## The raw materials challenge

## European File

Manpower, capital, know-how and energy are all vital to make the wheels of industry turn; so too are raw materials. Unlike products obtained from animals (like leather for example) or from plants (like timber) mineral raw materials are not renewable. There is, however, no likelihood of serious shortage. According to the Organization for Economic Cooperation and Development, which embraces most of the Western nations, existing exploitable mineral resources can, up to the year 2000, fulfill current human needs 6 to 17 times over for aluminium, vanadium, chromium and colombium; 3 to 5 times over for platinum, titanium, cobalt, nickel, manganese and iron; and 1.2 to 2.2 times over for lead, tungsten, copper, tin and tantalum. The only products which may not meet human demand are zinc and mercury (0.9), bismuth (0.8), silver (0.6) and asbestos (0.5). But in general these are products for which feasible substitutes exist or whose use should be curbed for ecological reasons. In addition, known reserves are on average 2 to 3 times greater than those currently being exploited, and to these must be added the resources that will eventually be tapped from the ocean bed.

The real problems lie elsewhere — namely, in the geographical location of known mineral lodes and in raw material price and investment trends. In the margin looms the question of Europe's relations with other industrialized countries, and above all, with the Third World.

- ☐ Firstly the problems of geographical location: Known raw material reserves are shared between very few countries:
  - 90% of the industrialized countries' resources (44% of the world total) are to be found in the United States, Canada, Australia and South Africa;

- 82% of the Eastern bloc's known reserves (23% of the world total) lie beneath the Soviet Union (although prospecting is only just beginning in China);
- 69% of the developing countries' reserves (33% of the world total) are situated in six countries: Brazil 25%, Chile 19%, Indonesia 7% and Zaire, Guinea and India 6% each.

As a result, according to estimates made in 1974, the Community has to import 75% of its raw material needs, Japan 90%, whereas the USA imports only 15%. Of course, a high degree of external dependence need not be worrying so long as the sources of supply are sufficiently diversified and access to them is unlikely to be threatened by economic or political upheaval. But this is not always the case. For example, the Community is 99 to 100% dependent on imports for its manganese, platinum and vanadium, which are provided mostly by South Africa and the USSR, for chromium, which is found almost exclusively in South Africa and Zimbabwe and for tungsten, nearly two-thirds of which is located in China, the USSR and North Korea.

Besides minerals, Europe is also dependent for other raw materials: leather and skins, which the developing countries are increasingly processing themselves, to the great detriment of European tanneries and leather and shoe manufacturers; timber and wood-pulp for paper, which the Community has to import from Scandinavia, the USA and the USSR to cover between 55 and 60% of her current needs, expected to rise to 65% by the year 2000 (the second largest contributor to Europe's trade deficit after oil). Then, there are vegetable oils and fats, soya, manioc supplied by only a very few countries, and tropical products (coffee, tea, assorted fruits and so on) which cannot be grown in Europe. The common agricultural policy, which enables the Community to be self-sufficient for most of its foodstuffs, does not prevent Europe from remaining the world's number one food importer.

Prices and investments: As a result of the crisis in mining investment, a marked increase in the cost of mineral raw materials is bound to occur during the 1980s. The United Nations has estimated that for the Western countries and the Third World alone, annual investments of 12 000 million dollars (at 1975 value) would be needed between 1977 and 1990 to meet a moderate increase in consumption for the six metals representing more than 95% of the value of mining production: iron, copper, aluminium, zinc, nickel and lead. Annual investments actually planned for the period 1979-83 are only worth 10 000 million dollars at today's dollar exchange rate, which is down on its 1975 value.

The main reason for this lack of investment is the declining profitability of mining companies, which have been 'sandwiched' between increasing mining costs and political and economic risks on the one side, and, apart from a few fluctuations, the general stagnation in prices of most raw materials since the 1950s, on the other side. The low level of investment and therefore of production is now expected to provoke numerous price rises which new investors with more abundant capital (oil companies in particular) will try to exploit. But the transition may not always be smooth. In the absence of international agreements, price rises are unlikely to be regular or

predictable. They could well occur in sharp bursts, upsetting the smooth running of the economy. Against such a background, a temporary breakdown in supply of any product cannot be ruled out.

An increase in raw material prices could nevertheless prove beneficial for the world economy, and Europe could withstand it provided the increase was introduced progressively and in the context of an overall increase in trade between the Community and the Third World. Trade in raw materials only accounts for 4% of the Community gross national product, but it represents up to 75% of the income of some developing countries. An average increase of 50% in raw materials prices would bring the developing countries a rise in income three times greater than the current total of development aid. As these countries, whose needs are huge, get richer, their purchases of finished goods and equipment will expand and this will create new jobs in industrialized countries. Studies in France have shown that each increase in price of imported raw materials between 1972 and 1976 was more than offset by a corresponding rise in national exports.

