the last decade to improve the transparency of international business. Official action may at times have appeared somewhat slow but should be evaluated against the back-

ground of existing legal and practical constraints and the complexity of the problems to be addressed. The availability of a more comprehensive and detailed flow of statistical information has provided the basis for a more objective evaluation of risks by both supervisors and the banks themselves. Internal control systems have also improved significantly. Nevertheless there remains considerable scope for further improvement both as to the quantity and quality of statistical coverage. Supervisory authorities in Member countries are aware of the obstacles and problems, and there is ample evidence that they will continue in the direction of improving the statistical basis of risk monitoring, stimulated by recent experience.

## International Co-operation

The important question of the demarcation of supervision between home and host authorities has been at the centre of international discussions for almost a decade. Given the philosophical, legal and practical difficulties, it is not surprising that differences of opinion still exist amongst countries. In this context, endorsement of a set of broad guidelines, including the sharing of responsibility under the BIS Concordat, is to be viewed as a major achievement. However, problems of conflicting jurisdiction remain, and further international co-operation is essential if adequate supervisory coverage is to be ensured.

The increasing emphasis on *consolidation of balance sheets*, being imposed on banks by the authorities as a supervisory technique, is a step towards limiting the number of international banking operations escaping supervision. If consolidation is to be implemented comprehensively, legal and technical problems have still to be overcome. Nor will the extension of consolidation be a panacea for all supervisory problems. To be effective, consolidated supervision requires support and co-operation from the banking community, and while banks have generally become less averse to the principle, some banking circles are concerned that its imposition will harm competitive positions and be used to impose additional constraints on banks' range of activities. Conversely, as long as supervisory standards and practices differ significantly from country to country, supervisors will be confronted with a conflict between the desirability of enforcing national supervisory measures worldwide and the advantages of maintaining domestic banks on an internationally competitive footing.

1. OECD Capital Markets Division, Directorate for Financial, Fiscal and Enterprise Affairs.

2. The Internationalisation of Banking: *The Policy Issues*, OECD, 1983.



# The Prospects for Soviet Agriculture

*Output of Soviet agriculture has been growing at an ever decreasing rate over the past 15 or 20 years and persistently failing to meet the targets laid down in successive five-year plans. After several years of poor harvests, necessitating large imports of grain, the Soviet government announced a new, longer-term Food Programme in May 1982 with a horizon of 1990, which sets out the government's commitment to overcoming chronic shortages of agricultural products, ensuring more regular food supplies and improving the popular diet, while at the same time reducing imports of feed grain. Although substantial investments are to be made in the sector in the years to 1990, the Food Programme does not involve a profound reorganisation of the agricultural sector. Hence the prospect during the 1980s is for Soviet agriculture to continue to fall short of the targets laid down for it. Grain is likely to come closer to target than meat, and as a result, grain imports, both for feed and direct consumption, will probably be lower than in recent years, according to a new OECD report<sup>1</sup>.*

The gross output of Soviet agriculture increased in real terms at an average annual rate of 3.9 per cent from 1966 to 1970, 2.5 per cent from 1971 to 1975 and 1.7 per cent from 1976 to 1980. During this period, the Soviet population grew at an average rate of about 1 per cent a year, so the expansion of agricultural production has only gone a small way to eliminating shortages of some basic foods, especially higher value items such as meat. Output growth has been achieved with a steadily shrinking labour force but a spectacular increase in investment (see Chart). While the new Food Programme provides for the farm sector to receive 27 to 28 per cent of total capital investment in the 1986-1990 period, this will not be enough to achieve the ambitious production goals for either grain or meat.

The implications for the Soviet consumer are not catastrophic, though, any more than in the past. The difficulties of Soviet agriculture have not caused the population to starve, but they forced the people to accept a less rich and varied diet than their Western counterparts. Their calorie intake is comparable to that of the United States population, but a far smaller proportion comes from animal products than is the case in North America. Whereas almost

70 per cent of North America's protein intake comes from animal products, in the Soviet Union the figure is only 50 per cent. Even so, Soviet citizens' consumption of animal products and fruit and vegetables has increased while per capita intake of potatoes and grain products has diminished since the 1960s. However, this trend has not been sustained in recent years as a result of four bad harvests in a row (table 1). So although the Soviet people's nutritional needs are met in a quantitative sense, their demand for greater variety and more meat, fruit and vegetables — a product of the rising expectations that accompany higher real incomes — is far from satisfied at present. In recognition of this, the underlying objectives of Soviet agricultural policy comprise both qualitative and quantitative improvements and reflect the view that the limiting factors to the development of food consumption are exclusively on the supply side.

In general, though, it is not expected that the consumption of animal products will markedly increase by 1985 except perhaps for eggs. While the 1981-1985 plan includes a target for meat consumption of 65 kilos per head by 1985, the outcome is likely to be no more than 59-60 kilos, only a slight increase on the average of about

57 kilos per head since 1978-79. This situation could be altered by a change of policy on meat imports; up to now, meat has only been imported to make up for shortfalls in domestic production, and foreign-produced meat has not been used to raise per capita meat consumption in the Soviet Union. Such a change of tack cannot be ruled out entirely, however.

## Grain: Low Yields and High Volatility

The need to increase animal production, and in particular the supply of meat, is the central issue of Soviet agricultural policy and will remain so for the foreseeable future. This problem hinges on the shortage of feed grain, imports of which have been running at high levels recently. The persistent feed grain problem is the paramount concern of the Soviet authorities who are trying to increase production, to cut losses by improving storage and transport facilities and to avoid bottle-necks caused by production shortfalls in individual years. At present these can only be met by large-scale imports of grain from the West. In 1980-81, for instance, grain imports amounted to 34 million tonnes, and they increased to an estimated 45 million tonnes in 1981-82 — equivalent to about a quarter of the Soviet Union's average grain output in the four years 1979-1982. And imports are expected to continue at a high level for the next two or three years.

Fluctuations in grain production (table 2) reflect to a large extent the great differences in climate between the various regions of the country. In trying to assess the future prospects of Soviet grain output, the possibilities of eliminating these climate-induced instabilities must be taken into account. The Soviet Union is making great efforts to apply biological, chemical and mechanical technologies to this problem, as well as taking appropriate administrative measures to minimise the effects of adverse climatic conditions.

The emphasis on increasing animal production has led to larger and larger shares of grain production being used for animal feed. Between 1966-70 and 1980, the absolute quantities of grain used for feed doubled, while total grain output grew by barely 40 per cent. Despite substantial increases in coarse grain production during 1976-80, the supply of feed grain remained insufficient.

The 1981-85 plan provides for annual grain output to average 239 million tonnes over the period, reaching 245 million tonnes in the fifth year. This means average annual output in these years is 34 million tonnes higher than during the last plan

1. Prospects for Soviet Agricultural Production, OECD, 1983.

period, a target which seems difficult if not impossible to reach. It would be equivalent to an output of 885 kilos per head in 1985, which would be nearly midway between the average output in the 1976-80 period and the long-term target of 1,000 kilos per head a year.

The production of feed grains in particular is given a high priority in the current plan, with the emphasis on expanding production of maize, barley and leguminous grain. Increased grain output is expected to come from larger acreages sown to maize and barley but essentially from higher yields per hectare. Since record harvests in 1976 and 1978 were followed in the 1979-82 period by a return to a more sluggish trend, it seems unlikely that targets set out in the present 5-year plan will be met; and a total production of 230 million tonnes by 1985 seems the maximum that could be expected (table 3). This figure assumes an average yield of 18 quintals per hectare (against an average of less than 15 in 1980). An increase in grain acreage appears out of the question insofar as the country's arable area is practically exhausted. The area sown to grain, therefore, is not likely to exceed 127-128 million hectares.

With the shift in the cropping pattern towards feed grains and away from bread grains, the authorities are endeavouring to raise the overall crop yield as well as meet the rising demand for animal feed. The general trend towards giving more acreage to feed grain can be deduced from the fact that in 1965, 67 per cent of the grain acreage was sown to bread grain and only 23 per cent to feed grain (the rest is sown to rice and groats); by 1976, the relative shares were 55 per cent and 37 per cent respectively.

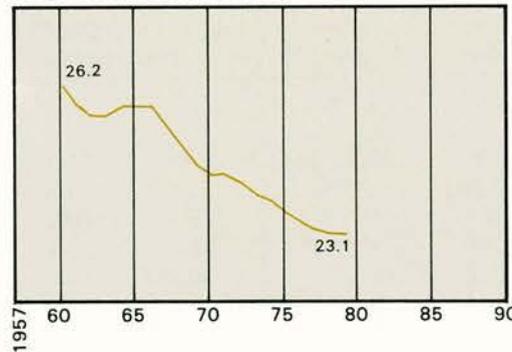
### Animal Production: Stagnant

Animal production increased substantially during the 1960s, but since the late 1970s meat and milk production have stagnated (table 4). Targets in the 1976-80 plan were not attained, but Soviet planners have still set their sights on an even bigger increase in meat output during the 1980s than was hoped for in the 1970s. The prospects however are for output to increase very slowly, although it is likely that poultry meat production will move as rapidly as planned through the creation of more big broiler farms. In general, though, the plan does not provide for a sufficient increase in productive investment for its objectives to be achieved.

