
Objectives and Measures for Energy and Mineral Cooperation: a note

Francisco R. Parra

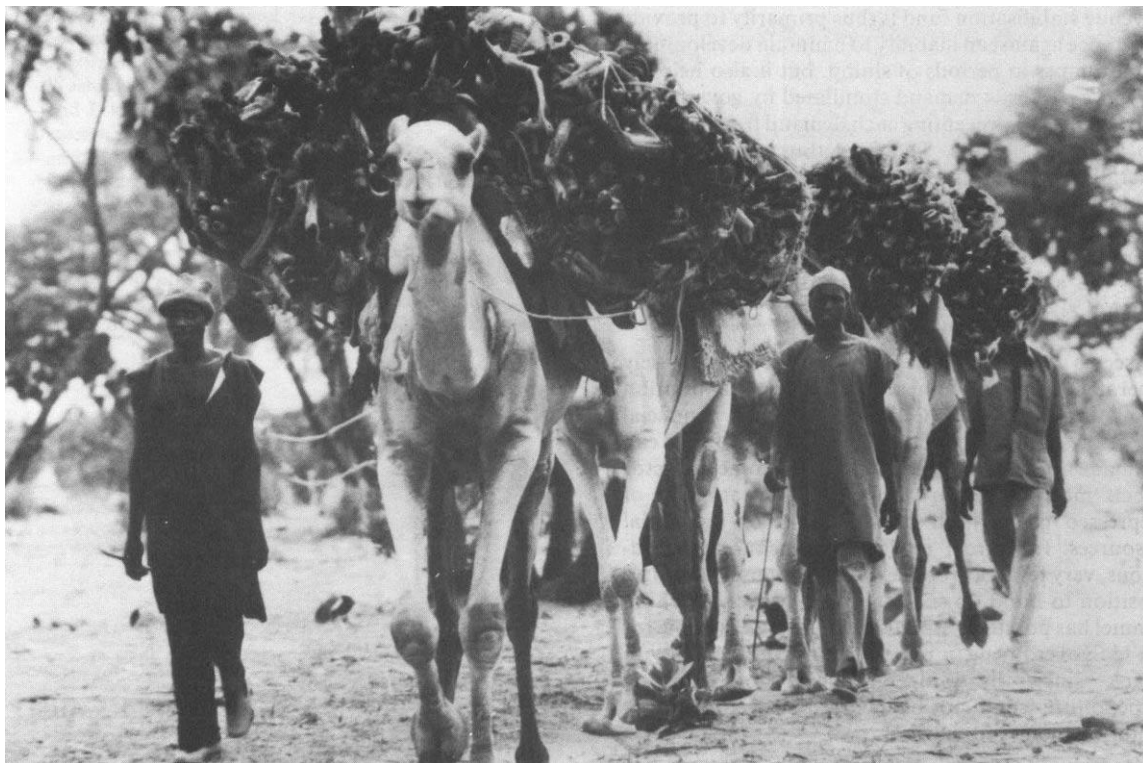
The Role of Third World Energy Demand

This note¹ sets out some objectives and measures for energy cooperation between the European Communities and developing countries. As in the past, most energy forecasts today make the assumption that the demand for energy in developing countries will continue to grow at a substantial pace, even if not quite as fast as previously. Indeed, some forecasts suggest that, apart from consumption in the OPEC countries themselves, the whole of the growth in demand for oil over the next 20 years will come from the developing countries. However, serious doubts

may be expressed about the capacity of developing countries' economies to sustain high growth rates in energy demand. They did so after the 1973-74 oil price rises largely on the basis of increased borrowing, but there is a limit to such a process in an era of high interest rates and depressed conditions in the industrial world which are reflected in lower demand and prices for the goods produced by the developing countries. From the point of view of the industrial countries themselves, there is a clear need for the Third World to take its place once again as a dynamic force in the world economy, but this it will have difficulty in doing until it makes some progress in coping with its energy problem.

