



# The Courier

AFRICA-CARIBBEAN-PACIFIC - EUROPEAN COMMUNITY

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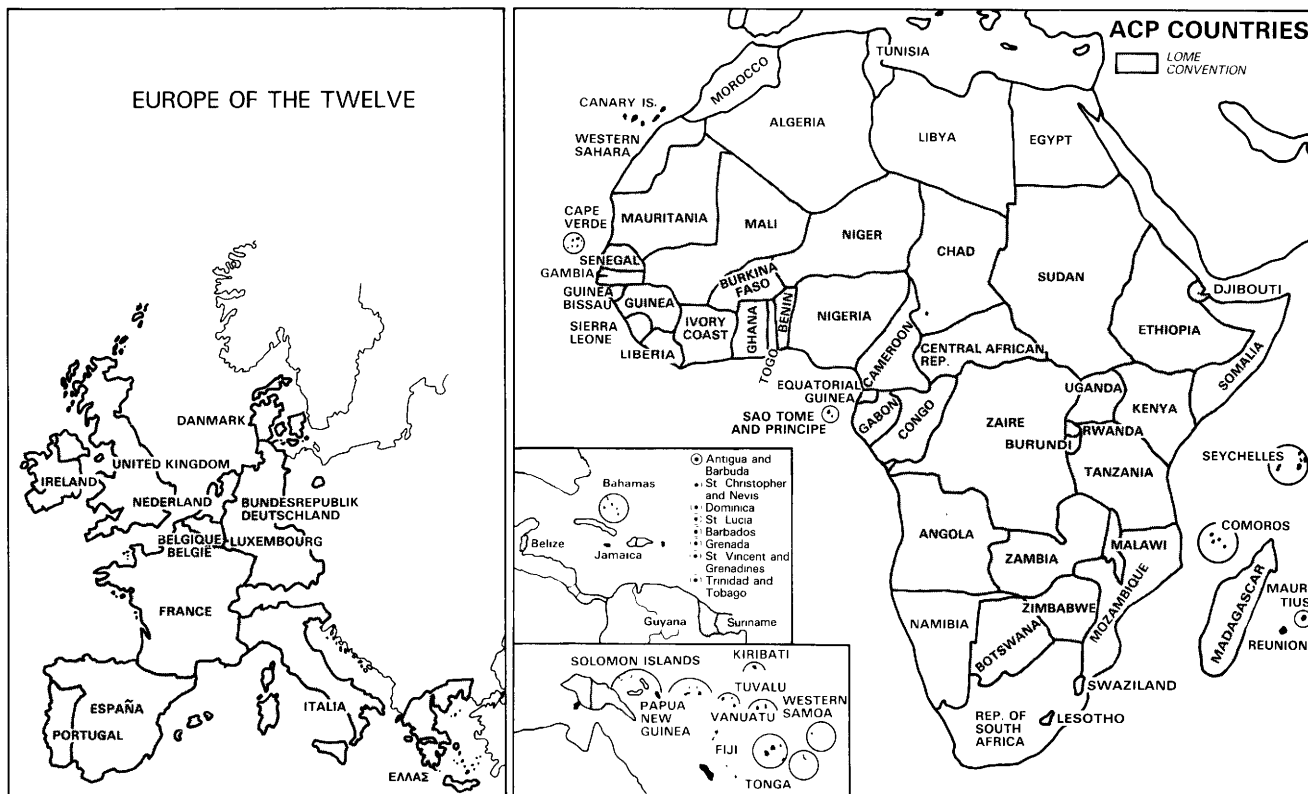
WOODFUEL

## THE EUROPEAN COMMUNITY

BELGIUM  
DENMARK  
FRANCE  
GERMANY  
(Federal Rep.)  
GREECE  
IRELAND  
ITALY  
LUXEMBOURG  
NETHERLANDS  
PORTUGAL  
SPAIN  
UNITED KINGDOM

## THE 66 ACP STATES

ANGOLA	GAMBIA	ST. VINCENT & THE GRENADINES
ANTIGUA & BARBUDA	GHANA	SAO TOME & PRINCIPE
BAHAMAS	GRENADA	SENEGAL
BARBADOS	GUINEA	SEYCHELLES
BELIZE	GUINEA BISSAU	SIERRA LEONE
BENIN	GUYANA	SOLOMON ISLANDS
BOTSWANA	JAMAICA	SOMALIA
BURKINA FASO	KENYA	SUDAN
BURUNDI	KIRIBATI	SURINAME
CAMEROON	LESOTHO	SWAZILAND
CAPE VERDE	LIBERIA	TANZANIA
CENTRAL AFRICAN REPUBLIC	MADAGASCAR	TOGO
CHAD	MALAWI	TONGA
COMOROS	MALI	TRINIDAD & TOBAGO
CONGO	MALTA	TUVALU
CÔTE D'IVOIRE	MAURITANIA	UGANDA
DJIBOUTI	MAURITIUS	WESTERN SAMOA
DOMINICA	MOZAMBIQUE	VANUATU
EQUATORIAL GUINEA	NIGER	ZAIRE
ETHIOPIA	NIGERIA	ZAMBIA
FIJI	PAPUA NEW GUINEA	ZIMBABWE
GABON	RWANDA	
	ST. CHRISTOPHER & NEVIS	
	ST. LUCIA	



### FRANCE

*(Overseas departments)*

Guadeloupe  
Guiana  
Martinique  
Reunion

*(Overseas territories)*

Mayotte  
New Caledonia and dependencies  
French Polynesia  
St Pierre and Miquelon  
French Southern and Antarctic Territories  
Wallis and Futuna Islands

### NETHERLANDS

*(Overseas countries)*

Netherlands Antilles  
(Bonaire, Curaçao, St Martin, Saba, St Eustatius)  
Aruba

### DENMARK

*(Overseas territory)*

Greenland

### UNITED KINGDOM

*(Overseas countries and territories)*

Anguilla  
British Antarctic Territory  
British Indian Ocean Territory  
British Virgin Islands  
Cayman Islands  
Falkland Islands and dependencies  
Montserrat  
Pitcairn Island  
St Helena and dependencies  
Turks and Caicos Islands

This list does not prejudice the status of these countries and territories now or in the future.

The *Courier* uses maps from a variety of sources. Their use does not imply recognition of any particular boundaries nor prejudice the status of any state or territory.

Cover page: *This Bofi woman from Mbaiki, Central Africa, has fetched her load of firewood (47 kg) from a point over 5 kms away from her village (Photo Vivant Unvers).*

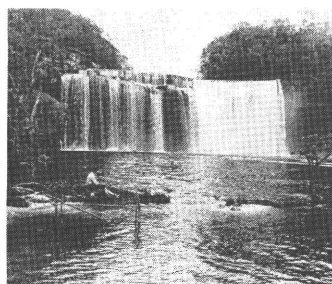
## Best wishes for 1986

### MEETING POINT: Adebayo Adedeji

As Executive Secretary of the United Nations Economic Commission for Africa (ECA), a post he has held for the past ten years, Adebayo Adedeji, who is Nigerian, is well placed to talk about the economies of African States. His assessment is straightforward: today's Africa is fighting for its survival. *The Courier* met Mr Adedeji recently in Brussels. Pages 2 to 4



### COUNTRY REPORTS: Guyana



Sir Walter Raleigh, the 16th century explorer, may have failed to find the legendary city of El Dorado in the Guyana highlands, but gold is nevertheless there. So too are diamonds and timber and bauxite and a fertile soil. Present-day Guyana is in crisis, however. *The Courier* looks at its troubles and at its hopes and plans for a brighter future. Pages 12 to 27

### Djibouti

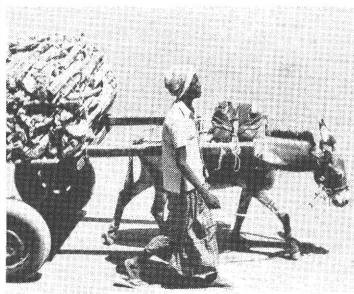
Situated in one of the most strategic points on the globe, Djibouti is naturally tantalizing for the superpowers but, since independence eight years ago, it has conducted a policy of neutrality and friendship towards all nations. Its economy, however, remains heavily dependent on the outside world. In order to give real meaning to Djibouti's independence, the battle is on for greater economic self-reliance. Pages 28 to 42



### EUROPE OF 12

The 1st of January 1986 saw the enlargement of the EEC to 12, the two States of the Iberian Peninsula, Spain and Portugal, having joined. *The Courier* presents pen-portraits of the two new Member States (pages 47 to 55) and reports on the recently-opened ACP-EEC negotiations aimed at establishing a Protocol by which the two countries will join Lomé III. (See News Round-up, pages I and II)

### DOSSIER: The woodfuel crisis



A highly complex crisis, that of poverty, viewed from the standpoint of the users themselves. What are the real problems they face? What means do they have at their disposal for facing them? What strategy should be adopted in response to so perturbing a situation and one which affects almost half the world's population... Pages 64 to 91

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## ADEBAYO ADEDEJI

**“The challenge faced by Africa is one of sheer survival”**

CEC/Lambiotte



Based in Africa Hall in Addis Ababa, in the very building where African Heads of State meet regularly, the Economic Commission for Africa was created in 1958 by the United Nations. The ECA is a “regional institution whose traditional role consists of gathering, analysing, evaluating and disseminating information and basic data on African economies and their associated problems, the strengthening of economic relations among member countries and the provision of technical assistance and advisory services”.

Its Executive Secretary for the past ten years, Professor Adebayo Adedeji, a Nigerian national, has frequently voiced his concern about Africa’s future. *The Courier* met him recently during a visit to Brussels where he had talks with Community officials, including Dieter Frisch, Director-General for Development and a meeting with the Committee of ACP Ambassadors.

► *A few years ago, an ECA Survey indicated that the conditions of life of the population in 22 independent African countries were worse than they were in 1960. How much further have they deteriorated?*

— When we did the study in 1974-1975 we discovered that 22 of our member states had been stagnating economically, that the standards of living were falling and that, indeed, between 1960 and 1975 only eight of the then independent African states had been able to maintain consistent growth in their economy. Unfortunately today, ten years after that study was undertaken, the picture is much worse. Virtually all African countries, with the possible exception of two or three, have seen very serious reverses in their economic growth, partly because of their own internal policies and partly also because of external factors.