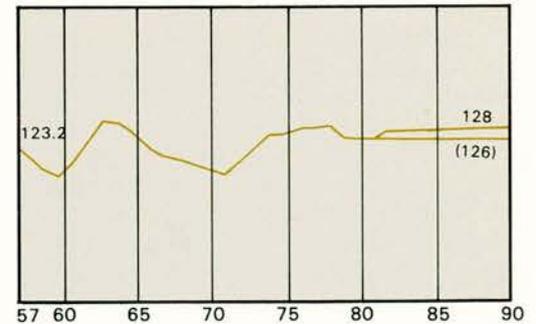
While animal production has accounted for an increasing share of total agricultural output, reaching 55 per cent in 1979 and

## THE BASICS OF SOVIET AGRICULTURE

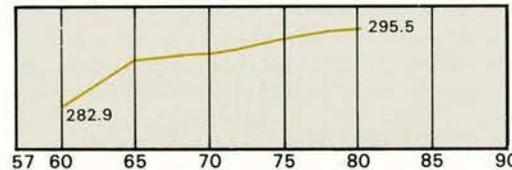
LABOUR (million workers)<sup>1</sup>



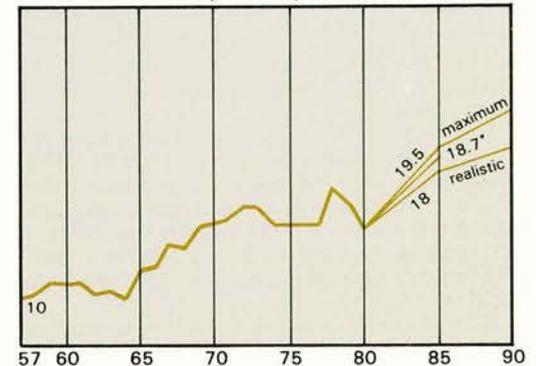
AREA SOWN TO GRAIN (million hectares)



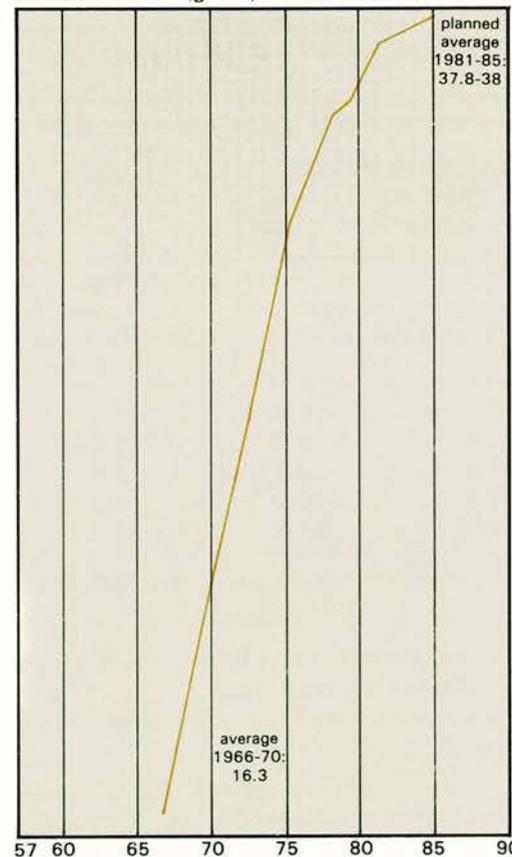
LAND ("land units")<sup>2</sup>



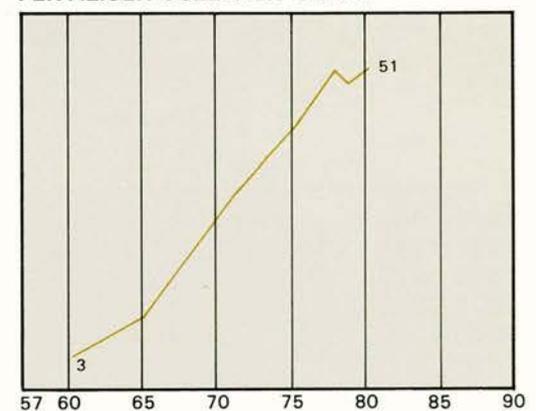
GRAIN YIELDS (quintals per hectare)



INVESTMENT (gross, billion roubles)<sup>3</sup>



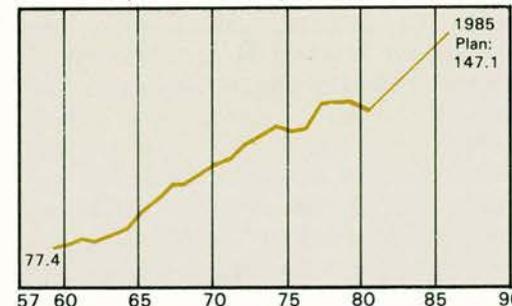
FERTILISER USED FOR GRAIN<sup>5</sup>



\* Baybakov's figure.

1. Three-year averages.
2. A land unit as used in the OECD report is equal to one hectare for arable land and land planted with perennial crops and equal to a fifth of a hectare for pasture and other agricultural lands.
3. Per year.
4. In 1973 prices, three-year averages.
5. Kg of effective nutrient per hectare.

OUTPUT (billion roubles)<sup>4</sup>



Sources: *Nar. khoz. SSSR za 60 let*, Moscow, 1978, p. 273 and *Nar. khoz. SSSR v 1980 g.*, Moscow 1981, p. 202 (for gross output in 1973 prices) and 437, 440 resp. 340, 341 (for investment, which for 1961-69 and 1966-69 is on the price basis of *Nar. khoz. SSSR v 1975 g.*, and ... 1872 g., resulting in a slight understatement); labour from Soviet statistical abstracts for various years; land units derived from data in *Statisticheskii ezhegodnik stran-Chlenov SEV*, various years. Grain figures from statistical abstracts, plan data.

1980, its expansion has been restricted by the Soviet authorities' failure to push up grain production as fast as hoped. The

priority given to grain production reflected the planners' desire to increase animal production more rapidly than has been the

## 1. PER CAPITA CONSUMPTION OF SELECTED FOODS (kg per year)

Group of products	1970	1975	1980 actual	1980 plan	1982 estimates	OECD average
Meat(a)	48	57(c)	57	(60-63)	57	83
Milk and milk products (b)	307	315	314	(330-335)	310	290
Fish and fish products	15.4	16.8	17.0	(20.9)	17.4	19
Vegetables and melons	82	87	93	(113)	n.a.	109
Eggs	159	215	238	(225)	244	236
Sugar	39	41	42.2	(43-44)	40	41
Grain and grain products (including leguminous grain)	149	141	139	(144)	140	104
Potatoes	130	120	112(d)	(115)	110	56

a) Including meat products, animal fat and meat subproducts in kind. To compare the Soviet data with OECD consumption statistics, a deduction of at least 10 per cent has to be made for fats and low quality subproducts.

b) Liquid milk, cream, butter and cheese only, in whole milk equivalents.

c) Per capita meat consumption in 1975 was abnormally high because of numerous distress slaughtering as a consequence of that year's harvest failure. It was 55 kg in 1974.

d) The sizeable decline by 7 kgs (or 6 per cent) compared with 1979 was mainly caused by the extremely bad potato harvest and the resulting shortfall in market supplies.

Sources: Statistical Yearbooks of the USSR. Plan data for 1970 according to F. Kotov, Y. Ivanov, I. Prostyakov, The USSR Economy in 1976-1980, Moscow 1977, p. 81 and Ekonomika sel' skogo khozyaistva, No 8, 1976, p. 17.

## 2. FLUCTUATION OF GRAIN YIELDS IN THE USSR, 1956-80 Quintals per hectare

	Five year average	Maximum and minimum yield in individual years		Difference between maximum and minimum yield
1956-1960	10.1	11.1	8.4	2.7
1961-1965	10.2	11.4	8.3	3.1
1966-1970	13.7	15.6	12.1	3.5
1971-1975	14.7	17.6	10.9	6.7
1976-1980	16.0	18.5	14.2	4.3

Source: Zernovoe Khozyaistvo, n° 9, 1976, and figures derived from this source; Nar. khoz. SSSR, 1980.

case and, in the event, the shortage of feed grain resulted in meat production reaching only 15.1 million tonnes in 1980 instead of the 17.3 million tonnes projected. Similarly, the target for 1985 of 18.2 million tonnes looks impossible to attain (table 4).

Private plot farming, which accounts for around a quarter of total Soviet production on less than 10 per cent of the cultivated area, is particularly important in the livestock sector where such farms account for about 30 per cent of production, and it is declared policy to help private livestock farmers by supplying feed from the socialised sector and by improving the marketing facilities for their produce. However, the incentives offered to private farmers have done no more than prevent the long-term decline in private animal production, and private holdings are not expected to contribute significantly to future output growth. Hence, the private sector's share of meat

production will decline further and its share of milk and egg output (now 30 and 34 per cent respectively) will fall even more sharply.

High feed consumption for a given weight increase is a mark of the inefficiency of Soviet livestock farming, a qualitative problem which exacerbates the quantitative one of feed shortage. Feed conversion ratios are generally unsatisfactory, the main reason for excessive feed consumption being a physiologically unbalanced composition of rations — particularly a lack of digestible protein. According to a Soviet estimate, some 25 million tonnes of feed grain could be saved if feed contained adequate quantities of protein. The low technical level of harvesting, storage and feeding in the Soviet Union, on top of the feed shortages leads to considerable losses in nutrients and vitamins and generally depresses feed conversion. With present feed deficiencies, moreover, it is difficult to

raise animal productivity through up-grading breeds, even if large imports of high-breed animals could be envisaged.

One of the most important objectives of the 1976-80 plan was to increase the production of protein concentrates and to improve the nutritive content of concentrate feed by shifting to the industrial processing of mixed feed with a physiologically balanced composition including added protein, vitamins, minerals and micro-elements.

In the 1981-85 plan, a major expansion in productive capacity for protein feed and compounds is planned, but no specific targets have been laid down. As it is, the Soviet Union's failure to improve the nutritive value of feed mixes is evident in the fact that the annual milk yield per cow has remained stationary for almost a decade, while the output of laying hens has tended to level off at 202 eggs per year, a figure which remains unsatisfactory.

Any substantial increase in Soviet animal production would require additional capital investment in land improvement, in the construction of modern livestock housing and in technological advances in the feed-processing industry. The necessary capital for a general modernisation of animal production through a shift towards industrially organised and properly equipped livestock complexes will only be available in the longer term. No imminent breakthrough in the Soviet livestock industry is conceivable, therefore, and the protein deficit will persist for some time to come.

## Mechanisation and Land Improvement: Limited Benefits

The growth in Soviet agricultural production in the past two decades or more has come about largely as a result of capital investment. Capital resources remain relatively scarce, however, and additional inputs meet with diminishing returns in terms of the increased output per unit of incremental investment. Hence, there is an emerging tendency for the authorities to give priority to capital investment programmes which yield quick returns.

Investment growth in agriculture has been on the decline since 1975, and the planned increase in the 1981-85 plan follows the downward trend. In view of this, the planned growth in total agricultural output looks impossible to achieve.