But here a new difficulty arises: expenditure on prospecting and mining investments are badly shared out geographically. Political or economic instability, nationalization, broken contracts and the lack of bank guarantees have forced mining companies to cut back activities in certain Third World countries, and, despite the efforts of international organizations, they have not been replaced. According to the United Nations, nine-tenths of expenditure on mining exploration is concentrated in industrialized countries (the USA, Canada, Australia and South Africa). The remainder is largely spent in Brazil, Chile, Indonesia and the Philippines.

European mining investments do little to help correct this imbalance:

- Firstly, they are too low: between 200 and 300 million dollars a year between 1966 and 1977, despite the fact that the annual world investment requirement was nearer the 12 000 million dollar mark, and the fact that Europe is the world's largest consumer of imported raw materials.
- Secondly, European investments are themselves concentrated in industrialized nations. In 1977 they took 75% of Community companies' mining investments (four-fifths of which went to non-European countries). In addition, 85% of exploration funded by European countries between 1975 and 1977 was spent in the industrialized countries (compared with 60% between 1966 and 1967). The share of expenditure on mining exploration going to developing African countries fell from 4.4% in 1966 to 0.2% in 1977.

As a result, Europe is relying more and more on the goodwill of a few of its principal industrialized rivals, which produce raw materials that they are perfectly capable of processing themselves. In neglecting the Third World countries, where the political risks are admittedly higher, Europe is ignoring the boost that the development of these countries could give to her exports: our major rivals have obviously less reason than the developing countries to use the increased income gained from dearer raw materials to buy European-manufactured goods.

## A Community problem

Co	European Commission staff working paper entitled 'Structural change for the ommunity in the 1980s' deals again with the problem of raw materials, which was the bject of a number of Commission reports in 1975. Why is there this interest?
0	Firstly, because the European Treaties entrust the Commission with the task not only of establishing a common market, but also with that of establishing the progressive alignment of national economic policies so as to develop economic activity, ensure continued and balanced growth and raise standards of living.
	Secondly, because, as their name suggests, raw materials are the very basis of our economy, and problems connected with them are common to all member countries.
_	Thirdly, because the Community countries either do not yet have raw materials policies or tend to take national measures that are a potential threat to free competition, and in time of shortage even upset the working of the common market. It is therefore necessary to encourage the search for solutions and ensure that they are coherent at a European level.
	Finally, because the European dimension can give the member countries' efforts an added effectiveness and a wider audience, especially when it comes to talks with producer countries, particularly those in the Third World. The question of raw materials is in fact at the heart of the North-South Dialogue, which the Community countries are increasingly approaching with a common voice and which is likely to get down to details during the course of the next year.
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Meeting the raw materials challenge will require a set of complementary measures, based on the following guidelines:

- ☐ Action within the Community should concentrate on:
  - an assessment of indigenous resources. The Community can provide financial aid for prospecting and exploitation of raw materials. To date this policy has only taken on real significance for energy sources (uranium, hydrocarbons, coal, alternative energy sources). But it should be possible to develop lead and zinc production in Ireland and Greenland. Greece, the tenth Community member country and Spain, a candidate for membership, also harbour important mineral reserves. However, we should not expect too much from under our own feet: major consumers of raw materials that we are, we have by now exhausted almost all we possess. But the prospects are brighter for renewable resources, especially timber. In a communication to Community ministers in December 1978, the European Commission

<sup>&</sup>lt;sup>1</sup> See European file No 15/80: 'European energy demonstration projects'.

outlined a number of measures aimed at doubling Europe's timber production and thus meeting growing demand (currently rising by 2% per year, while Community production is only increasing by 1% per year and Scandinavian countries are nearing the ceiling of their supply potential).