► *The Lagos Plan of Action, your baby, was intended to reverse Africa’s decline, but it was not implemented. Earlier this year African Heads of State endorsed renewed proposals in Addis Ababa, but it’s still unclear how those measures will be implemented. Can you elaborate on that?*

— Well, it is not actually true that the Lagos Plan of Action was never implemented. It was implemented, but half-heartedly. The African countries in a way had not appreciated how serious the situation was and how rapidly it was deteriorating in 1980... In a way, the ECA was several years ahead of member states in its appreciation of the seriously and rapidly deteriorating

economic conditions in Africa. Unfortunately I must also add that external factors did not help. In 1980, most people, both in and out of Africa, thought that the economic depression which had hit the developed countries was a temporary phenomenon. It was regarded as an aberration which was unclear and economic growth in industrialized countries, particularly in OECD member states, which are the major partners of Africa in terms of markets for African exports, as well as in terms of aid or foreign assistance, was soon expected to resume. As we now know, the economic depression in western Europe was a structural one and the longer it continued the greater the impact has been on the African economy. And then, thirdly, the drought came in with a vengeance; in 1972-73, we had the Sudano-Sahelian drought; and in 1983-84 we had drought affecting virtually all African countries south of the Sahara. So these three factors made things much worse for Africa and that made the full implementation of the Lagos Plan of Action extremely difficult. In fact the challenge which has faced African countries in the past two or three years has not been one of development but one of survival, sheer survival.

► *And what about the prospect of implementing of the new Addis Ababa Plan?*

— Well, they say that out of every evil comes good. I think that because this crisis has been widespread, it has affected virtually all African countries, and there is a new awareness that something must be done, and that awareness also includes a realization or an appreciation on the part of our governments that they must take the initiative and the leadership in this matter. Hence we believe in ECA that the programme which was adopted by Heads of State and Government in July in Addis Ababa, the five-year programme for rehabilitation and recovery of the African economy, will be more seriously and more faithfully implemented in the years ahead.

### **“Africa is hardest hit because of its dependency syndrome”**

► *If you were to rate internal and external constraints to development, what group would be the biggest hindrance?*

— That's a very difficult question to answer. I don't think it's a question of which is the worse or the most serious in retarding the growth of African development. The real question is that both have adversely affected the development of Africa.

Don't forget that, after all, the African economy is a dependent economy, dependent on the external economy for the export of its primary commodities, dependent on the international community for the importation of major factor inputs, including even sometimes the importation of raw materials; and therefore, every time the international economy is in disarray, particularly the economy of the OECD member states, the African economies are hard hit. In fact, they are the hardest hit because of our dependency syndrome. Of course you may argue then that if they had organized themselves better they should have been less dependent economically than they are today. But the fact of the matter is that the African economy is a dependent economy, and being a dependent economy its survival, its health, its growth depends not only on what happens inter-

nally but also on what happens externally. So both factors have adversely affected the African economy.

► *But wouldn't you agree that there are a lot of measures that could be dealt with internally, before you apply for outside help?*

— Yes, it's not a question of applying for outside help, it's a question of the kind of international economic relations which Africa has, which are in themselves a legacy of colonialism and which unfortunately the African governments had not changed radically after independence. They had continued to assume that that kind of economic relationship would not only survive but would constitute the basis of promoting rapid economic transformation in Africa. Now they realise through bitter experience that it is not going to help Africa. I think the decolonization of the African economy which will be set in motion will lead to the more self-reliant development that the ECA has been arguing for over the years.

### **Self-sufficiency in food, the path to growth**

► *Much is said about the basket-case countries in Africa. But aren't there some countries that aren't doing too badly and that could represent a pole of growth?*

— I wish I could say yes to that. Unfortunately when you look at the

African countries with the experience of the last two years, the answer is really no; because all these countries have dependent economies. In fact the eight countries we identified in 1975 which appeared to be doing well, were doing it because the demand for their exports was very great. Four of these eight countries were OPEC countries, oil-producing countries. In 1975 the price of oil was very high, the demand for petroleum products was very high and they were able to generate a lot of resources. The other four were agriculture-based countries, countries like Ivory Coast, Cameroon and Tunisia. But they too were doing well because of the very brisk demand for the export commodities, so it's part of this dependency syndrome. None of these countries except one or two, had been able to sustain food production. In those years when they had enough foreign exchange to buy imported food, it really didn't matter. But when the crunch came and they could not earn enough foreign exchange resources and therefore they could not import as much food as they needed to, they found themselves in the difficulties in which they are today.

So, we really have to face up to the fact that a self-reliant development process which puts number one emphasis on food self-sufficiency and the ability of Africa to feed its rapidly-growing population is the path to growth and development; and second comes a production process that is more geared towards meeting the needs of the population, than towards meeting the export needs.

► *You have headed the ECA for the last ten years. Don't you think that Africa's current situation is also a failure of your organization?*

— *(laugh)* I really don't think that would be a fair assessment. Because the crises we now face in Africa were foreseen by ECA almost ten years ago. As far back as 1977 at the ECA conference of Ministers in Kinshasa, Zaïre, I warned member states that an economic crisis was looming ahead of Africa. And indeed, the ECA consistently worked towards changing the policies of African governments, reorient-



*“In 1983-84 we had drought affecting virtually all African countries south of the Sahara”*

ing their economic development policies, an action which culminated in the adoption of the Lagos Plan of Action.

But in those days, in those years, the ECA in general, and I particularly, were accused of being alarmist, that we were just causing undue alarm, crying havoc, crying wolf where there was none; the result really was that the necessary sense of urgency which we wanted to create was not created. And the international community did not take us seriously. It was not until the drought-induced emergency situation and the publicity given to it by the media, that the international community realised how serious the African situation had become and the member states themselves, because of the crisis and the emergency, started to roll up their sleeves.

### **“There is no alternative to regional institutions”**

► *One of the achievements ECA is proudest of is to have promoted a number of regional institutions. But since most of them are having difficulties and are unable to promote real development, don't you think that was really a flawed achievement?*

— No, no. Promoting inter-country cooperation in the best of circumstances is a very difficult task. Particularly for Africa, which is newly-independent, where member states are very jealous of their sovereignty, where the problems are many and complex. I think that's really our achievement, that they agreed to establish these institutions at all in the first place. If there had been no economic crisis of the kind that we have been talking about, and that these countries have been facing during the past years, these institutions would have been better developed, and better provided with resources.

But that being said, there is no alternative to having these institutions; after all, don't forget that the large majority of African countries is very small, with populations of less than 10 million on the average, and that the only way they can really achieve their full opportunities, exploit their full opportunities and speed the development process is through cooperation by the establishment of such specialised institutions.

So we are very proud that we have been able to establish that, and we are doing everything possible to strengthen these institutions. Indeed, three years ago, the ECA Conference of Ministers, established an intergovernmental ad hoc committee to evaluate these institutions, and that committee came out with an unanimous report which said that these institutions are very important and vital to African development and integration, and that they should be supported. That was the kind of certificate of health which we felt was justified.

► *The UN is celebrating its 40th anniversary amid calls for reforming the machinery that was built over the years. What sort of change is needed, especially in the ECA?*

— Well, the ECA itself, ten years ago, instituted its own reform, by deciding that it had got to become more operational, to go to the grassroots, to devolve responsibility at the sub-regional level, because of the huge size of the African continent. So, in 1977, the ECA established five mulpocs<sup>(1)</sup>, sub-regional organizations, in all the sub-regions in Africa, one for west Africa, one for eastern and southern Africa, one for northern Africa and east-central and central Africa respectively.

The ECA has now emerged within a period of one decade as the largest single institution in terms of operational activities in Africa after the FAO. But we continue to take all measures to strengthen our operational activities, to ensure our being able to serve member states; not only in terms of ideas, not only in terms of surveys and studies, but also in terms of executing individual projects at the national level.

### **“We are anxious to strengthen our cooperation with the EEC”**

► *In a few months time, a special session of the UN General Assembly will be devoted to the African situation. What concrete measures are likely to emerge from this session?*

— Well, I don't know what will emerge from the session until the session is held, but I do know definitely

(1) Multinational Programming and Operational Centres.

that ECA and the OAU secretariat have already started working on the preparation for the special session; we are determined to ensure that when the session does take place, concrete projects and proposals are before the session. In other words, we do not think that this should merely be one of speeches and speech making and declarations.

We think that the session should be one which will be a further step towards the implementing of the five year programme which our Heads of State and Government adopted in July, and bringing out the investment implications of the programme of action which was adopted; what the African countries hope to contribute towards implementing that programme, and what they expect the international community to contribute in the implementation of this programme.

► *The Lomé regional fund is more and more popular among fund-starved regional groupings. What sort of cooperation do you want to establish with the Commission and the ACP Group?*

— Well, we have very close cooperation with a part of the ACP Group, the African member states. We assisted them in the negotiating process, both of Lomé II and of Lomé III and the fact that I am here in Brussels, with my colleagues, shows how anxious we are to establish and strengthen our cooperation with the Commission and the Community. Because we believe that the Community as the traditional trading partner of Africa has a greater responsibility than any other group of countries towards ensuring the recovery of the African economies.

► *South Africa is currently a suspended member of ECA. How would you assess the situation there?*

— Well, South Africa was suspended in the early '60s by the ECA because of its apartheid policy and we believe that sooner or later, the apartheid system, which is against the Charter of the United Nations will collapse, majority rule will be established in South Africa and then South Africa, ruled by the majority of its population, will be able to regain its seat in the Economic Commission for Africa. ○

Interview by Amadou TRAORÉ

## CTA meeting in Amsterdam

### African ministers and Dutch researchers seek ways to agricultural recovery

Agriculture has become the main concern of the ACP countries, particularly those in Africa, after all too many years as the poor relation of development policies and programmes which saw industrialization as the only way to economic and social progress. As far as principles are concerned, the change in the politicians' outlook is a salutary one for the future. But the fundamental question is how to re-create and develop productive farming in Africa in a geophysical environment that is less favourable than it was 20 years ago and in an international economic situation that is more constricting.

This conclusion and this question were behind the offer the Dutch Government made at the official opening of the Technical Centre for Agricultural and Rural Cooperation (CTA) in Wageningen in February 1985 to invite the African Ministers of Agriculture to the Netherlands to look at the different aspects of achieving Africa's food production potential with Dutch agricultural researchers and technicians.