While Soviet farms remain technically far behind their Western counterparts, considerable improvements have been made in mechanising farm operations. During the 1976-80 plan alone, the motorised power capacity per farm worker

doubled, while the farm sector's electricity consumption trebled. However, the 1981-85 plan provides for only a modest number of machines delivered to agriculture compared to the previous plan. Despite the urgent need to replace machinery, the number of new machines supplied to Soviet farms in 1981-85 may be only half the number acquired in 1976-80. A net addition of 100,000 tractors is expected, for instance, compared to 228,000 in 1976-80 and 357,000 in 1971-75. Yet the tractor park remains only half the required minimum, according to Soviet observers.

A particular deficiency is the lack of combine harvesters, which exposes crops to weather damage at harvest time and results in greater harvest losses than would otherwise be the case. One Soviet projection set a goal of one combine harvester for every 100 to 110 hectares of cropland (or one per 70 to 80 hectares in regions of intensive land use), but this target will probably not be met even in 1990.

The Soviet authorities are attaching

### 3. ESTIMATES OF GRAIN OUTPUT (in million tonnes on 128 million hectares)

	Maximum	Optimistic	Realistic
1980*	189.1 <sup>1</sup>	189.1 <sup>1</sup>	189.1 <sup>1</sup>
1985**	250	237-243 236-244 <sup>2</sup>	230
1990**	282	256	243-256

\* Actual.

\*\* Projection.

1. On 126.6 million hectares.

2. Baybakov's yield figure for 1985 on 126.5-128.5 million hectares.

### 4. ANNUAL OUTPUT OF LIVESTOCK PRODUCTS TO 1985 million tonnes

	1975-77	1978-80	1976-80	1981-85		1985	
	Actual average			Planned average (soviet global meat figure)	OECD estimate	Planned	Estimated
Beef and Veal	6.6	6.9	6.8	7.4	6.9	7.6	7.0
Pigmeat	5.0	5.2	5.0	5.7	5.3	6.2	5.6
Poultrymeat	1.5	2.0	1.8	2.9	2.9	3.3	3.0
Other meat <sup>1</sup>	1.3	1.1	1.2	1.2	1.0	1.1	1.0
<b>Total meat</b>	<b>14.5</b>	<b>15.3</b>	<b>14.8</b>	<b>17.0</b>	<b>16.0</b>	<b>18.2</b>	<b>16.6</b>
Milk	91.8	92.9	92.7	97.0	95.0	102.0	97.0
Eggs (billion)	58.2	66.0	63.0	72.0	74.0	76.0	80.0

1. Chiefly sheepmeat and goat meat.

Sources: 1977 data from SSSR v tsifrakh, Moscow, 1978, p. 123. All other figures calculated and adapted by OECD.

## GRAIN HANDLING LOSSES

Soviet grain output is given in "bunker" terms, meaning the weight ascertained by farms immediately after harvesting, whereas Western figures show the yield of grain after cleaning and drying. Apart from the moisture content, losses occur at all stages of the handling and distribution process.

Losses arise during transport of the grain from farms to elevators and from the drying out of moisture contained in the grain delivered to the elevator, not to mention impurities. Some 12 per cent of total bunker weight is probably "lost" on average in this way and must be deducted to arrive at a figure comparable to Western measures of grain output. To this must be added losses during storage and during the transport and distribution of the grain to the final consumer.

The total deductions that have to be made from Soviet figures for gross grain output therefore are of the order of 14 to 17 per cent. The actual loss will vary according to factors such as the weather, of course, which may reduce the moisture content by half, if it is particularly favourable at harvest time. On the other hand, a wet, short harvesting season may increase losses to 25 per cent, as seems to have happened in 1977, when predictions of a record harvest gave way to a disappointing result.

Better harvesting organisation, more modern methods and improved transport and elevator facilities may reduce losses by one quarter over the current decade, thus adding an extra 7 to 9 million tonnes of usable grain in an average year by 1990.

increasing importance to land improvement as a means of increasing agricultural productivity. Land improvement measures involve mainly irrigation in dry regions and drainage in over-watered areas, as well as the liming of acid soils. Expenditure on land improvement is due to increase by 19 per cent in 1981-85, compared to 1976-80.

A major project in the country's land improvement programme has been the development of the so-called Non-Black-Earth zone, a vast region stretching from the Urals westwards to the Baltic and Byelorussian republics and from the White Sea southwards to a line between Bryansk and Sverdlovsk. The emphasis is on

draining and liming, although some irrigation is also involved. Despite a heavy investment not only in land improvement itself but also in fertiliser supplies and mechanisation, production has not increased as rapidly as hoped in this area. Its rate of output growth was only half the national average in 1976-80, and the targets were consequently lowered for 1985. It is still being allocated a disproportionate volume of capital equipment and fertiliser supplies - 20 and 30 per cent respectively, although it comprises only 9 per cent of total agricultural land and 14 per cent of overall crop acreage. This is much the same as in 1976-80, although during that period fertiliser supplies were 21 per cent under target and total investment was 11 per cent short. Although this region could contribute a significant output of high-yielding winter wheat, if properly utilised, its gross agricultural output is unlikely to expand by the 30 per cent projected in the 1981-85 plan, and it will be even further off the ambitious targets laid down for its level of production by 1990.

### Fertilisers: Rapid but Still Inadequate Development

Up to the early 1960s, fertiliser use in the Soviet Union had been limited almost exclusively to industrial crops - cotton, sugar beet, flax and sunflower seed. In 1960, only one fifth of total fertiliser supplies were used for grain, although it was the largest single crop, while 13 per cent was applied to potatoes, vegetables and melons. Fertiliser application soared during the 1960s and 1970s, though, with

an increasing proportion used for grain crops – almost two fifths by 1976. The situation has stabilised since then, with grain receiving 32 million of the 82 million tonnes of fertiliser supplied in 1980. While the quantity of fertiliser being used for industrial crops is quite satisfactory under existing climatic conditions, the amount

being devoted to grain crops and meadows and pastures is too low and will remain so up to 1985.

Grain has benefited more than any other crop from fertiliser use, since most of the increases in grain yields have been due to the more intensive use of fertilisers. While it would be ideal for Soviet agriculture to

step up fertiliser application on grain to 150 kilos per hectare by 1990, the actual figure will probably fall well short of that, since the expected outcome for 1985 is at best 117 kilos per hectare, which implies an annual increase of 5.7 per cent throughout the course of the 1981-85 plan.



*The Soviet Union is trying to upgrade the population's diet...*



*...and especially to increase the supply of meat...*



*...This requires more feed grain than the country can raise, despite considerable mechanisation and increased use of fertilizer...*



*...Hence, if meat production targets are to be met, imports of feed grains will have to continue. But these targets are not realistic, so grain imports may fall in the second half of the Eighties.*

The targets for fertiliser supply in 1985 have been revised down from the initial level of 135-140 million tonnes, and the new objective for 1985 is 115 million tonnes, the same as the unattained target originally set for 1980. Even so, to meet this target, deliveries will have to rise by 7 per cent annually, compared to an average of 5.4 per cent per year in 1976-80. This appears optimistic and depends both on the fertiliser industry being able to operate recently built plants at full capacity and on the addition of new capacity during the period.

\* \* \*

Until the early 1970s the Soviets used to slaughter a certain portion of their animal herd in years of bad harvest to offset feed shortages, but since a more consumer-oriented policy was adopted (to improve or at least sustain the level of meat production), such shortages have been made up by ever-growing grain imports, ranging from 30-40 million tonnes in recent years. If present meat-production targets were to be achieved, grain imports would continue at about present levels. On the assumption, however, that meat production will fall well short of planned levels (i.e. 16.6 million tonnes in 1985, against a goal of 18.2 million tonnes, for instance), requirements for feed grain will also be reduced. By 1985 grain production could at best reach 230 million tonnes rather than the 245 million tonnes targeted, implying grain imports of some 15 million tonnes. By 1990, the gap between domestic production of 250 million tonnes at best and requirements should narrow. If, as suggested by OECD's report, meat production were to reach only 18.2 million tonnes in 1990 instead of the planned 21.5 million tonnes, the Soviet Union could come close to self sufficiency in grain by the end of this decade. This does not take account of possible reexports to other Communist countries, for whose benefit it may still need to import sizeable quantities of grain in normal years. Meanwhile, though, much of its foreseeable import requirements are covered by medium-term agreements with the United States, Canada and Argentina.

However, the prospect remains bleak for the Soviet consumer. If the authorities were determined to raise meat consumption levels to somewhere near official targets, they would have to import substantial additional quantities of feed grain and/or step up meat imports (assuming prices were favourable). But even with the most strongly consumer-oriented policy imaginable, there is little chance that meat consumption will attain the so-called Soviet scientific norm of 78-82 kilos per capita by 1990.