- recycling raw materials and developing more economic technologies. The Community is already pursuing a scientific research programme dealing chiefly with municipal and industrial waste, paper and cardboard, used rubber and so on. In addition, various Community directives make recycling of certain materials compulsory throughout Europe. These enable considerable savings to be made and at the same time improve the quality of the environment. But since needs are expanding, this too can only be a partial solution.
- □ Outside the Community there are numerous possible courses of action. The lynch-pin of any strategy should be to improve relations with producing countries and in particular with those that are most likely to use the income they earn from exporting raw materials to buy European goods. Such a strategy should also involve:
  - the stimulation of European mining investment in the Third World. Exploration, feasibility studies and investment should be backed up by better credit facilities, public sector financial support and loans that are only repayable in the event of success. The system of guarantees against non-commercial risks could also be improved. In 1978, the European Commission proposed a series of measures designed to promote and protect European investments, particularly mining investments in the Third World. A year later the Commission was able to get some of these ideas accepted during the renewal of the Lomé Convention, which links some sixty African, Caribbean and Pacific countries with the Community. The Lomé Convention provides a framework for technical and financial aid to mining projects, chiefly through loans but sometimes even through direct participation. Furthermore, a financial mechanism has been set up to help ACP countries maintain the production and export of copper, cobalt, phosphates, manganese, bauxite, aluminium, tin and iron, in the event of crisis.
  - the search for greater trade stability. This concerns Community countries as much as their Third World partners. Firstly, Europe must take precautions against the risk of temporary breakdown in supply, which could affect a number of products, especially minerals. By diversifying purchases, concluding long-term contracts and building up emergency stocks, Europe can guard against such an eventuality. In addition, the Community can improve supplies of timber and leather and skins indirectly through agricultural cooperation aid, aimed at improving forestry and developing the production and consumption of meat in ACP countries. Third World countries need a stable income to ensure their economic development. To compensate for a bad harvest or a fall in world prices (even a momentary one), the

<sup>&</sup>lt;sup>1</sup> See European file No 10/80: 'The European Community and waste recycling'.

<sup>&</sup>lt;sup>2</sup> See European file No 17/80: 'Community aid to the Third World: the Lome Convention'.

Community and her ACP partners set up the 'Stabex' system, within the framework of the Lomé Convention. Stabex in effect insures the ACP countries against a reduction in income earned from exports of raw materials to the European market. Repayable or non-repayable aid can be granted for exports of some 40 products, including cocoa, coffee, groundnuts, tea, sisal, timber, rubber, leather and skins.

The Community wants to go a step further: to hit at the root of the problem for the benefit of every nation in the world. The demands of the developing countries and the interests of the industrialized nations meet in the need to eliminate or reduce the destabilizing effect of sharp fluctuations in raw material prices. (For some products, particularly foodstuffs, prices can drop by 30%, sometimes even 75% in a single year.) The Community played an active role in the recent UNCTAD — United Nations Conference on Trade and Development — agreement establishing a Common Fund to finance the creation of buffer stocks and various complementary measures. But before the Fund can become truly operational, with raw material stocks being bought up when prices are low and sold again when they rise, product agreements must first be worked out. Although most of these are still in the discussion stage, the path to be followed is clearly mapped out and should prove beneficial for the joint development of North and South.

• the reorganization of processing. The processing of raw materials also poses problems, as the following examples illustrate. The primary processing of titanium ore has become virtually a monopoly of the Japanese, who have no indigenous titanium reserves and who are Europe's main competitors not only in the manufacture of titanium tubes and strips, but also in the construction of nuclear power-stations and desalination plants, which use them. It would be wise in such cases for Europe to build her own plants and to process at home. But this is not the whole solution — through this very desire to keep the processing of phosphates on home ground, Community industry allowed the USSR to take the initiative and sell Morocco factories to manufacture fertilizers. This example is characteristic: a growing number of developing countries want to carry out at least the primary processing of the raw materials they sell themselves. To do so they will often take steps to limit their exports of raw materials.

The industrialization of the Third World is inevitable and perfectly legitimate so long as it follows a certain economic rationale and is based upon local needs or advantages, such as the availability of energy, labour, capital, technology and so forth. Rather than abandoning to her industrialized rivals the fruits to be gained from the sale of equipment (machinery, means of transport, etc.) to developing countries, Europe should face the facts: the Third World wants industrialization, and will get it with or without European help. It could bring with it a new pattern of trade relations, with Europe supplying plant and machinery, buying back processed products and then selling higher-technology finished goods. This new relationship would reproduce on a different level the degree of mutual interest necessary to guarantee long-term satisfaction of needs on both sides. Europe's security of supply is not simply therefore a question of raw materials. It could also — and indeed must sometimes — be assured through trade in semi-finished and even some finished

products when conditions dictate. Industrialization of the Third World will become compatible with the need to safeguard European jobs as soon as structural changes are made and Europe learns how to adjust her industry towards competitive and more advanced production. Any entrenchment of the existing situation, however, will only lead to a worsening of our economic and social difficulties.

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The problem of raw materials, then, poses other questions fundamental to our economic, social and political future: how can we produce more and better goods using less raw materials, whether in the form of energy or not? How are we to keep employment steady in the face of pressure from traditional and new rivals? Will it be confrontation or interdependence that characterizes Europe's relations with the Third World, whose stagnation or development will dictate the future of the planet? Faced with these questions, a common strategy and joint action could help shift the odds in Europe's favour

The contents of this publication do not necessarily reflect the official views of the Institutions of the Community.

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