The conference, run by the CTA, was held in the Amsterdam Royal Tropical Institute, which has been one of the most efficient and specialized tropical agricultural research units in the Netherlands for over 70 years. The meeting, attended by African countries—only eight were represented by a Minister or Secretary of State and the others by their Ambassadors in Brussels—was chaired by Moïse Mensah, the vice-chairman of IFAD, and five Member States of the Community, in addition to the host government, were represented by officials from their ministries of overseas Development. François Van Hoek, a Director from the Directorate-General for Development, represented the Commission.

CTA Director Daniel Assoumou Mba opened the meeting, saying that Africa's agricultural production had



KIT, Amsterdam

*Delegates in Amsterdam. In the foreground (l. to r.) Mr Mangongo-Nzambi, Gabonese Ambassador to Brussels, Daniel Assoumou Mba, Head of the CTA, Mr Braks, Dutch Minister of Agriculture, Mr Mahachi, Zimbabwe's Minister of Agriculture and Land Resources, Issa Ongoïba, Malian Agriculture Minister and François Van Hoek, at the EEC Commission Director*

been in a state of crisis for many years and present trends were such that the situation was likely to be irreversible unless something was done soon. At the same time, he said, grain imports (in some of the ACP countries) had risen considerably and food aid had become an ever-greater need. This was not unavoidable. If the major problem of agriculture, on which the whole economic, social and even political future of these countries depended, was to be solved, he felt, then African agriculture had to be encouraged to produce and to improve living conditions. So the farmer had to be motivated by the real profits farming could bring and by financial facilities whereby he could use modern methods. He also pointed out that the possibility of owning land was also a very important incentive for the African farmer and one that the political leaders had to make available to young people in order to attract them to agriculture — particularly since, at the end of 1985, "there

is nothing really encouraging to suggest that Africa is on the way to the self-sufficiency in food" that has long been heralded for the year 2000, Mensah went on. Quite the contrary, he said, Africa's image today is of a continent where the daily calorie availability per inhabitant has been below the required level for the past 15 years and, as a result, food imports have swallowed up a large part of these countries' export earnings (16% in 1981-83).

That, roughly, was the background for the discussion of five technical documents produced by researchers from the Royal Tropical Institute of Amsterdam and the Agricultural University of Wageningen. Each document contained a thesis and an antithesis, i.e. it described the present situation in Africa and the potential solutions in relation to the policies—failures, as the Heads of State of the OAU admitted at Addis Ababa in July '85—used so far.

The first paper, on food aid and development policy, was presented by Kees Tuinenburg of the Royal Tropical Institute. It analysed ongoing food aid — which, it said, had increased considerably over the years, had become vital and was constantly requested by the recipient countries. But at the same time food aid was a brake on agricultural development and, as such, was denounced by certain international bodies and paradoxically, by the recipient countries to a certain extent as well. As Omar Giama (Somalia) said; “Food aid must not be designed as an instrument of development (this was Mr Tuinenburg’s expression), as it can ruin a country’s agriculture by discouraging its farmers in the long run, and wreak lasting changes in the people’s eating habits”. The Somalian Ambassador went on to say that food aid had to be confined to emergency cases so as to force the governments and the industrialized countries to adopt and finance the measures needed to get the recipient countries to produce food.

There may of course be a development interest in the food aid policy if the counterpart funds, i.e. the money accruing from the sale of the products, are injected into the agricultural sector — which is far from usually being the case, delegates said.

Nevertheless, food aid is still vital to many countries. G.K. Chinkuli, Zambia’s Agriculture Minister, felt. He also thought that, if food aid was to become a factor of development, then it had to be a support to proper food production schemes in the field rather than a whiff of oxygen that left the people back where they started, with no future. But, the Ambassador added, if food aid really is to be an instrument of development, the donor countries also have to contribute, in particular by breaking the link between aid and the type of agricultural development model, by stressing the quality of the technical staff sent out to the recipient countries (there had been many cases of experts who were inexperienced and often not keen really to fit into the environment of their missions) and by trying to make a drastic reduction in the time between the taking of and the actual implementing of a decision to finance a project.

François Van Hoek, the EEC Commission Director responsible for food aid, took up a number of criticisms, particularly those addressed directly to the Commission. Food aid, he said, was a means of handling certain countries’ structural deficits which could not be covered without it. Food aid represented only 10% of these countries’ food imports and could not therefore validly be considered as a brake on local agriculture because, as we know, it was often thanks to the leaders’ own import policies that products costing far less than local goods could be imported very cheaply. And the same went for the change in African eating habits which he felt had happened a long time ago.

This criticism should in fact have been levelled by the Europeans at the African countries which had never tried to alter the situation they had inherited on independence. As Mr Van Hoek pointed out, there are countries which refuse products from their neighbours and prefer to import, say, flour from Europe or the USA instead of spare parts to improve their production apparatus.

The talks revealed that the success or failure of a country’s agriculture depended on the policy that country applied and that good projects could not prosper with a bad agricultural policy. The same goes for food aid. What is needed is a basic reform of the policies which have neglected the rural areas (and peasant productivity in particular) in the past and led in turn to the present African food shortfall.

Incentive policies, particularly as regards prices and marketing, were covered in the second paper, as agricultural policy covers not just production but marketing as well. Jan de Graaf’s study brought out the major effect which incentives have on production through prices and the machinery of the market. The nationalization of agriculture and the standardization of basic prices were seen as real barriers to progress in agriculture in Africa — in many countries, Mali for example, the peasants have dropped export crops which are less attractive now that prices on the national and international markets are too low. They have gone into subsistence farming instead of commercial food crops because there is no market and prices are no incentive. Hence, in addition to

unfavourable climatic conditions, a simple abandonment of agriculture by the peasants in many countries of Africa.

But even where the market machinery works, agriculture is declining due to increasingly high costs in a system where the farmers have no facilities for financing equipment or input and where speculation flourishes, conducted by middlemen who capitalize on the absence of storage and transport infrastructure and negotiate prices that discourage the producers in the long run.

This is why the scientists at the meeting insisted on the Government’s political responsibility when it came to building infrastructure and making the farmers proper economic operators by giving them the same bank credit facilities as are offered to speculators in real estate and business. There are agricultural financial bodies all over Africa, of course, but their scope is restricted and they are not very democratic. Lastly, in no African country do the farmers really belong to the privileged classes (civil servants, the armed forces and the professions). Nor are they a coherent force that can affect the political and economic decisions that concern them. Delegates stressed the fact that farmers would have every interest in forming cooperatives that would make for better management of their activity.

The researchers, ministers and other delegates at the Amsterdam meeting concluded by agreeing on one essential point — that if production is to be boosted, then the conditions for proper competition between public and private sectors and for maximum assurance that the farmer can earn enough to raise his standard of living in line with that of other professions must be created.

But the big question is still to decide whether agriculture, which has always been proclaimed a priority area, really does get the financial, psychological and technical support it needs to become the much desired basis for economic and social development.

The scientific means of agriculture were the subject of the third paper. The idea here, basically, was to decide whether the agricultural research run in the industrialized world in different geoclimatic conditions could be trans-



ferred to the developing countries or whether agricultural research should be adapted to local needs.

Louk Box, of the University of Wageningen, who presented this paper, referred to his experience in Africa, saying that there was a huge gap between scientific theory and getting it put into practice by African peasants who had their own time-honoured methods. For the researchers, this gap, a glass wall, as he called it, could be translated into lack of tie-up between their scientific definition of the problems and the priorities as the farmers

get direct experience of the environment in which they would be operating. "There is no tie-up between the people who do the research and the people who use it", the Malian Minister Issa Ongoiba said.

Delegates also noted the inadequacy of the way the results of agricultural research were communicated to the users, the farmers.

The last two items up for discussion were: "A rapid increase in production and sustained development", and: "The controversy between self-sufficiency and marketing".

marketing of African products? The question was raised because of the widely accepted view that export crops are developed to the detriment of food crops. Mr K.S. Thio (Wageningen) thought this was wrong, as, in principle, export crops lead to an increase in food production in that the export earnings derived from them should push up consumer demand so that it can only be satisfied by producing more food. This is where the logic breaks down, Mr Thio said, for "Africa does not consume what it produces and does not produce what it consumes" and there is a constant decline in the yield per hectare of most of the continent's crops. Nigeria, for example, currently exports palm oil but is in danger of becoming a net importer of it in the very near future.

Delegates thought that there was no such thing as a clash between self-sufficiency in food and the marketing of products, although both these sides of African agriculture needed improving.

The Amsterdam conference was the first of its kind and a success for the CTA. It enabled African decision-makers to compare their thinking with the thinking of scientists — who so often come up against political barriers when putting their ideas into practice.

Mrs Schoo, the Dutch Cooperation Minister, wound up the meeting by hoping that the "European Governments and other organizations can take action now for the future of Africa". She added that concerted action was now essential as far as that continent was concerned and it should be possible to discuss it at a special UN conference in April 1986. She also echoed what Mr Braks, the Agriculture Minister, had said at the opening of the conference, stressing the all-important part played by a sound pricing and marketing policy in boosting food production.

But the political responsibility of the African countries themselves was mentioned as being extremely important if tangible results were to be achieved in agricultural production in the places concerned. Africa got off to a bad start 25 years ago and it is not yet back on its starting block ready to start the development race again. ○

Lucien PAGNI



KIT, Amsterdam

*Mr Braks with Moïse Mensah, IFAD Vice-President, who chaired the meeting*

themselves saw them. In other words, what was needed was a different approach to the priorities of training and research for Africa and one which was based on another evaluation of the relationship between the knowledge of the scientists and the know-how of the local farmers, Mr Box said.

The delegates were quick to agree on this question of adapting research to the conditions of use. African technicians who had received all their training in Europe stressed that their theoretical knowledge was out of step with practical requirements in the field and Mr D.K. Yoman, who represents Ivory Coast at the FAO, said the African countries ought to be training their agronomists in Africa so they could

Rapid growth of production does not seem to generate sustained agricultural development in Africa because of the absence of any balanced combination of scientific and technological innovation with crops and sustained utilization of land. This could be attenuated, Mr F. Van der Pol (Royal Tropical Institute) said, by keeping tabs on things as well as money — that is to say that knowing what happens to things in an agricultural system is every bit as important as finance when it comes to evaluating agricultural innovations, particularly when the durability of a system is the consideration.