---

# The Greek Environment: The Need for Action

---

*Should Greece, as a less industrialised country within the OECD, be concerned about environmental problems? The answer given by a new OECD report<sup>1</sup> is an unqualified yes. The pressures on the Greek environment have made themselves felt in a particularly brutal way. Urbanisation has been rapid while economic activity and population have been concentrated in a few areas (85 per cent of the population increase of the last 20 years has taken place in Athens and its suburbs), and economic growth, which was well above the OECD average during the Seventies focussed on industries which can give rise to much pollution — chemicals, textiles, and non-metallic minerals. Quadrupling of energy requirements over the last twenty years added to the picture, as did the twelvefold increase in the number of autos on the road (table 1).*

*As Greece is the cultural cradle of Europe, with outstanding monuments and privileged geographical and climatic conditions, the contrast between past glories and present pollution is particularly unsettling. Yet until recently the country had not yet formulated a comprehensive environmental policy. This is now being remedied as Greece moves into the Common Market and must harmonize its environmental policies, along with other economic measures, with those of the Nine. At the same time slower growth is likely to limit available resources, including public finance, and to cause difficulties in mustering the very considerable investment required to cope with the environmental backlog. Given these pressures, a further deterioration of the environment in Greece is a real risk. To avoid it, government action is mandatory.*

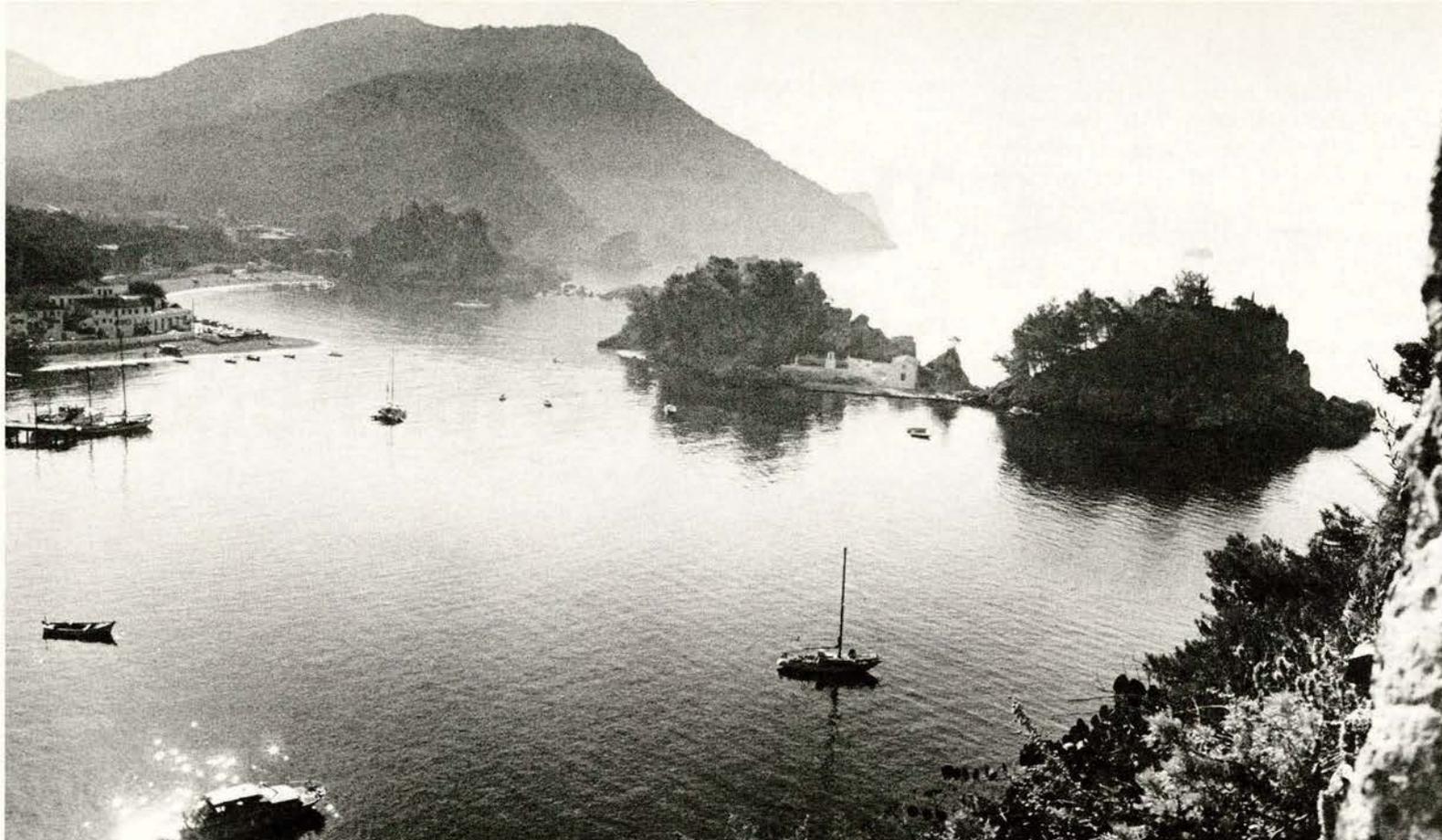
*The Greek government is acutely conscious of the problem and has given environmental protection high priority. Greece has also asked OECD to carry out an examination of the situation and the actions undertaken. The following article outlines some of the difficulties and the conclusions reached by OECD on the Greek environment and environmental policy.*

**T**he priority given by the Greek government to environmental protection can be seen from the fact that existing laws and regulations are being enforced and reinforced, that more resources are being devoted to the environment and that the public is being encouraged to participate in urban planning. But despite the government's determination, it is difficult to carry out an effective environmental policy in Greece for several reasons:

- Since financial and administrative resources are limited, measures must be simple and practical so that they can come into effect quickly. But environmental policies are complex by their very nature.
- Despite growing awareness of environmental problems in recent years and national pride in historical monuments and the wine-dark sea, the public is not as

---

1. Environmental Policies in Greece, OECD, 1983.



If Greece were to let the environment deteriorate, it would be a loss to the entire world community.

attuned to many environmental issues as in most other countries. Nor is there much public participation in environmental decision-making.

- The government's commitment to the environment has revealed a lack of personnel qualified in the techniques of environmental management, a gap which can only be filled by more training.

## Urban and Regional Policies

Regional and urban policies are the key to any environmental policy since they create the framework for specific measures against pollution and for the preservation of historic and cultural treasures and nature sites.

The lack of success of the measures taken in this domain by the various governments of the last 30 years can mainly be attributed to the fact that they were largely of the "thou shalt not" variety. The aim was primarily a negative one – to restrain the growth of greater Athens; positive measures that should have been taken simultaneously were conspicuously absent. The present government is taking a more positive approach, its objective being to achieve balanced development of the entire country.

It is true that, if people and economic activity were less concentrated on Athens and Thessaloniki, balanced development would be easier to achieve, and in the last two or three years there has been a trend in this direction. Appropriate regional policies are also necessary. They could draw upon

Greece's favourable experience with government-launched industrial zones and could entail the use of environmentally sensitive policy instruments – investment grants that are conditional on sound siting, for example. OECD's report commends the government for having envisaged the use of such instruments in its plans for regional

policy. Such measures would ensure that decentralisation does not merely become city sprawl.

Keeping the lid on pressures for urban growth could also help the authorities cope with serious traffic congestion, air pollution and noise within the city limits. There is an obvious need to implement existing urban

### 1. INDICATORS OF ENVIRONMENTAL PRESSURE IN GREECE, 1962-1982

1962		1962 = 100		
		1972	1977	1982
8,389,000 (1961)	Population <sup>1</sup>	105	n.a.	116 (1981)
3,628,000 (1961)	Urban Population <sup>1</sup>	129	n.a.	162 (1981)
\$8.81 billion (\$ 1975)	GDP <sup>2</sup>	215	260	295
3.45 Mtoe	Energy Requirements <sup>3</sup>	319	413	468 (1981)
2,735 million kWh	Electricity <sup>3</sup>	440	636	n.a.
n.a.	Industrial Production <sup>4</sup>	272	362	410
190 thousand tons per month	Cement <sup>4</sup>	278	463	539
1.64 million m <sup>3</sup> /month	Construction Permits <sup>4</sup>	391	393	272
50,000	Vehicles <sup>5</sup>	488	910	1,260
572,000	Foreign Tourist Arrivals <sup>6</sup>	390	645	880

#### Sources:

1. Greece, Economic Studies, OECD, 1982
2. National Accounts, 1951-1980, OECD, 1982.
3. Energy Balances of OECD Countries, OECD Energy Statistics, 1971-81, OECD, 1983.
4. Main Economic Indicators, 1960-79, OECD, 1982.
5. Review of Environment Policy in Greece
6. National Tourist Organisation of Greece and OECD.



plans: in the course of urbanisation, housing needs have largely been met by unauthorised construction, which now accounts for up to 35 per cent of the housing stock. The implementation of urban plans has been systematically frustrated by the failure to control such illegal building and by periodic legalisation of housing constructed without authorisation.

Urban services have been neglected for too long, and the first step in remedying this situation is to identify priorities. At least some of the appreciation in land values caused by urban growth should be channelled into the financing of infrastructure instead of, as at present, accruing solely to the owners of the land.

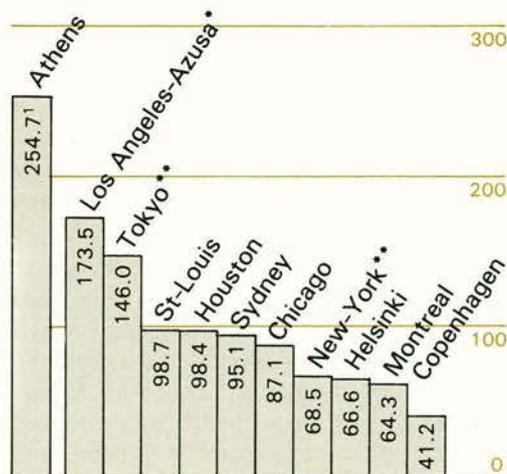
### Air Pollution: Nephos, the Cloud

The symbol of air pollution in Greece today is the 'nephos' or cloud of Athens. Episodes of photochemical smog have occurred in the city on several occasions in recent years.

International comparisons show that sulphur dioxide levels in Athens are presently below those of Tokyo, Chicago or Rome and within acceptable ranges. They also meet EEC standards of 80 microgrammes per cubic metre median. Suspended particulates (Chart) and smoke levels, however, are much higher in Athens than in many OECD cities and above EEC standards. Levels of nitrogen oxide are particularly high. Air pollution in Athens has

become a very serious problem indeed and will worsen unless drastic measures are taken.

### SUSPENDED PARTICULATES IN OECD CITIES (CENTRE-CITY, COMMERCIAL) (Method: annual average mg/m<sup>3</sup> – high volume – gravimetric – 24 hr)



Source: Air Quality in Selected Urban Areas 1977-78, WHO, 1980.

\* suburban, industrial.  
\*\* centre city, industrial.

1. This value takes into account dust from uncovered soil (approximately 50 per cent).

EEC limit is 80 microgrammes per cubic metre (median) and EEC guide value is 40-60 microgrammes per cubic metre, annual average, as measured by the black smoke method. Although the measuring methods are different, it is recognized that suspended particulate levels in Athens do not meet EEC limits.

## 2. GREEN SPACE IN CITIES

	m <sup>2</sup> /per capita
Athens	2.7
Paris	8.4
Rome	9
London	9
Vienna	15

Source: T. Papayannis, Greece, Urban Growth in the '80s, Athens, 1981

Numerous studies have been undertaken to measure the effects of air pollution on the health of Athenians – with striking results. To take only one example, a tripling of sulphur dioxide entails a doubling of hospitalisation for respiratory and cardiovascular illnesses<sup>2</sup>.