¹Remarks made at the Conference at IDS in June 1982 on 'Europe and the South in the 1980s: prospects for political change'.

Mark Edwards/Earthscan



Trains of camels haul firewood into Niamey, Niger's capital.

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The Third World Energy Problem

There are, of course, several dimensions to the energy problem in developing countries, but the following four seem the most important.

The high import price of oil In many of the poorest countries, oil imports now account for more than 50 per cent of foreign exchange earnings on merchandise exports, in some cases *much* more. Added to debt servicing (some of the debt stemming from financing of previous oil imports), this does not leave much over for financing economic development.

Shrinking resource of fuel-wood This is an acute problem in many countries, sometimes more severe than the oil import problem. It is not just a question of temporary shortages in energy, but of permanent damage being done to the productive capacity of the countries involved.

Lack of financial resources There are not many developing countries which lack resources for developing indigenous energy. Most have ample potential for hydro-power or good prospects for oil and gas discoveries or for coal, and virtually all could have recourse to nuclear energy. What is lacking is the financial capability to develop these. It should be borne in mind that private foreign capital can be attracted into exploration, but only for the development of oil and gas, and even in these cases, there are serious obstacles if the finds are very small.

Technical and management capability Most developing countries, in addition to lacking the financial resources to develop their indigenous energy potential, also lack any depth in essential technical and management capabilities.

Areas for assistance

Many developing countries need to pay greater attention to the process of energy planning. Within the structure of government, the responsibility for energy falls typically between several different ministries, semi-autonomous institutes and national companies, and the executive function cuts across government departments, particularly agriculture and transport. The need for coordination in the development of energy resources, in accordance with economic priorities, makes it essential that an adequate plan is prepared by the government. Like all economic planning, energy planning is a complex exercise and technical assistance in this area, backed by experience in the developing countries themselves, could be an invaluable contribution the EEC could make.

The remainder of this note concentrates on hydrocarbons, for which many countries have reasonable geological potential. Some of the areas here which could benefit from technical assistance at relatively low cost are as follows. The first four are 'software' of a kind which can be provided at relatively low cost (compared with the 'hardware' of physical operations) and have an extremely high yield in economic terms.

Assistance in the drawing up of appropriate legislation

In some countries, the legislative framework necessary to attract foreign capital into the exploration phase is inadequate and advice is not always acceptable from some expert quarters because of conflict of interest, real or suspected.

Exploration and production The same applies to models for exploration and production.

Promotion In addition to providing the appropriate legal framework for exploration it is necessary, particularly in today's environment, actively to promote interest in the acreage to be offered. This involves preparing the necessary background material and disseminating it, for example through presentations and lectures to groups of potentially interested companies, as well as making known the channels of communication and procedures to be followed.

Negotiation with companies Some governments need assistance in negotiating exploration and production agreements with companies. Occasionally, assistance in negotiation is required to protect the government from provisions and agreements which could turn out to be exploitative. Quite as often, the assistance is needed to prevent the government (usually suspicious of foreign oil companies) from pressing for unrealistic terms.

Geological and geophysical surveys and exploration It is usually advantageous for a country to undertake some pre-drilling exploration before going into exploration and production agreements. Geological surveys and geophysical exploration, including seismic work, is of course much more expensive than the types of activity listed above. It may be necessary however in order to stimulate interest in existing acreage.

Exploratory drilling Like exploration this involves a higher magnitude of cost, and is an area from which development assistance funds have typically stayed away. This is partly because it is an extremely high risk area, and partly because foreign capital is generally

available for the most attractive prospects. Consequently, development assistance funds would almost by definition be confined to the poorer prospects. However, it should be noted that while foreign capital is available for the better prospects, the poorer ones, which may be insignificant in the terms of major oil companies' objectives, could go a long way to solving the internal requirements of many of the