Lastly, is there or can we speak of a clash between self-sufficiency and the

## AFTER THE DUBLIN EMERGENCY PLAN...:

# A rehabilitation and revival plan for the countries hit by drought



*Lorenzo Natali: Forging a link between "the emergency plan and a structural scheme".*

Now that most places have had their rains and the critical stage in most countries hit by famine seems to be past, there is a huge risk of public opinion in the rich countries turning to other events, of momentum being lost, of much-appreciated solidarity declining, of songs and concerts being forgotten and of the benefit of all these operations to help the afflicted being ultimately only ephemeral.

Some countries still have serious problems, Vice-President Natali pointed out at a press conference on 31 October. The response must be immediate if lives are to be saved, particularly in Ethiopia, where the situation still gives cause for concern and there is an estimated shortfall of between 800 000 and 1 million tonnes of grain.

There are pockets of difficulty in one or two other countries, too, because of inadequate rainfall and a shortage of seed and farm tools. The priority task of everyone, without exception, is to get those agricultural economies that have been completely destroyed off the ground again without delay and to guard against the effects of further disasters.

The fact that much of the Sahel is green again should mask nothing. The

*Continuity in the Community drive to help the African countries fight drought, and a proper tie-up between the first EEC response to famine (the Dublin Plan — ECU 430 million or 1.25 million t cereal equivalent)\* and implementation of Lomé III. This is what is behind the Community's rehabilitation plan for Africa which Development Commissioner Lorenzo Natali has just launched.*

drama of drought and desertification and famine is still there and anyone who is content with what has been accomplished so far will do much to destroy the effects.

Lorenzo Natali is convinced of this and, bolstered by experience gained from implementation of the Dublin plan, almost 100% of which has been carried out, he put an agricultural rehabilitation and revival plan for those African countries worst hit by drought before the Community Development Ministers on 4 November. Thoroughgoing discussions followed and he got the Council's agreement on the proposed guidelines which, Mr Natali explained, are to forge a link between the emergency plan and a structural scheme.

The general idea of the plan is to make an immediate contribution to running selected schemes to improve the countries' ability to cope with similar disasters in the future and get agricultural production off the ground again—without waiting for the practical implementation of the new Convention.

When asked about the criteria for distributing aid to beneficiaries, Commissioner Natali said "We shall act pragmatically; help will be given where help is needed, and more partic-

ularly in the eight countries most affected by drought."

### Coping for themselves

The main problems which the African countries come up against when coping with the effects of a drought are well known. Crises are slow to be detected, there are organizational difficulties, external aid is slow to arrive and, most important, domestic transport facilities are inadequate. So the plan insists on certain schemes which have to be run concurrently and as a matter of urgency.

So, when disaster occurs, each country should rapidly mobilize all its resources by setting up a central unit to implement a pre-established emergency plan that has been coordinated at regional level. Community aid will therefore involve supplying the means (advice and technical assistance) of producing such plans and perhaps also financing facilities to ensure that these units function properly.

Until more sophisticated detection infrastructure—remote sensing, for example—has been installed, agro-meteorological surveillance, the transmission to a central unit of data on harvests gathered in the field, on food prices, on population movement and so on will be an important means of early detection of famine situations. The projected Community aid will help get such systems set up quickly and perhaps also improve existing ones and extend them to all zones under threat by means of technical assistance and logistical and operational support.

The plan also includes reconstituting buffer stocks of food and seed to meet the first emergencies (they will come, as a matter of priority, from any surpluses in the countries in the region—triangular schemes), supplying flexible storage facilities (plastic sheeting, for example) and organizing the keeping of these stocks.

(\*) See Courier no. 94, Nov-Dec 1985, News Round-up.

Lastly, the bottlenecks in the aid channelling system revealed during distribution of food aid in 1984-85 should be eliminated as far as possible. This is a priority. It means tackling the problems of unloading, storage and removal from certain ports, of rail and road infrastructure serving the landlocked areas—the new plan could, for example, help build temporary bridges etc—and of transport facilities, particularly maintenance and repairs and stocks of spare parts.

### Reviving agricultural production

Although rain is important, it cannot solve all the problems on its own. And neither can the good will of the peasants. They have to have the essentials, the basic inputs for 1986-87 that is to say, and in many cases they have not got them. And in turn the national budgets in their countries have been too undermined by the fight to save lives to ensure that their agriculture takes off again without outside help. The idea of the Community plan is to provide support to guarantee that essential inputs such as seed, fertilizer and plant-health products can be imported. At the same time it should reinforce the agricultural credit systems in the short and medium term, so the peasants can buy inputs or reconstitute their dairy herds.

In many cases, accompanying measures will be vital when displaced peasants are settled back in their original surroundings. They will need to be guaranteed water; green areas—gardens, say—must be created, epidemics must be contained and food supplements must go to the most vulnerable. The plan is associated with these operations in the various areas (for which NGO initiative and cooperation will certainly be extremely useful).

### Financing the plan...

This is in two parts. There is a Community contribution (already assured) of ECU 100 million from various 4th and 5th EDF reserves over and above the funds earmarked for indicative programmes and regional cooperation. It is entirely in the form of grants.

Then it is being suggested that the Member States of the Community also make a bilateral contribution that is at

least equal to the Community aid for operations to be coordinated with the Commission scheme. They have yet to say where they stand on this.

Lastly, other non-European funders who attended the Bonn Summit might also make contributions.

### ... and organizing it

The urgency of the schemes that need running will certainly mean that procedures are flexible. But a general determination to act in a rapid and coordinated manner will be at least as important when it comes to the success of the operation.

The Commission proposes to start by joining with the ACP countries concerned to decide which actual schemes to run, the particular aim being a humanitarian one, and to group them into a general programme. With this as a basis, coordination between the Commission and the Member States should then make it possible to say which financing each will be responsible for. Specific financing decisions could then be taken rapidly. That is the plan and it should mean that practical implementation can start very early, at the beginning of 1986.

In order to make this possible, the Commission set up, on 4 November, a task force to organize the Commission side of the work, ensure coordination with the recipient countries and the Member States and establish contact with other donors. A working party headed by the Commission Delegation will be activating the identification and subsequent implementation of the specific schemes in each of the recipients.

The procedures will not necessarily be any different from the conventional ones, but they will be simpler and faster. This is the direction indicated by the Commission's proposed adaptations—which seem vital if the rehabilitation and recovery plan is really to be designed and executed in the prescribed time.

### The medium and the long term

Obviously this is an urgent plan. But the various schemes must be part of a medium- and long-term rehabilitation and revival drive and thus fit



*The goodwill of the peasants will not, in itself, be enough to solve the problems*

into the policies of the recipient countries if they are to be really beneficial.

Lomé III programming is now under way and secure food supplies are one of the prime objectives.

The Commission has also agreed to assess the food strategies it triggered in four ACP countries. It plans to report on them in early 1986 so that conclusions may be drawn for continuation of the strategies in the countries concerned and extrapolation in others.

Lastly, the Commission is working on a global approach to environmental protection, and particularly the anti-desertification campaign (this is new to Lomé III), which will initially stress reforestation schemes.

The plan which Lorenzo Natali has launched follows on directly from the guidelines which EEC Heads of State and Government laid down in Milan last June when they aimed to take both the short- and the long-term into account in their coordinated efforts and called on the Member States to put priority in their national programmes on helping the African countries to achieve secure food supplies. This is certainly a good opportunity to put top level political will into practice. ○

Fernand THURMES

## COMIDES II IN DAKAR

### Firm commitment to fight desertification

The second ministerial conference on the fight against desertification was held in Dakar (Senegal) from 1-9 November 1985. The 22 countries from in and around the Sahel which attended the first meeting in January 1984 were joined this time by five more — Congo, CAR, Cameroon, Egypt and Libya.

Three Community countries, many international organizations, NGOs and donors also attended.

The Commission was represented by Lorenzo Natali, Vice-President in charge of Development.

The aim of this second meeting was, as President Abdou Diouf said in his opening speech, to seek and decide on a programme of practical action in the light of the scientific and technical data that were currently available to fight the drought in Sahelian Africa that is gradually working its way further down the continent. "The now-permanent challenges must be picked up and all known corrective methods and measures must be put into practice to save the natural environment in which men, women and children can continue to live and thrive", he added.

The Senegalese Minister for the Protection of Nature made a speech reminding delegates of the absolute necessity of combatting desertification. It was a priority which involved the Member States of the Community and the ACP Group jointly, he said, and one which was put into practice through the provisions of Chapter 2 of Lomé III.

The Minister said that the same went for the CILSS, the Club du Sahel and all those regional organizations that were trying to halt the advancing desert.

Lorenzo Natali said we should not be deflected from what is and must remain our aim — to act to prevent further tragedies such as those the Sahel has already seen twice over the past decade.

"The vital political will to act is there", he added, going on to explain the main lines of what the Community intended to do together with the countries interested in the fight against desertification. The EEC would be concentrating on:

- economical management of available surface and underground water resources;
- a better balance between cattle, water and pastureland;
- better land management (through agricultural and livestock intensification schemes wherever possible). All forms of erosion will also have to be fought and arable land divided so that crops, pastureland and forests are balanced harmoniously.

In its guidelines, he said, "the Community proposes to put top priority on trees, above all because trees are and will for some time to come be a prime source of energy, a source of food for men and animals and a simple, cheap, natural phenomenon that people in rural areas can use in many ways".

"I do not believe catastrophe to be inevitable" Mr Natali said. The situation of the stricken peoples could be

improved, he pointed out, although the results of aid from the international community and the EEC were still fragile and a series of long-term schemes had to be run. Meanwhile, he said, "This month (November 1985), the Community has launched a plan for immediate rehabilitation of the countries with the worst drought, with a view to helping the economic recovery of the rural world once the rains return".

So we have to act, Lorenzo Natali pointed out, although the prime responsibility lies on African shoulders, as "the answer to desertification will come, above all, from a myriad of small schemes that individuals and basic communities can cope with". The Commissioner did point out, however, that, as far as COMIDES I was concerned, "The problem of making the local populations aware of the problem was not given the prominence it warranted and one matter of vital importance, the consultation and involvement of the local communities in the anti-desertification campaign, was not mentioned at all. I hope this conference will deal with these topics and further our thinking about them".

The conference worked on expert documents and the results of COMIDES I and was thus able to discuss the ways of fighting drought and the priority areas for the campaign in depth. Eight topics were listed as priorities — plant stock and forest seed-



*Cheikh Cissokho, the Senegalese Minister for the Protection of Nature, at COMIDES II*



lings, soil fertilization and biotechnology, soil and salination, additional staff training, meteorology and climate, desertification monitoring, water resources management and the economy of ligneous products.