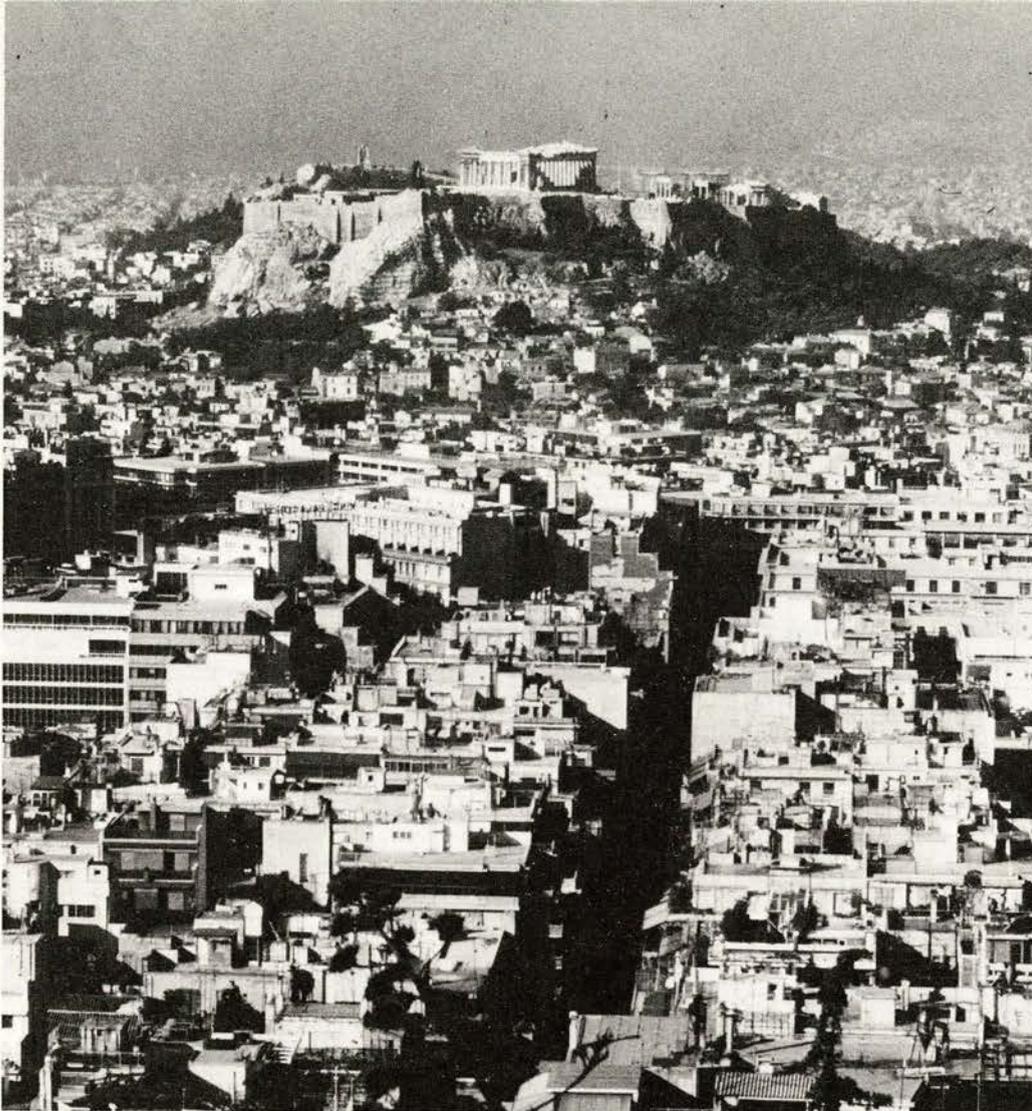
Air pollutants also contribute to the deterioration of building materials and historic monuments and to the corrosion of many metallic structures. The damage to the marble sculptures on the Acropolis is the flagrant example and has given rise to world-wide concern.

Since there are no studies on the overall economic consequences of air pollution in Athens, the cost of reducing the damage – and the cost of the damage itself – can only be inferred from studies made elsewhere. Estimates in France and the United States (in 1978) of the cost of damage from air pollution that could have been avoided if pollutants had been reduced by 20 per cent, range from \$45 to \$90 per person. The total cost of damage stemming from air pollution in the U.K. and France ranges from \$61 to \$76 per person, according to other studies. National averages cannot be transposed to a city, where pollution is more concentrated, except to give a lower limit, which in the case of Greater Athens would entail health and property damage costs of more than 6,000 drachmae (\$65)<sup>3</sup> a year per inhabitant or 18 billion drachmae (\$194 million) a year for the city as a whole. This order of magnitude underlines the urgency of an early assessment of the economic consequences of air pollution in Athens.

Forecasts of emissions from stationary industrial sources depend very much on those of economic growth, which has slowed down during the past four years (0.6 per cent on average or slightly below the average rate for OECD) but shows signs of picking up. If there were to be growth of 3 per cent a year over the next ten years and if controls are not tightened, pollutant emissions from stationary sources could

2. D. Plessas, The Social Cost of Atmospheric Pollution in the Athens region, KEPE, Athens 1980.

3. 93 drachmae = \$1.



*Air pollution – even if it is sometimes invisible – is damaging not only to the health of the inhabitants but also to the city's monuments.*

increase by 34 per cent over the period. In Greater Athens, however, increases may be smaller because of the implementation of air-quality regulations, closure of polluting plants and the banning of potential new sources of pollution.

Pollutants from autos, trucks and other mobile sources on the other hand are likely to increase sharply because car ownership is growing faster than per capita income and is likely to more than double before the end of the century. According to a recent OECD study<sup>4</sup>, the vehicle fleet in Greece in the year 2000 could be two and a half times larger than it is today. If such projections are realised, traffic-related emissions can be expected to increase by some 60 per cent over ten years unless stricter control measures are taken.

Emissions from space heating are expected to increase more or less in line with the growth of income, unless modified by control measures. In cities, the effect would, of course, be greater.

Taking all sources into account, therefore, it seems reasonable to conclude that emissions of air pollutants will increase and that air quality, especially in cities, will continue to deteriorate unless firm and effective air-pollution abatement policies are adopted.

The new and vigorous measures recently adopted in Athens (see inset) which the Government plans to strengthen, reflect an appreciation of how serious the situation in the capital is. While the effects on sulphur dioxide and lead are encouraging so far, they are less so for nitrogen and hydrocarbons. Enforcement of EEC's new vehicle emission standards would be especially effective (and Greece may even wish to see these tightened further).

The mechanism of Athens' cloud formation needs probing, and the effect of countermeasures systematically monitored. Inventories of pollution sources and transmission models should be improved. Cost-effectiveness and efficiency are key issues in pollution control in Greece, and these criteria should be used in selecting the appropriate strategy. A typical choice for example is whether or not to site a polluting industry in or near an urban area.

Circumstances may require a shutdown or relocation of some highly polluting plants. Elsewhere emission abatement and monitoring of new plants at the planning and development stage may be more effective.

The Government has recently taken steps to coordinate responsibilities and

resources for the fight against air pollution. Consolidating presently fragmented legislation would also be advisable, OECD's report concludes.

## **Water: Shortages, Sewage and Oil Spills**

Parts of Greece suffer from an actual or potential scarcity of water, given competing demands for irrigation, industrial and domestic uses. The Government has responded to the problem by investing heavily in measures to increase the water supply over the last three decades. Experience suggests that conflicts over water use can best be resolved within a consolidated management system, based on clear principles for the allocation of rights to water use and discharge of waste, and incorporating appropriate pricing schemes.

Greece faces an enormous backlog of construction for sewage systems and waste-water plants. This problem should be attacked through a priority programme based on the results of the ongoing water-quality survey and on cost-effectiveness and efficiency criteria. Such a programme will require an extraordinary investment effort. Fees could cover at least part of the costs of waste disposal, both for domestic sewerage and industrial waste.

The quality of Greece's inland and coastal waters is generally good, but pollutants have been found in certain rivers and lakes. The gulfs of Saronikos, Thermaikos, Pagassitikos and Patraikos are heavily polluted by industrial discharges and by untreated municipal wastes. Official discharge standards could certainly be better enforced. They could also be improved and systematised, taking EEC directives into account.

The quality of coastal and sea waters is also threatened in certain places by oil development and accidental oil spills, a problem which calls for greater efforts to meet international standards and to accelerate the ratification of international conventions.

## **Noise: Even on Sunday**

Examination of available data suggests that 50 per cent of Athenians and 15 per cent of Greeks outside Athens are exposed to noise that disturbs daily activities such as conversation and sleep. Hence, some 20 to 25 per cent of the Greek population suffers from unacceptable levels of noise. These figures are close to those for Spain and Denmark but below those for Japan.

Noise in Athens is a particularly difficult

4. Long-term Outlook for the World Automobile Industry, OECD, to be published late in 1983.

## NEW GREEK ENVIRONMENT POLICY

by Antonis Tritsis, Minister of Physical Planning, Housing and the Environment

The main measures taken by the Greek government to lay the foundations for a comprehensive environmental policy in Greece are:

- Environmental issues have been entrusted to the Ministry of Physical Planning, Housing and the Environment.
- The decision was taken to introduce into Parliament a new basic law on the environment. It is now being prepared and is intended to replace or supplement the various existing laws with a comprehensive and updated legal framework for an effective environmental policy.
- It is proposed to set up an autonomous agency within the Ministry of Physical Planning closely linked to local government.
- The Ministry of Physical Planning, Housing and the Environment has undertaken a systematic survey of land use and the state of the environment, country-wide, in cooperation with the universities and other technical and scientific organisations.
- To resolve the problem of Athens, the government approved in January 1982 the first comprehensive antipollution programme which, in December 1982, was further refined and a timetable established. This programme commits the Government to take specific action on all sources of pollution – industry, automobile fuels and central heating. Within this framework, a master plan for the Greater Athens Area is in preparation which will give due concern to environmental improvement. The Government is committed to putting the plan into effect before the end of the

year. It will be the first official master plan for the Attica region in 150 years and will include all levels of planning.