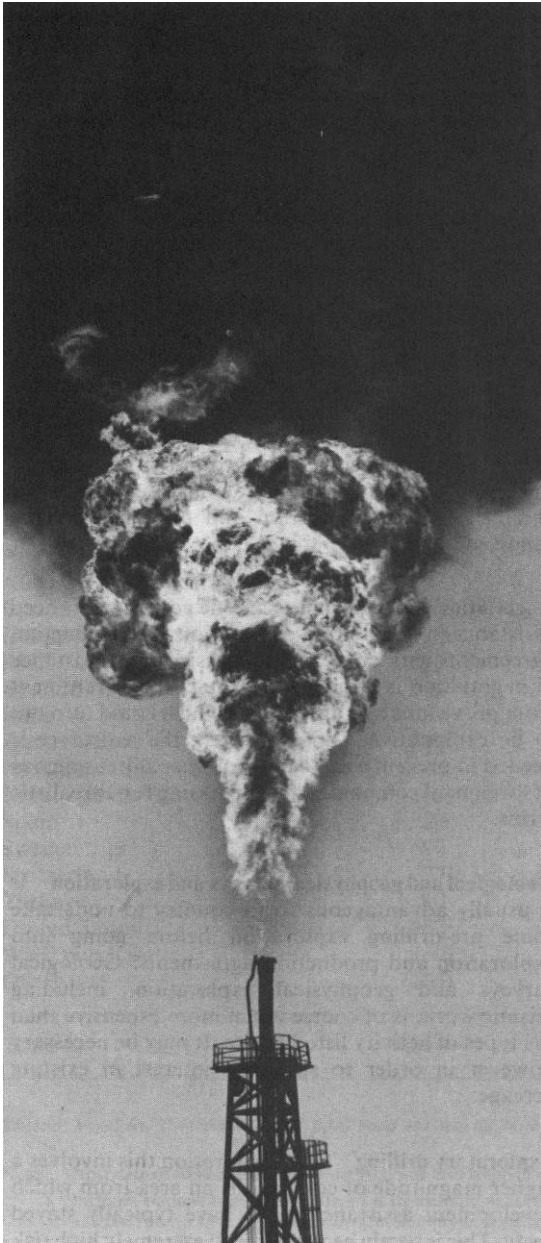
poorer countries. To the extent that the World Bank energy affiliate was intended to contribute towards solving this problem, its demise was a considerable blow to developing countries.

Risk Insurance Insurance against the technical risks in hydro-carbons exploration and the political risks following discovery of reserves is an area currently receiving attention in various institutions. At the International Energy Development Corporation we have our own proposals on an exploration insurance mechanism to provide against technical risks and allow for financing of exploration by commercial banks. The World Bank is, I understand, also developing proposals for insurance against political risks.

The development and utilisation of natural gas In the course of the search for oil, deposits of natural gas are sometimes encountered, which the foreign oil company is not interested in developing. Assistance is required on several counts here — assessment of gas reserves, development of the gas field, study of gas utilisation alternatives, and investment in gas utilisation plants (eg ammonia-urea, methanol, lng, compressed gas, etc).

Institutional Changes

This is the main area where I believe technical and financial assistance to developing countries is most needed in helping them to cope with the development of their hydro-carbon potential. However, I would add that I very much doubt whether technical and financial assistance to developing countries from the EEC (or indeed, the World Bank, or other institutions) will be anywhere near as effective as it would be if a specialised institution existed to lubricate the process. The World Bank's energy affiliate appears to have been stillborn. There remains a need for a specialised unit, not necessarily as ambitious as the World Bank's energy affiliate, to concentrate on helping to solve some of the problems outlined above. The need in developing countries for assistance in energy planning, for example, requires a counterpart in developed countries and the same applies to all of the 'software' areas noted above. A full-time, experienced, professional body specialising exclusively in the problems of developing countries would fill an important need on behalf of the various agencies involved in providing development assistance funds. The unit could not only provide the software services, but also organise in a professional manner the provision of funds for such 'hardware' services as geological and geophysical surveys, the development of marginal oil and gas fields, and gas utilisation projects.



Steve Benbow/Network

Gas being burned off at an offshore oil rig in the Gulf of Mexico.