All these were discussed with a view to finding solutions.

Twenty nine major projects were chosen in these various areas — the creation and strengthening of national forest seed production centres, integrated rural development and anti-erosion campaigns in the main catchment basins (Fouta Djallon and Mount Nimba in Guinea, which are veritable water towers as far as western Africa is concerned) for example.

Delegates did mention the fact that there were still one or two political difficulties over CILSS's position as the caretaker body between conferences.

A series of resolutions were adopted at the end of the meeting, expressing participants' "satisfaction at the interest some countries and cooperation agencies had already made clear, as well as their willingness to help finance the chosen schemes... (and confirming their) desire to see the sub-regional institutions play a proper part in implementing major projects".

There is a data sheet summarizing each project, so the country or region concerned can draw up the technical



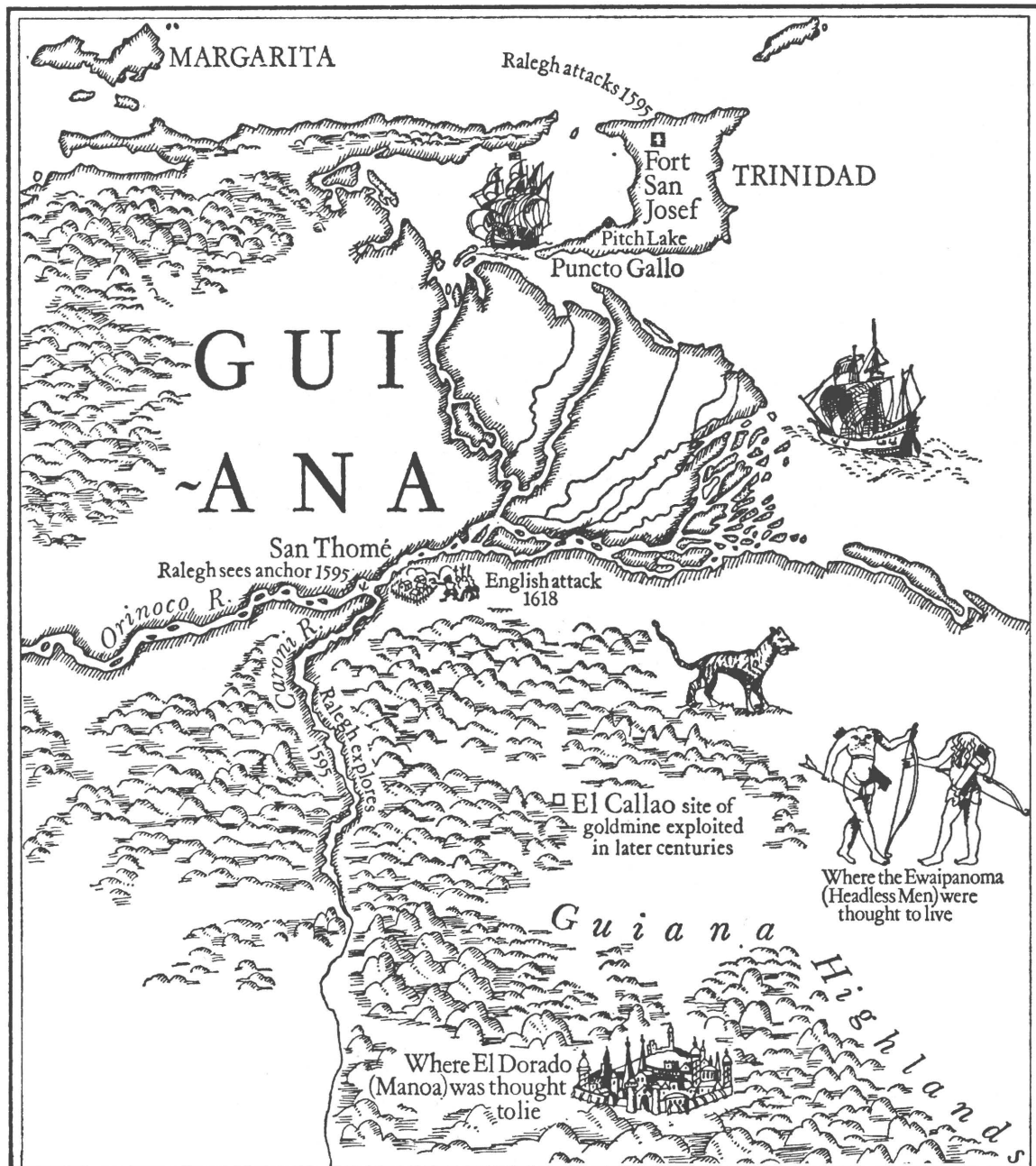
*The effects of a prolonged drought are devastating, both on nature and on man (above Senegal, below Mali)*

and financial specifications. The fact that no priorities have been listed for either topics or projects means that each country or sub-region can decide on its own.

In the matter of following up what had been done at Dakar, the Ministers and Heads of Delegation once more stated the need for regular ministerial conferences for a concerted anti-desertification/protection of nature campaign (COMIDES) to be called every two years in a different country each time.

The President was made responsible for: 1) making the necessary contacts with the countries, the financing bodies and the sub-regional and other organizations with a view to obtaining the financial, human and material resources that were vital to his two-year mission; 2) to strengthen and reorganize existing regional and sub-regional bodies working to beat desertification so they could do a better job of meeting COMIDES' objectives, and 3) to carry out a study on what instruments would be useful to the smooth functioning of COMIDES and on what structures were needed to follow up and implement the recommendations of the conference. ○ L.P.

# COUNTRY REPORTS



## GUYANA: Off course for El Dorado?

To understand a country, one must understand its past. Guyana is no exception to that principle, it is, indeed, its very embodiment.

Situated on the north-east coast of the South American continent, and being its only English-speaking territory, Guyana is associated culturally and economically with the islands of the Caribbean. For over three centuries the country was dominated by imperial powers. The first to brave the muddy shores and the mangrove swamps were the Dutch who, in the late 16th and early 17th centuries, sailed up the rivers to ground that was above tidal level and established flourishing trade settlements, supplying Europe with cotton, coffee and sugar. The Dutch

were followed by the French, and the French by the British. In 1814 the French ceded their lands to Britain, and in 1831 the colonies of Essequibo, Demerara and Berbice were merged into a single colony under the name of British Guiana. The original inhabitants, Amerindians, disliked working for the settlers and preferred life in the rain forest or savanna of the interior. With the introduction of sugar cane the need arose for labour to be imported in the form of slaves from Africa. When, in turn, that source ceased to exist following the abolition of slavery in the British Empire in 1833, indentured labour was recruited from Portugal, India, China and elsewhere.

As well as providing an explanation for its mix of races (Guyana is not only called the "land of many waters" but also the "land of six peoples"), the country's history has had a causal effect on present-day economic and political life. A past dominated by flagrant exploitation of labour by capital has led to a present dominated, both before and after independence in 1966, by socialism in one form or another. The People's Progressive Party (PPP), which has been in opposition since independence, is Marxist-Leninist in orientation. The ruling party, the People's National Congress (PNC) is firmly committed to socialism at home and to non-alignment abroad. Opting for the widespread use of cooperatives as the means to achieve the economic and social transformation from what had been a resoundingly capitalist state into a socialist state, the PNC, under its Founder Leader, Comrade Linden Forbes Sampson Burnham, (who dominated Guyanese politics for nearly twenty years, until his sudden death in August 1985) declared Guyana a Cooperative Republic on 23 February 1970.

Guyana's PNC government, re-elected in December 1985, has formidable problems to face. The country has a heavy external debt and is in arrears on almost all repayments. Profits in all three major productive sectors—sugar, bauxite and rice—are down. Foreign exchange is scarce, and becoming scarcer. There is an import ban on all non-essential consumer items and a virtual ban on all imports not directly concerned with development. The crime rate is high and capital punishment, abolished for years, has recently been reintroduced. There is no wheat flour to make bread, and sugar, milk, salt and cooking oil are in very short supply. Many Guyanese—and often the better educated or most skilled—are emigrating, legally or otherwise, to the United States or elsewhere. Water and electricity systems are at breaking point and health care has deteriorated badly. Government has, and will continue, to address itself assiduously to all these areas, but the scale of the crisis is such that it will take the greatest determination and ingenuity for it to be overcome.

Nevertheless, Guyana is not a land poor in either human or natural re-



*The monument at the Square of the Revolution in Georgetown dedicated to "The Heroes of the 1763 Revolution Against Forced Labour and the Plantation System in Guyana"*

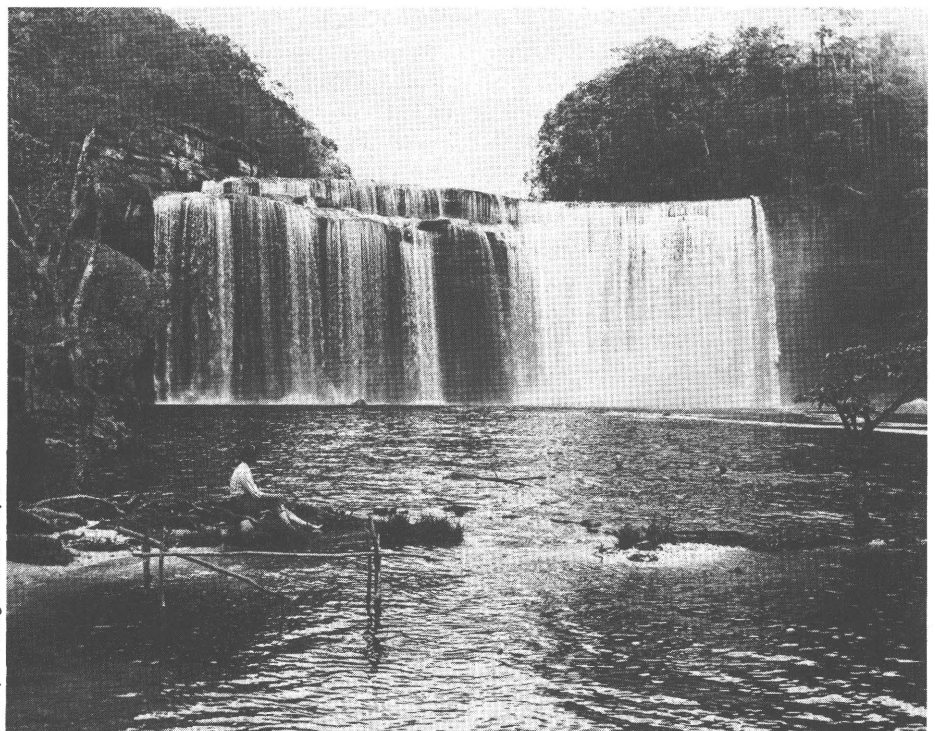
sources. There are countrymen of extraordinary talent both inside and outside the country, of whom the best known of the latter is perhaps the present Commonwealth Secretary-General, Sir Shridath ("Sonny") Ramphal. And while it is true that another knight, the 16th century explorer, Sir

Walter Raleigh, crossing the Atlantic in the other direction, failed to find El Dorado, the city of gold, in Guyana, the gold is nevertheless there. So too are diamonds and bauxite, timber and sugar, hydro potential and rice. But, in common with many developing countries, the root of the country's economic and, by extension, social troubles, lies in the vulnerability of its economic base.