- To remedy the more general urban problem, a new law of urban planning is presently under preparation. It will cover the entire range of planning from an overall master plan to neighbourhood planning and local building and will make specific reference to environmental improvement. A special 2-year crash programme of urban planning and improvement will cover 432 large, medium and small towns and will mobilise an estimated 7,000 planners, architects, engineers and multidisciplinary scientists. This operation includes the localisation of industry and other sources of pollution, transportation and traffic planning, water sewerage and waste disposal.
- Provision will be made for a coastal zone extending to a water depth of 500 metres as well as the sensitive zones on the periphery of cities to protect those areas from illegal subdivision, squatting or over building – problems which are at the heart of the environment crisis.
- New legislation will provide for direct citizen participation in the neighbourhood planning process.
- There will be a new approach to tourism featuring coordinated action between the Ministry of Physical Planning, Housing and the Environment and the National Tourist Organisation of Greece so that new tourist facilities can be located in such a way as to protect sensitive landscapes, in particular the coastline.
- Lastly, as an indicator of Greece's new environmental concern, the country is taking a more active part in international environment fora.

problem because of the large number of vehicles in use (60 per cent of the national fleet), the density of population, the proximity of industry to housing, and the operation of an airport within a peri urban residential area. It is compounded by traffic congestion which occurs four times a day.

Measurements of noise in Athens indicate that levels over 70 decibels (dBA Leq Index<sup>5</sup>) are frequent in the city centre and that levels above 65 dBA, which are considered "unacceptable" by most OECD countries, are regularly found in residential areas of the suburbs. During the night, noise falls by only 5 to 7 dBA between 2 a.m. and 5 a.m. in the centre, and between 11 p.m. and 5 a.m. in the suburbs.

As in many OECD countries, noise problems in Greece are likely to grow in the future. An OECD Conference on Noise Abatement Policies forecast that, for the OECD as a whole, the number of people exposed to unacceptable levels of noise would increase by 30 per cent between now and the turn of the century. The increase could be greater in Greece because of the projected higher rates of growth in the vehicle fleet. Furthermore, since noise is spreading over time and space, it may begin to affect small and

medium-sized Greek towns, the populations of which are now increasing more quickly than before, and tourist areas, which are also growing rapidly.

Traffic-management measures and vehicle inspections should be continued, further developed and accompanied by the enforcement of noise emissions standards for imported vehicles. While these may be based initially on EEC standards, Greece may wish to see them strengthened in due course.

Similar conclusions apply to the regulation, both international and domestic, of industrial and construction equipment and home appliances.

Aircraft disturbs the sleep of more than half the people living around Athens' airport. A stricter control of flight paths would be helpful. Control of urban development is also needed, especially in view of the project for a new airport but also more generally to reduce both noise generation and nuisance.

### Control of Chemicals

In 1980, chemicals accounted for 11.3 per cent of the total value added to production by the Greek manufacturing sector which corresponds closely to the

OECD average but is smaller than average as a per cent of GDP (1.9 per cent in 1980 as against an OECD average of 3 per cent). The Greek chemical industry grew in the decade 1969-79 at a faster rate than the average for OECD (7.75 per cent as against an OECD average of 6.1 per cent). In agricultural chemicals the country is a small net importer of fertilizers, but had a trade surplus in pesticides.

Chemicals-control legislation and practice in Greece reflect the concern of a country in which agricultural fertilizers, insecticides and pesticides account for a significant proportion of the chemicals released into the environment.

The draft institutional law for the environment will contain a section dealing with transport and use of hazardous chemicals, which is aimed at harmonizing Greek legislation with international regulations.

As in most other OECD countries, laws have been enacted to control a broader range of chemicals – pharmaceuticals and cosmetics, for example. More recently, the authority to control industrial chemicals has also been established.

In keeping with international trends, the

5. Leq = Equivalent continuous noise level, i.e. total sound energy over day or night.

Greek legislative approach has increasingly been an anticipatory one, and information on chemicals must be generated and assessed prior to marketing. Moreover, the range of potential health and environmental hazards reviewed prior to marketing has broadened. A number of pesticides can be used only if the Ministry of Agriculture issues a licence, based on precise information about the substance and its toxicity. Knowledge of whether and how a pesticide is used in other countries is a guide but not decisive in determining whether or how that pesticide may be used in Greece.

Having joined the EEC, Greece will be consolidating notification procedures according to Common Market directives, taking into account the socio-economic and environmental conditions prevailing in the country and undertaking regulation of existing chemicals on a case-by-case basis.

### **Soil and Forests: Deforestation and Erosion**

Erosion is one of Greece's major problems, affecting about a third of the land mass. In areas where the pattern of rainfall is unfavourable, the productivity of over 2 million hectares of land has already disappeared in places and only patches of tillable soil remain, most of the surface consisting of bare limestone and igneous bedrock. An additional 3 million hectares, in more favourably endowed zones, are severely if not completely eroded. Some of this land can be cultivated only every three years and some is simply being abandoned.

Some 2.5 million hectares or 19 per cent of Greek land is forest, with 3¼ million hectares partially forest and 2½ million wooded grazing land.

As in other Mediterranean countries, most of the remnants of what used to be a rich cover of vegetation are to be found today only in the mountains. Another 1½ million hectares of forest are in such poor condition as to be virtually unproductive.

The ruggedness of the land, the aridity of the climate, floods, fires, overgrazing, mining, and inadequate forest management have all taken their toll on the forest and on the soil. Deforestation itself is a major cause of soil degradation, while conservation is hindered by the fragmentation of land ownership, a tradition of rural individualism and residual pockets of subsistence farming.

Reforestation is used to combat soil erosion but, at a current rate of 4,000 hectares a year, it is not even keeping pace with losses from fire. Fire prevention and control could be improved but a more vigorous reforestation programme could be



*About a third of the Greek territory suffers from soil erosion.*

helpful, not only from an environmental point of view but also economically and socially.

While overgrazing as a factor in soil damage is likely to decline with economic advancement of rural areas, the OECD's report suggests that the Greek Government may wish to consider stricter enforcement of existing regulations, accompanied by compensation as appropriate. Unless adequately integrated fiscal, agricultural and soil conservation policies are adopted, cultivation of marginal and sub-marginal land in Greece will increase.

The Ministry of Agriculture is involved in the management of virtually all aspects of agriculture and forestry, beginning with a much needed mapping exercise over the whole country; this would provide opportunities to ensure that environmental concerns are taken into account at an early stage of policy development.

Greece has at least two other severe environmental problems. The extensive programme of irrigation (irrigated land now covers about a quarter of arable land) has left in its wake a residue of salt in the soil which indicates a greater need for environmental care when irrigation is further

extended. Finally surface mining is an increasingly serious problem and, given the employment implications of mining, one in which it is difficult to enforce controls. OECD's report suggest a policy in which rehabilitation of damaged lands is made a condition for the authorisation of new mining acreage.

### **Nature Conservation**

It is essential for Greece to raise public understanding and support for the "capital" represented by its splendid scenery and rare species. Existing nature conservation policies concerning the designation of national parks and other protected areas could be improved by giving special attention to "aesthetic" — the Greeks have a word for it — forests and monuments of nature, to coastal wetlands and estuaries. Greece is a party to a number of international conventions on conservation, but several of them are yet to be ratified, and implementing legislation is not yet enacted.

Consideration should also be given to setting up a National Conservation Strategy as a step towards harmonising programmes of several agencies. Such a stra-

tegy could also help in identifying ecosystems and in reviewing policies and legislation, and could provide the basis for strengthening the Government's administrative capacity to implement conservation programmes.

Experience in other OECD Member countries suggests the value of setting up a special nature conservation agency, administratively distinct from bodies responsible for the promotion of agriculture, forestry or other types of land development. It would need to have close links to economic and physical planning.

### Monuments and Villages

The monuments that constitute Greece's great legacy to world culture are protected by strong laws; less so their surroundings. Apart from theft and vandalism, air pollution is the major culprit in the process of decay: sulphur and nitrogen compounds in the atmosphere transform the sparkling Pentelic marble of the Acropolis into gypsum. The Government has adopted a number of measures to halt the degradation, including air pollution abatement and support for research to develop a protective chemical treatment for the stone. All statuary and friezes in the Acropolis are gradually being removed and shortly will be visible only in museums.

Efforts are also being made to reduce the crowds of visitors who tend to cluster around a few well-known archeological

sites and museums. Ways must be found to diminish congestion as well as to raise revenues for site development, restoration and conservation. Several suggestions have been advanced, such as longer opening hours, higher admission fees within schedules that accommodate the needs of special groups, incentives to encourage visits at off-peak hours, days or seasons and perhaps even the establishment of a heritage-conservation club, offering members privileges in exchange for a substantial fee.

Greece is also rich in post-classical buildings and traditional villages for which there needs to be greater appreciation on the part of the inhabitants themselves as well as measures of protection. Government efforts to assist owners in restoration work, to foster appropriate new uses for old buildings and to involve residents in planning the future of their settlements hold promise and could be further developed.

### Tourism

Tourism, with 5 per cent of GDP is a mainstay of the Greek economy. As elsewhere, it depends critically on the preservation and enhancement of the environment. Comparison of the touristic pattern in Greece with that of other Mediterranean countries (Table 3) brings out substantial differences. Between 1970 and 1982 the number of foreign tourists arriving in

### 3. INTERNATIONAL TOURIST RECEIPTS AS A SHARE ...

	...of exports of goods and services % 1981	... of GDP % 1981
Greece	20.5	5.1
Italy	7.5	2.2
Portugal	16.1	4.3
Spain	18.9	3.6
Turkey	6.9	0.7
OECD	4.1	0.9

Source: OECD

Greece grew from about 1.2 million to more than 5 million; and an additional half million tourists touch down at Greek ports every year on cruises. Foreign tourists spent about 58 million nights in all registered accommodations in 1981. A further 20 million nights should be added for domestic tourists, although this is probably an underestimate because it does not cover visits to secondary residences or tourists staying with families.

As in other countries, tourism is sensitive to environmental protection or degradation and could become increasingly so. As tourists are becoming more demanding and want reliable information on local conditions, this information could be provided through simple environmental indicators.