The decade following independence was a time of nation-building. Political independence had been won and Guyana moved fast to establish herself as a leading member of the non-aligned movement. Economic independence proved more elusive, however.

Two of the three major industries—sugar and bauxite—were nationalized in the early and mid-1970s. The public sector was gradually extended into other areas previously regarded as private sector (and generally foreign-owned) preserves, to the extent that in present-day Guyana the public sector is the major employer and controls over 90% of official import and export business.

Fortunately the sectors performed comparatively well in the early years of independence. Sugar prices, in particular, were high and allowed GDP to grow slowly but steadily. Since the



*The Orinduk Falls: a site of beauty and serenity on one of Guyana's great rivers*

mid-1970s, however, with only a slight remission in the past two years, both the sugar and the bauxite industries have been in serious difficulties, whether through price levels, management crises, decline in production, loss of markets or, most of all, lack of foreign exchange. The sugar industry, almost entirely foreign-owned until 1976 (principally by Booker-McConnell), is now wholly owned by the state

Davis explained, has been the recent unpredictability of the weather. Guyana, which used to have two marked dry seasons and two marked wet seasons, has, for the last four years, had unexpected rains late in the year which have badly affected the second of their two annual crops.

The sugar problem, however, and the one on which opinions range from resigned acceptance of a fact of life to

secure source of foreign exchange), there is a widespread feeling that it could have been more advantageous, and disappointment that the Community has not chosen to make it so.

On the home market the outlook has improved slightly over the past year. Until recently local sugar prices were heavily subsidized by the Government and the recent raising of price levels (which, it must be said, still only



**Mr Harold Davis**  
Chairman of GUYSUCO

holding company GUYSUCO (Guyana Sugar Corporation).

### Sugar turns sour

Flourishing in the 19th century, when Demerara sugar and rum became household words, sugar is still Guyana's most important export crop and provides employment in one form or another for some 26 000 Guyanese. Nevertheless the industry today has its problems — problems that were summed up by Harold Davis, the present chairman of GUYSUCO in one word: "money". Sugar, in Guyana, has turned a little sour.

Funds are not available in sufficient quantities for capital investment in the industry. Equipment, both in the field and in the factories, is ageing, and the 15% of return on overseas sales which the industry is allowed to retain in a foreign account in the U.K. is clearly not enough to carry out essential rehabilitation. Another major problem, Mr



*Sugar cane being taken to a mill by canal. One word sums up sugar's problems: "money"*

deep resentment at the unfair operation of the world economy as a whole, or of the Sugar Protocol in particular, is that of price. World sugar prices have fallen considerably since what now appear as the halcyon days of the early 1970s and there is bitterness in Guyana, as in other sugar-producing ACP countries, at what is regarded as the European Community's failure to respect the spirit of the Sugar Protocol. Under the Protocol, signed in 1975, the Community undertook to import, and the ACP countries to supply, agreed quotas of sugar at guaranteed prices. Despite the fact that, almost since the signing of the Protocol, the agreed prices proved to be above world market prices, there is resentment that the price level, in theory negotiable annually between the parties, has in practice always been as good as dictated by the Community. While the Protocol is clearly valued (and, indeed, guaranteed sugar sales constitute Guyana's only absolutely

correspond to the cost of production) has somewhat eased the industry's financial position.

### Diversification: the recipe for recovery?

In addition, GUYSUCO is putting into practice within its own domain government policy for the economy as a whole: it is diversifying its productive base. Curious as it may sound, and within the limits imposed by the soil types which exist along the coastal strip on which virtually all agricultural activity takes place, GUYSUCO is going into aquaculture and into the production of rice, peanuts, onions and cassava. It is also looking at the possibilities of the use of bagasse in energy production, in response to a government call for all possible sources of alternative energy to be explored.

Given this programme of diversification, and given the current levels of production, Mr Davis believes that



the industry could be moved from its present loss position to a break-even position. If world prices should rise (and Guyana has never "defaulted", as the Chairman put it, on her Protocol quota, and could sell surplus on the world market) then sugar could be "back in the boom". There will be no bonanza, though. Sugar bonanzas, he was certain, were a thing of the past.

## Bauxite: cautious optimism

The history and the problems of the bauxite industry have been somewhat different. Sugar had no serious rival as the premier sector of the economy until the mid-20th century. Rice production, originally begun by Indian settlers or by runaway slaves in the 19th century, assumed real importance in the early 20th century and was given greater impetus by the recent ban on wheat flour imports as part of the drive for self-sufficiency in foodstuffs. Bauxite, on the other hand, developed into a major contributor to domestic output and generator of foreign exchange with the increased demand for industrial raw materials experienced in the 1940s and '50s. Though the industry has had its problems, too, particularly at management level, there is cautious optimism about its future.

Mining began in the area around the town now known as Linden (named after the former President), on the De-

merara river, and which had originally been called Mackenzie after the Canadian geologist who had first discovered the reserves in 1917. The Canadian company, ALCAN (Aluminium Company of Canada), together with Reynolds Metals Company of the United States, dominated the industry until independence. ALCAN, operating in Linden, established an alumina plant in the 1960s. Reynolds, operating at Everton and Kwakwani on the Berbice river, concentrated exclusively on the mining and processing of bauxite ore. By 1975 the industry had passed into public ownership and all production is now undertaken by the state-owned Guyana Mining Enterprise Limited (Guymine). In 1976 a holding company was established, known as BIDCO (the Bauxite Industry Development Company), with responsibility for the development and diversification of the Guyanese bauxite industry as a whole.

Guymine now operates mines and plants at four locations: Linden, Kwakwani, Ituni and Everton. Linden is overwhelmingly a non-metal bauxite operation. The main product, refractory grade bauxite, is used principally as a heat-resistant material, in steel furnaces or in glass production, for example. Also produced at Linden is a smaller quantity of bauxite for industrial abrasives, the two products together being referred to as calcine



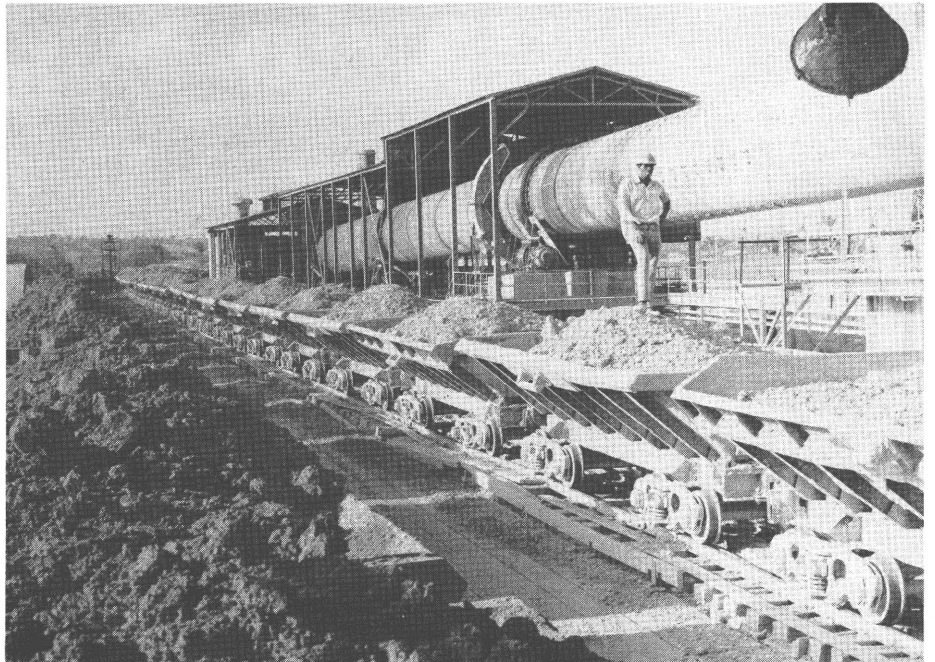
**Mr Bernard Crawford**  
*Chairman of BIDCO*

products due to the enormously high temperatures involved in their processing. The Berbice operation, on the other hand, produces proportionately larger amounts of metal grade bauxite of the type used in the production of aluminium, although the scale of the operation as a whole is very much smaller.

The relatively low proportion of metal grade bauxite has proved, in the event, to be something of a salvation for the industry in Guyana, insulating it to some extent from the current depression in the aluminium industry worldwide. There have, however, been plenty of other problems. Increased competition, particularly from China, together with unreliability of supply, have led to a loss of markets. Plant and equipment have not been able to



BIDCO



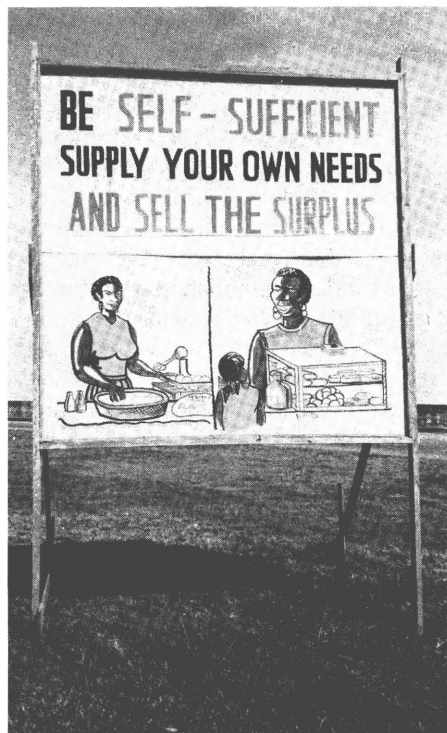
*Left, the bauxite plant at Linden. Right, laden ore bars on the way to the plant. There is cautious optimism about the industry's future*

be maintained to standard, for lack of funds generally and of foreign exchange in particular. Overstaffing has undermined the efficiency ethic of the whole organization and costly redundancies have proved necessary. At the same time—and the phenomenon is by no means peculiar to the bauxite industry—some of the brains left the industry when it was in decline, and few have returned. Ironically, perhaps, Reynolds, the U.S. giant which was bought out in 1975, has recently been brought back to provide expertise in management and marketing.

### Rehabilitation: a priority in all sectors

This initiative forms one of the bases on which Bernard Crawford, BIDCO's Chairman, is pursuing rehabilitation of the industry. Demand for bauxite ore has increased quite substantially in the past year or two, and this is bringing its own headaches.

In 1983 some 300 000 tons of ore were produced. In 1984, the figure was nearer 500 000. Guaranteed supplies are essential for the users of refractory material, particularly since, unlike the users of metal grade bauxite, they tend, with a few notable exceptions, to be smallish enterprises, often not in a position to keep large stocks as buffers against times of short supply, Guya-

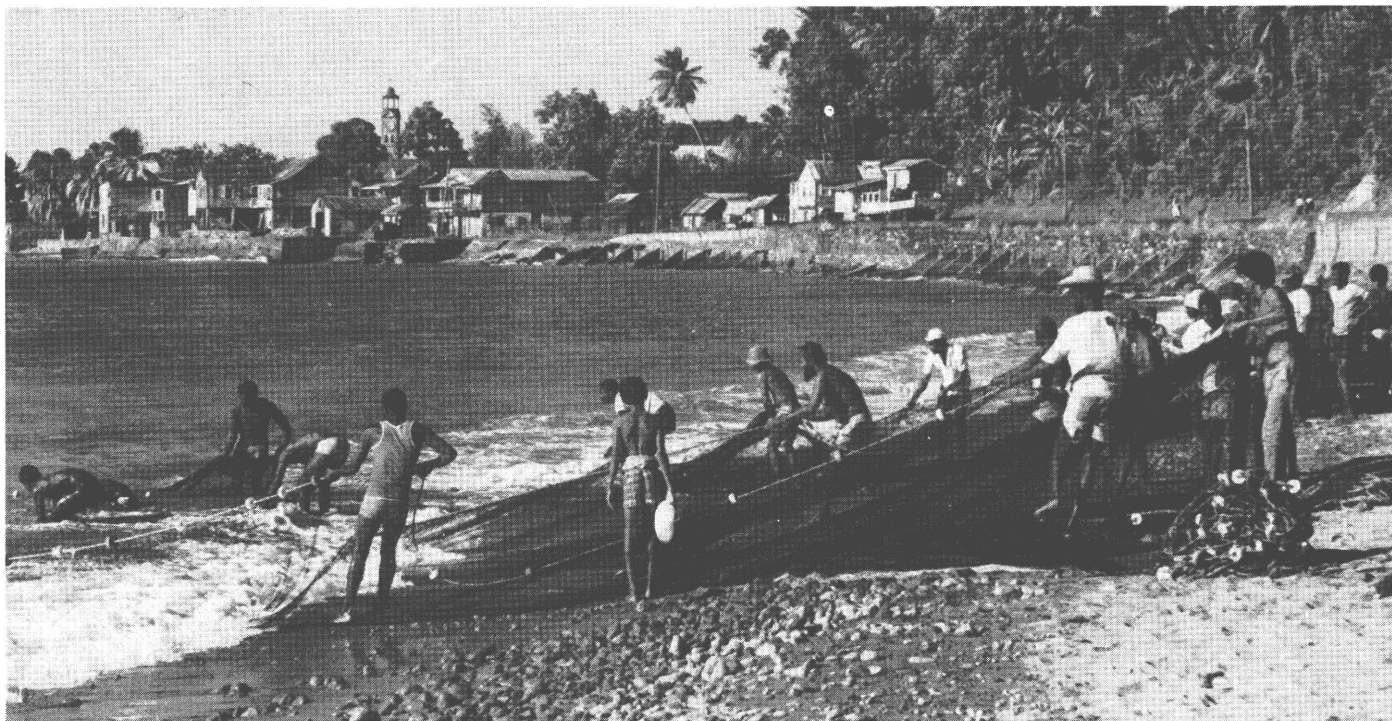


na's production needs to be increased, therefore, if potential new markets are to be captured. "We have had not so much to look at the question of some notional figure of market demand", Mr Crawford admitted, "but to devote all our energy to trying to keep up with the actual market". At the same time, a blueprint is being worked out for the full rehabilitation of the industry and assistance in the form of soft

loans from the European Investment Bank has been approved. The sector is also eligible for assistance of up to ECU 35 million under the Sysmin facility of the Lomé Convention and an advance of ECU 3 m has already been approved. In addition, discussions are being held with the World Bank for further soft loans.

### Rice leads the drive for self-sufficiency

Production of rice, the third major sector, was badly down in 1985 and had been declining gradually since the peak year, 1977, when a record 212 000 long tons were harvested from an area of about 350 000 acres. By 1981 production was averaging only 165 000 tons or so and only 250 000 acres were given over to cultivation. The decline is doubly disturbing for the government and for the country as a whole. Not only is rice an important export crop, and seen by the government as having greater potential for export growth, in fact, than either of the two other major export commodities, it is also playing a leading role in Guyana's increasingly frequent barter trade. Rice has been exchanged recently, for example, for spare parts and manufactured goods from East Germany and, most importantly, for oil from Trinidad.

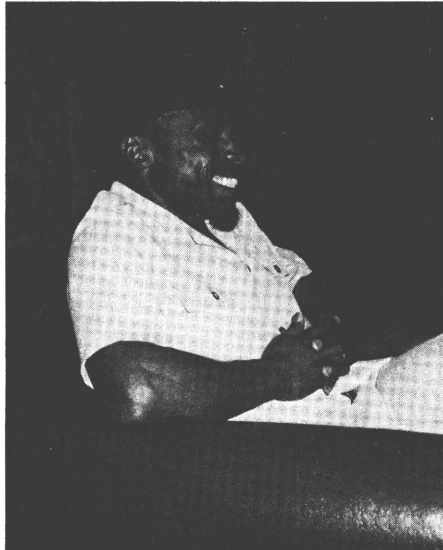


*Fishing has a key role to play in the quest for self-sufficiency in food and for higher nutritional standards*

As regards trade with Europe, Guyana will certainly be seeking to take advantage of the new provisions for exporting rice to the Community contained in Lomé III.

If producing more is proving problematic (pricing policies have been one of the many difficulties), so, too, is getting the nation to consume more. Or, more properly, getting the nation to consume less of what is not, officially, available. At present the ban on imports of wheat flour and the consequent inability to make bread or *roti* are causes of discontent. Rice flour is not generally regarded as an acceptable substitute for cooking purposes, and local preference for all wheat flour-based foods, as for other officially unavailable foodstuffs, is proving difficult to overcome.

Nevertheless, rice production is a key component of the Government's campaign for independence in foodstuffs, evidence of which is to be seen in the many hoardings posted in the country's townships bearing slogans such as "Plant a seed and reduce a need" and "Supply your own needs and sell the surplus". This is also the reasoning behind the ban on imported processed fish. Guyana has considerable fisheries resources as a whole, and has in the past excelled in shrimp fishing in particular. Promoting the sector is important to the government not



The Courier

**Carl Greenidge**  
*Minister of Finance*

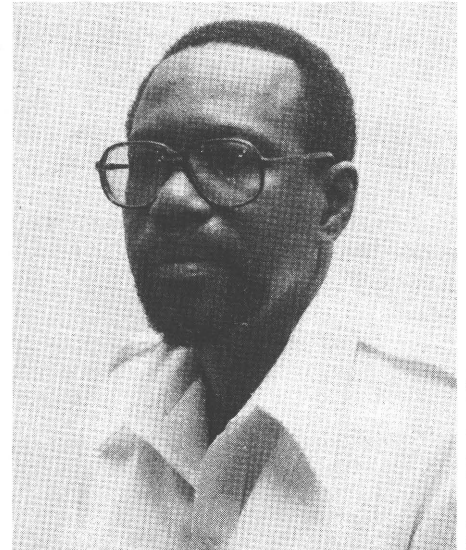
only as part of its drive for self-sufficiency in food, but also in its quest for higher nutritional standards.

### "In nobody's backyard"

Guyana is also a strong defender of her independence from outside forces, fiercely preserving her right to be "in nobody's backyard". While this has undoubtedly done little to ease her financial crisis, political independence is clearly a point of honour for the present Government and one on which no compromise is likely to be made for mere financial return. The US intervention in Grenada in 1983 is seen as having dangerous implications for the region.

Rashleigh Jackson, Guyana's Foreign Affairs Minister<sup>(1)</sup>, prefers to define the country's foreign policy not in terms of anti-colonialism or anti-imperialism per se, but of "pro-independence", "independence of action in terms of one's right to judge an issue on its own merits". As such, Guyana falls foursquare into the non-aligned movement and has, over the past 15 years, consistently manifested its commitment to that group. (Umana Yana, the "meeting place of the people", one of Georgetown's distinctive landmarks, was built for the non-aligned Foreign Ministers conference held in the capital in 1972). Guyana is also firmly committed to the ACP group, and appreciative of the negotiations aspect of the Lomé Convention which, as the Minister said, "is the essence of

(1) Interviews conducted in October 1985.



Ministry of Foreign Affairs

**Rashleigh Jackson**  
*Minister of Foreign Affairs*

democratic international relations" and which stands in contrast to other trade and aid arrangements.

Curiously, in a sense, since CARICOM's secretariat is actually sited in Guyana's capital, Georgetown, it is with her CARICOM partners that relations over the past two years have been most strained. Tensions were created principally by the events in Grenada to which, unlike many CARICOM Member States, Guyana was—and is—violently opposed. Strains appeared also, though, through Guyana's inability to repay debts to some of her Caribbean neighbours. Nevertheless, the fact that CARICOM has weathered the storm at all was, in Minister Jackson's view, "a reflection of the political strength and vision of the leaders, encouraged by substantial sections of their populations who see no alternative to cooperation".