Greek coastal waters generally meet EEC quality standards for bathing, but sewage collection and installation of waste-water treatment should be programmed with a view to the likely number of visitors. Similar anticipatory concepts apply to drinking water. Litter control is inadequate in a number of spots and could be improved with relatively simple measures.

Only limited damage seems to have been done by inappropriate forms of tourist development but with notable exceptions. Policies to encourage the use of traditional buildings (including the restoration of old structures) have worked successfully. There is a need, however, to reinforce the control of unauthorised development and it would be useful to see whether tourist fees could cover any of the costs of environmental measures.

\* \* \*

The need, OECD's report concludes, is to act now before the country becomes more industrialised since there is still time to control the situation and the opportunity to do so.

Could tourist fees cover part of the cost of environmental measures?



# New OECD Publications

## SOCIAL AFFAIRS, MANPOWER, EDUCATION

### OECD: EMPLOYMENT OUTLOOK

— SEPTEMBER 1983 (September 1983)

In most OECD countries, unemployment is alarmingly high. Even if a recovery gets underway, it will remain a serious problem in the 1980s. Which groups are most affected? What are the short-run prospects? How is the labour market adapting to high and growing unemployment? This report surveys current labour market trends and examines several key labour market developments from a medium-term perspective. (See also OECD Observer No. 124, September 1983, page 15.)

(81 83 03 1) ISBN 92-64-12487-X

104 pages . . . . . F45.00 £4.50 US\$9.00 DM22.00

### REVIEWS OF NATIONAL POLICIES FOR EDUCATION: NEW ZEALAND (August 1983)

Examines the aims, content and quality of teaching and learning in New Zealand in light of the current response of the schools and post-school institutions to emerging social and economic pressures.

(91 83 04 1) ISBN 92-64-12477-2

140 pages . . . . . F66.00 £6.60 US\$13.00 DM30.00

## ENERGY

### IEA (International Energy Agency)

#### COAL INFORMATION REPORT (September 1983)

The first result of the IEA Information System designed to provide both OECD governments and the coal industry with a comprehensive picture of future prospects for coal.

(61 83 07 1) ISBN 92-64-12489-6

376 pages . . . . . F400.00 £40.00 US\$80.00 DM145.00

#### INTERNATIONAL COOPERATION FOR RATIONAL USE OF ENERGY IN INDUSTRY:

Proceedings of an international seminar organized by the Latin American Energy Organization, the International Energy Agency, the Ministry of Energy and Mines of the Republic of Peru, and the Commission of the European Communities, Lima 4-6 July 1983 (September 1983)

(61 83 08 1) ISBN 92-64-12502-7

654 pages . . . . . F100.00 £10.00 US\$20.00 DM45.00

## ENVIRONMENT

#### CONTROL TECHNOLOGY FOR NITROGEN OXIDE EMISSIONS FROM STATIONARY SOURCES. "Document" Series (September 1983)

Nitrogen oxides emitted by combustion processes contribute significantly to the formation of "photochemical smog" and "acid rain", a problem of international concern. The report assesses control techniques and their impact on energy production costs for stationary combustion sources.

(97 83 06 1) ISBN 92-64-12485-3

168 pages . . . . . F69.00 £6.90 US\$14.00 DM31.00

#### ENVIRONMENTAL EFFECTS OF ENERGY SYSTEMS: the OECD Compass Project (August 1983)

The OECD Compass Project — a comparative assessment of the environmental implications of various energy systems — seeks to show how environmental considerations can be better integrated into energy policy-making. Environmental impacts can be reduced significantly by

policies which encourage more efficient use of energy.

(97 83 03 1) ISBN 92-64-12470-5

138 pages . . . . . F60.00 £6.00 US\$12.00 DM27.00

#### COSTS OF COAL POLLUTION ABATEMENT. Results of an International Symposium (August 1983)

The prospect of a large increase in the use of coal in coming years has aroused public concern lest the environment suffer. This book examines the latest technological advances and assesses the costs of producing and handling coal with a reasonable degree of environmental protection.

(97 83 05 1) ISBN 92-64-12482-9

300 pages . . . . . F120.00 £12.00 US\$24.00 DM54.00

## INDUSTRY

#### THE STEEL MARKET IN 1982 AND THE OUTLOOK FOR 1983. "Document" Series (August 1983)

World steel demand, after a major contraction in 1982, is unlikely to show any general recovery in 1983, though there may be some improvement before year end. Demand in 1983 is likely to be lower for the EEC, Japan and Australia. In North America it will be only slightly higher.

(58 83 02 1) ISBN 92-64-12481-0

38 pages . . . . . F45.00 £4.50 US\$9.00 DM22.00

## SCIENCE AND TECHNOLOGY

#### EAST-WEST TECHNOLOGY TRANSFER: Study of Poland 1971-1980, by Zbigniew Fallenbuchl (September 1983)

Measures the massive flow of technology from the West to Poland and assesses its impact on the Polish economy. The various factors which led to the failure of the import-led growth strategy are examined. (See also *OECD Observer* No. 122 May 1983 page 29).

(92 83 01 1) ISBN 92-64-12484-5

200 pages . . . . . F110.00 £11.00 US\$22.00 DM49.00

## AGRICULTURE, FOOD AND FISHERIES

#### PROSPECTS FOR SOVIET AGRICULTURAL PRODUCTION AND TRADE (August 1983)

In recent years the Soviet Union has become one of the most important purchasers of agricultural commodities from OECD countries. This report examines the extent to which this is due to natural conditions or to organisational problems and provides an outlook on agricultural developments to 1990.

(51 83 06 1) ISBN 92-64-12471-3

118 pages . . . . . F60.00 £6.00 US\$12.00 DM27.00

#### REVIEW OF FISHERIES IN OECD MEMBER COUNTRIES-1982 (September 1983)

(53 83 01 1) ISBN 92-64-12476-4

268 pages . . . . . F79.00 £7.90 US\$16.00 DM36.00

## TRANSPORT AND TOURISM

#### MARITIME TRANSPORT-1982 (August 1983)

During 1982 worldwide demand for shipping services suffered a dramatic setback, resulting in the largest surplus of tonnage recorded since the second World War, with gross overcapacity in almost all sectors of the fleet. The prospect of austere trading conditions and too many orders for all kinds of ships suggest continued difficulties for shipowners.

(76 83 01 1) ISBN 92-64-12479-9

162 pages . . . . . F60.00 £6.00 US\$12.00 DM27.00

#### TOURISM POLICY AND INTERNATIONAL TOURISM IN OECD MEMBER COUNTRIES. Evolution of Tourism in 1982 and the Early Months 1983 (October 1983)

In spite of the economic recession, international tourism within OECD countries proved resilient, with no decline in visitors or receipts. But competition became more fierce and the pressures on governments to introduce protectionist measures increased.

(78 83 01 1) ISBN 92-64-12511-6

156 pages . . . . . F96.00 £9.60 US\$19.00 DM43.00

#### ECMT (European Conference of Ministers of Transport)

#### RESEARCH ON TRANSPORT ECONOMICS — Annual Information Bulletin. Volume XVI — November 1983 (October 1983)

(74 83 01 3) ISSN 0304-3320

556 pages bilingual

Subscription: . . . . . F180.00 £20.00 US\$45.00 DM90.00

## STATISTICS

#### QUARTERLY NATIONAL ACCOUNTS BULLETIN No. 2-1983 (August 1983)

(36 83 02 3). 130 pages bilingual

(36 00 00 3) ISSN 0304-3738

Subscription for 1983: . . . . . F60.00 £6.00 US\$13.00 DM30.00

#### NATIONAL ACCOUNTS: Detailed Tables. Volume II 1964-1981 (September 1983)

(30 83 03 3) ISBN 92-64-02459-X

318 pages bilingual . . . . . F120 £12.00 US\$24.00 DM54.00

#### LABOUR FORCE STATISTICS 1970-1981 (September 1983)

(30 83 04 3) ISBN 92-64-02458-1

478 pages bilingual . . . . . F120.00 £12.00 US\$24.00 DM54.00

#### QUARTERLY LABOUR FORCE STATISTICS: No. 3-1983 (October 1983)

(35 83 03 3) 82 pages, bilingual

not sold separately

ISSN 0304-3312 1983

Subscription: . . . . . F60.00 £6.00 US\$17.00 DM35.00

#### INDICATORS OF INDUSTRIAL ACTIVITY: 1983-III (October 1983)

(37 83 03 3) 124 pages, bilingual

Per issue: . . . . . F34.00 £3.40 US\$7.50 DM17.00

(37 00 00 3) ISSN 0250-4278 Annual subscription

(Quarterly) . . . . . F120.00 £12.00 US\$26.50 DM60.00

#### THE ENGINEERING INDUSTRIES IN OECD MEMBER COUNTRIES: Basic Statistics 1977-1980. Deliveries of "100" Selected Products. "Document" Series (October 1983)

(71 83 40 3) ISBN 92-64-02490-5

110 pages bilingual . . . . . F50.00 £5.00 US\$10.00 DM25.00

#### THE FOOTWEAR, RAW HIDES AND SKINS AND LEATHER INDUSTRY IN OECD COUNTRIES: STATISTICS 1981-1982 (August 1983)

(71 83 81 3) ISBN 92-64-02456-5

60 pages bilingual . . . . . F45.00 £4.50 US\$9.00 DM23.00

#### PULP AND PAPER QUARTERLY STATISTICS: 1983/1 (October 1983)

(73 83 01 3) 68 pages, bilingual

Per issue: . . . . . F22.00 £2.20 US\$5.00 DM11.00

(73 00 00 3) ISSN 0335-377X

Subscription 1983: . . . . . F66.00 £6.60 US\$14.50 DM33.00

#### THE PULP AND PAPER INDUSTRY 1981 (September 1983)

(71 83 60 3) ISBN 92-64-02457-5

84 pages bilingual . . . . . F62.00 £6.20 US\$12.50 DM28.00

#### QUARTERLY OIL STATISTICS. First Quarter 1983 — No. 2/1983 (August 1983)

(60 83 02 3) 318 pages bilingual

Per issue: . . . . . F120.00 £12.00 US\$26.00 DM60.00

(60 00 00 3) ISSN 0378-6536

Annual subscription: . . . . . F400.00 £40.00 US\$88.00 DM200.00

#### FOREIGN TRADE BY COMMODITIES — SERIES C — Volume I — Exports 1981 (September 1983)

(34 81 02 3) ISBN 92-64-02455-7

292 pages bilingual

#### Volume II Imports 1981

(September 1983) . . . . . (34 81 01 3) ISBN 92-64-02459-9

258 pages bilingual, Each Volume,

Exports or Imports: . . . . . F80.00 £8.00 US\$16.00 DM40.00

1983-1984 Subscription, Volumes I & II

Exports & Imports: . . . . . F150.00 £15.00 US\$30.00 DM74.00

# Where to obtain OECD Publications

## ARGENTINA

Carlos Hirsch S.R.L.,  
Florida 165, 4º Piso,  
(Galeria Guemes) 1333 Buenos Aires  
Tel. 33.1787.2391 y 30.7122

## AUSTRALIA

Australia and New Zealand Book Co. Pty. Ltd.,  
10, Aquatic Drive, Frenchs Forest, N.S.W. 2086  
(P.O.B. 459) Brookvale, N.S.W. 2100  
Tel. 452.44.11

## AUSTRIA

OECD Publications and Information Center,  
4 Simrockstrasse,  
5300 Bonn (Germany) Tel. (0228) 21.60.45  
Local Agent:  
Gerold & Co., Graben 31, Wien 1  
Tel. 52.22.35

## BELGIUM

Jean de Lannoy, Service Publications OCDE,  
avenue du Roi 202  
B-1060 Bruxelles Tel. 02/538.51.69

## BRAZIL

Mestre Jou S.A.,  
Rua Guaipá 518, Caixa Postal 24090,  
05089 Sao Paulo 10 Tel. 261.1920  
Rua Senador Dantas 19 s/205-6  
Rio de Janeiro - G.B. Tel. 232.07.32

## CANADA

Renouf Publishing Company Limited,  
2182 St. Catherine Street West,  
Montreal, Quebec H3H 1M7  
Tel. (514) 937.3519  
Ottawa, Ont. K1P 5A6, 61 Sparks Street

## DENMARK

Munksgaard Export and Subscription Service  
35, Nørre Søgade, DK-1370 København K  
Tel. +45.1.12.85.70

## FINLAND

Akateeminen Kirjakauppa,  
Keskuskatu 1, 00100 Helsinki 10  
Tel. 65.11.22

## FRANCE

Bureau des Publications de l'OCDE  
2 rue André-Pascal, F75775 Paris Cedex 16.  
Tel. (1) 524.81.67  
Principal correspondant :  
Librairie de l'Université,  
13602 Aix-en-Provence. Tel. (42) 26.18.08

## GERMANY

OECD Publications and Information Centre,  
4 Simrockstrasse,  
5300 Bonn Tel. (0228) 21.60.45

## GREECE

Librairie Kauffmann,  
28 rue du Stade, Athens 132.  
Tel. 322.21.60

## HONG KONG

Government Information Services,  
Publications/Sales Section,  
Baskerville House, 2nd floor,  
22 Ice House Street

## ICELAND

Snæbjörn Jónsson & Co., h.f.,  
Hafnarstræti 4 & 9,  
P.O.B. 1131 - Reykjavik.  
Tel. 13133/14281/11936

## INDIA

Oxford Book and Stationery Co.,  
Scindia House, New Delhi 1. Tel. 45896  
17 Park St., Calcutta 700016. Tel. 240832

## INDONESIA

Pdin Lipi, P.O. Box 3065/JKT.Jakarta.  
Tel. 583467

## IRELAND

TDC Publishers - Library Suppliers  
12 North Frederick Street, Dublin 1  
Tel. 744835-749677

## ITALY

Libreria Commissionaria Sansoni,  
Via Lamarmora 45, 50121 Firenze  
Tel. 579751/584468  
Via Bartolini 29, 20155 Milano. Tel. 365083  
Sub-depositari :  
Ugo Tassi Via A. Farnese 28,  
00192 Roma Tel. 310590  
Editrice e Libreria Herder,  
Piazza Montecitorio 120, 00186 Roma  
Tel. 6794628  
Costantino Ercolano Via Generale Orsini 46,  
80132 Napoli Tel. 405210  
Libreria Hœpli,  
Via Hœpli 5, 20121 Milano. Tel. 865446  
Libreria Scientifica  
Dott. Lucio de Biasio "Aeiou"  
Via Meravigli 16, 20123 Milano  
Tel. 807679  
Libreria Zanichelli Piazza Galvani 1/A,  
40124 Bologna Tel. 237389  
Libreria Lattes,  
Via Garibaldi 3, 10122 Torino. Tel. 519274  
La diffusione delle edizioni OCSE è inoltre assicurata  
dalle migliori librerie nelle città più importanti.

## JAPAN

OECD Publications and Information Center,  
Landic Akasaka Bldg., 2-3-4 Akasaka,  
Minato-ku, Tokyo 107. Tel. 586.2016

## KOREA

Pan Korea Book Corporation  
P.O.Box No. 101 Kwangwhamun, Seoul.  
Tel. 72.7369

## LEBANON

Documenta Scientifica/Redico,  
Edison Building, Bliss St.,  
P.O.B. 5641, Beirut. Tel. 354429-344425

## MALAYSIA

University of Malaya Co-operative Bookshop Ltd.,  
P.O.Box 1127, Jalan Pantai Baru,  
Kuala Lumpur. Tel. 51425, 54058, 54361

## NETHERLANDS

Staatsuitgeverij Verzendboekhandel  
Chr. Plantijnstraat 1 Postbus 20014  
2500 EA S-Gravenhage. Tel. 070-789911  
Voor bestellingen. Tel. 070-789208

## NEW ZEALAND

Government Printing Office Bookshops:  
Auckland: Retail Bookshop, 25 Rutland  
Street,  
Mail Orders, 85 Beach Road  
Private Bag C.P.O.  
Hamilton: Retail, Ward Street,  
Mail Orders, P.O. Box 857  
Wellington: Retail, Mulgrave Street, (Head Office)  
Cubacade World Trade Centre,  
Mail Orders, Private Bag  
Christchurch: Retail, 159 Hereford Street,  
Mail Orders, Private Bag  
Dunedin: Retail, Princes Street,  
Mail Orders, P.O. Box 1104

## NORWAY

J.G. Tanum A/S, Karl Johansgate 43  
P.O.Box 1177 Sentrum, Oslo 1.  
Tel. (02) 801260

## PAKISTAN

Mirza Book Agency  
65 Shahrah Quaid-E-Azam, Lahore 3.  
Tel. 66839

## PHILIPPINES

National Book Store, Inc.  
Library Services Division, P.O. Box 1934  
Manila,  
Tel. Nos. 49.43.06 to 09, 40.53.45, 49.45.12

## PORTUGAL

Livraria Portugal,  
Rua do Carmo 70-74, 117 Lisboa Codex.  
Tel. 360582/3

## SINGAPORE

Information Publications Pte Ltd  
Pei-Fu Industrial Building,  
24 New Industrial Road N° 02-06  
Singapore 1953. Tel. 2831786, 2831798

## SPAIN

Mundi-Prensa Libros, S.A.,  
Castelló 37, Apartado 1223, Madrid 1.  
Tel. 275.46.55/276.02.53  
Libreria Bosch, Ronda Universidad 11,  
Barcelona 7. Tel. 317.53.08/317.53.58

## SWEDEN

AB CE Fritzes Kungl. Hovbokhandel,  
Box 16356, S 103 27 STH,  
Regeringsgatan 12,  
DS Stockholm. Tel. (08) 23.89.00  
Subscription Agency/Abonnements:  
Wennergren-Williams AB,  
Box 13004, S104 25 Stockholm  
Tel. 08/54.12.00

## SWITZERLAND

OECD Publications and Information Center,  
4 Simrockstrasse,  
5300 Bonn (Germany). Tel. (0228) 21.60.45  
Local Agent :  
Librairie Payot,  
6 rue Grenus, 1211 Genève 11.  
Tel. (022) 31.89.50

## TAIWAN

Good Faith Worldwide Int'l Co., Ltd.  
9th floor, No. 118, Sec.2  
Chung Hsiao E. Road  
Taipei Tel. 391.7396/391.7397

## THAILAND

Suksit Siam Co., Ltd.,  
1715 Rama IV Rd.,  
Samyamb Bangkok 5. Tel. 2511630

## TURKEY

Kültür Yayinlari Is-Türk Ltd. Sti.  
Atatürk Bulvari No: 191/Kat. 21  
Kavaklıdere/Ankara Tel. 17.02.66  
Dolmabahçe Cad. No: 29  
Besiktas/Istanbul Tel. 60.71.88

## UNITED KINGDOM

H.M. Stationery Office,  
P.O.B. 276, London SW8 5DT  
Tel. (01) 622.3316, or  
49 High Holborn  
London WC1V 6HB (personal callers)  
Branches at : Belfast, Birmingham,  
Bristol, Edinburgh, Manchester.  
UNITED STATES  
OECD Publications and Information Center,  
Suite 1207, 1750 Pennsylvania Ave., N.W.,  
Washington, D.C. 20006 - 4582  
Tel. (202) 724.1857

## VENEZUELA

Libreria del Este,  
Avda F. Miranda 52, Aptdo. 60337,  
Edificio Galipan, Caracas 106.  
Tel. 32.23.01/33.26.04/31.58.38

## YUGOSLAVIA

Jugoslovenska Knjiga, Knez Mihajlova 2,  
P.O.B. 36, Beograd. Tel. 621.992

Orders and inquiries from countries where Sales  
Agents have not yet been appointed should be sent to  
OECD Publications Office, 2 rue André-Pascal, F  
75775 Paris Cedex 16.

# Organisation for Economic Co-operation and Development

## *Member Countries :*

Australia  
Austria  
Belgium  
Canada  
Denmark  
Finland  
France  
Germany  
Greece  
Iceland  
Ireland  
Italy  
Japan  
Luxembourg  
Netherlands  
New Zealand  
Norway  
Portugal  
Spain  
Sweden  
Switzerland  
Turkey  
United Kingdom  
United States

## *Special Status Country :*

*Yugoslavia*