### Looking to the future

If this, then, is present-day Guyana, where is Guyana going? Natural features, if they have been a source of development, have also been a constraint. The relatively narrow coastal plain, on which the population is concentrated, is crossed by three huge rivers, the Essequibo, the Berbice and the Demerara, and by many smaller ones. Much of this plain, some 20 miles wide, is actually below tidal level, em-poldered in the Dutch manner, and requiring protection at all times from the ocean. A sea wall stretches along the coast and the ocean is kept at bay by river and wharf walls on the river



The Courier

*Stabroek Market — the hub of Georgetown's trading activity*

## GUYANA

front, but flooding nevertheless occurs occasionally. The climate is not well suited to the growing of some crops, such as certain cereals. Many of the country's gold and diamond deposits, together with its hydro-electric potential lie deep in the interior. Eighty per cent of the country's 83 000 sq. miles is covered by forests, with wood species such as greenheart and purple-heart that would find ready markets. Exploitation of all these resources is made very difficult, however, by the lack of road or rail links and other essential infrastructure.

The other principal constraint has been the difficulty of carrying out policies conducive to sustained development. Not that development plans have not been formulated with this as their objective: this has been the case throughout the 1980s and the Government Action Programme of 1982 further strengthened movement in this direction. Certain elements of that programme have now been successfully implemented, such as the Reynolds partnership arrangement in the bauxite sector, the reorganization of the rice industry and the raising of prices to the consumer in both that and the sugar industry.

A number of other initiatives have been undertaken in an attempt to improve the general state of the economy. A flexible exchange rate policy has been adopted under which the rate is adjusted periodically against a basket of currencies. (The official exchange rate of the Guyana dollar is nevertheless still approximately a half or a third of its parallel rate). Measures are foreseen under the 1985 budget to try to control the public sector deficit and the growth of the balance of payments deficit has been curbed by the government's very rigid control of import licences.

Despite persistent efforts, the economic situation continues to deteriorate, and, as is often the case, the downward spiral, once begun, not only continues unabated but seems to gain in momentum. Because of her debts to the International Monetary Fund (IMF) Guyana has been debarred from further borrowing. Because she has been debarred by the IMF, some donors are making any further assistance conditional on an agreement first being reached with the IMF.



Even a recent World Bank report, entitled "Guyana: A Framework for Economic Recovery", which might give hope that recovery was within reach, is based on a number of fundamental assumptions that may well not hold true, such as that external assistance will be forthcoming, or that Guyana's debt will simply be waived.

Even the government has little hope that that will be the case, and it has, in fact, recently stated its determination to honour its massive debts, now amounting to something of the order of one billion US dollars. Carl Greenidge, Minister of Finance<sup>(1)</sup>, made clear, however, that Guyana, along with other debtor developing coun-

tries, would be seeking from the international community "serious and comprehensive treatment of the debt problem which would tie payment with the ability to pay". Guyana is certainly badly in need of such treatment.

\* \* \*

If the immediate outlook for Guyana, as with other developing countries, is not bright, it may not always be so. Independent Guyana is young, but has always been truly independent. All that remains for her now is to become prosperous, too. ◊

Myfanwy VAN DE VELDE

# “We want a humane society, self-reliant, democratic and prosperous”

## An interview with President Desmond Hoyte

Hugh Desmond Hoyte, Guyana's modest and quietly-spoken President, probably never expected to accede to the country's highest office.

Of the same generation as President Forbes Burnham, the charismatic Founder Leader of independent Guyana, who dominated the country's political life for nearly twenty years, Mr Hoyte, a long-serving Minister and, at the time, Prime Minister, was projected to the Presidency by the sudden death of Forbes Burnham in August 1985.

President Hoyte, in this interview with *The Courier*, began by summing up what, in his view, constituted the greatest legacy the late President had left to the country.

— “I think he left us a legacy of political stability — a culture of domestic peace and tranquillity. When he acceded to office in 1964, we were killing ourselves, internecine strife, communal violence, social upheaval, there was no sense of direction in the country. We lacked confidence, still feeling that we were not able to do things. We had just come out of centuries of colonial tutelage, not to say domination. He left us at peace during his administration. We have had over two decades of uninterrupted peace and stability in our country. He left us a confident society. And so, with his passing, sudden and unexpected though it was, there was nevertheless a very smooth transition because of the institutions he had built over the years, and the development of a political life of maturity and sophistication. I would say that was the greatest legacy he left us.

► *You yourself served under the Founder Leader for many years as a minister, and indeed as Prime Minister. It's perhaps early days, but will you be seeking differences to his line of approach?*

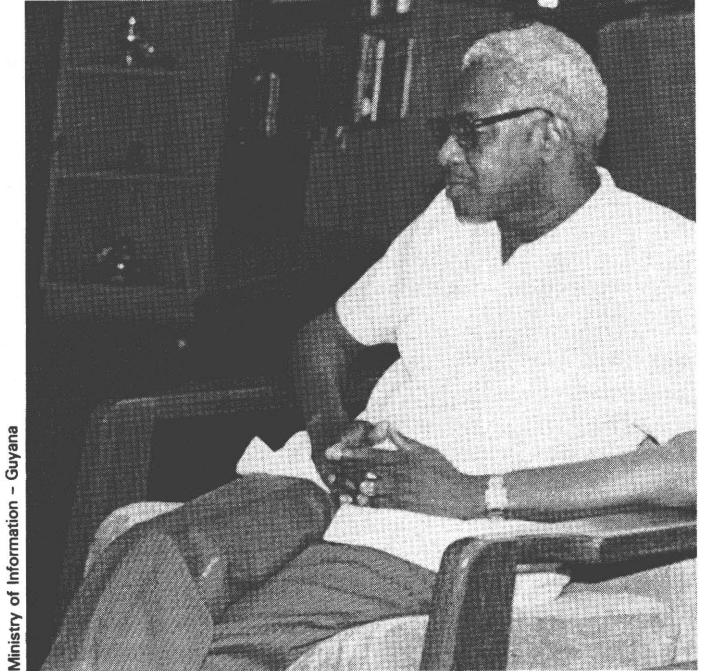
— Let me put it this way. He set us certain clear objectives which I believe

have a national consensus. We want to build in this country a humane society — self-reliant, democratic, and prosperous. We've worked very hard to build the infrastructure which will enable us to achieve this objective. But he himself always said that while our objective never changes, the tactics and the strategies, of necessity, must change in response to objective reality. And so, while I'm pursuing the same goals — first of all, my style will be different. I would be stupid to want to imitate the style of the Founder Leader; that would be impossible. He had a style of his own, which marked him, and I can't hope to emulate that style — and I wouldn't want to. I will have to have my own strategies, and tactics to deal with the requirements of what I would call the next phase of development. I do believe that, with his passing, one era of our national life came to an end. That era was one of political institution-building. It was an era, also, in which the political consciousness of our people was raised. As I put it in my address to the Supreme Congress of the People, it was a period in which we built the psychological and political infrastructure that was necessary to enable us to organize ourselves for the next phase of development

which has to be predominantly economic.

► *To turn to the economy and to leave aside, for the moment, sugar, are you planning to reduce dependence on the second of the economy's mainstays, namely bauxite?*

— The answer to that is, yes. With bauxite, of course, we are attempting some diversification in the sense of trying to develop some new product lines. But outside that sector, we are putting a great emphasis on agriculture. We are not only expanding our rice production, but we are putting in place policies and programmes to improve efficiency in the rice sector. We are developing a programme now to increase the dairy and beef cattle industry — although we are not self-sufficient in milk at the moment. We used to be. But we succumbed to the lure of cheap powdered milk from abroad, and so the dairy industry declined. Now we recognize the error of our ways, so to speak, and we will have a programme of self-sufficiency in milk. We're also attempting to increase our cattle herds and generally we have been focussing upon the cattle industry. Similarly, forestry — we have been encouraging the private



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operators in the forestry industry to expand, and in fact they have been expanding and improving the efficiency of their operations. Also we've been expanding the fisheries industry. I have been encouraging manufacturing — small manufacturers particularly. A good example is the toy industry. We haven't been importing toys because our small manufacturers have been able to make toys, — soft toys, obviously, not the sophisticated electronic ones. So, generally, we have been not only diversifying, but extending the range of economic activity, to reduce dependency on a few sectors.

► *Could we perhaps turn, now, to sugar, which is going through a difficult period. What do you think of the future of the industry, not just in Guyana, but in the Caribbean region as a whole?*

— I think that so long as the European Community continues to subsidize beet sugar in the massive way that it is doing, the prospects for cane-sugar are very bleak. It is true that we have some access to the EEC markets. We have prices which are better than the prevailing, depressed prices. But one can't rely on that situation continuing for all time.

Now we in Guyana have been devising a programme to change the con-



Rice harvesting. "We are not only expanding production, but putting in place policies to improve efficiency in the sector"

tent of our sugar industry. We want, first of all, to change the industry from being a sugar industry, to an industry that grows sugar-cane. And we see more than a slight difference in that concept. We believe that sugar-cane should be the basis for the production of a wide range of products, including sugar, but not primarily sugar. For example, we have just asked the EEC to examine our industry, and to advise

on the range of products from sugar-cane which it might be possible for us to manufacture. In addition we are asking the management of the sugar industry to make better and more effective use of their by-products, for example bagasse, for the generation of energy.

Additionally we are diversifying the sugar industry in the sense of introducing new crops, so that while sugar remains an important crop of GUY-SUCO, it will not be the only crop. GUY-SUCO is at present cultivating some 3000 acres of rice. They've got the land, and the people with the agricultural experience. So we are trying to reduce the vulnerability of the sugar industry — of the sugar population, I should say — to the vagaries of the international markets. So that they have other activities which will generate income, generate foreign exchange and so on. That is how we are hoping to approach this problem. We do feel that sugar per se is facing a difficult period, and will face a difficult period for a very long time, and therefore one would need to reduce total dependence on the production of sugar.

► *From what you have said, you are presumably not optimistic about future developments in the Sugar Protocol?*

— My argument has always been that the EEC has never fully imple-



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Forestry: a sector with great potential for expansion

mented the provisions of the Sugar Protocol, either in the letter or the spirit. For example, as you know, the Sugar Protocol requires the price to be determined by annual negotiations. But the fact of the matter is that those negotiations don't take place. The ACP countries have been reduced to the status of price takers. A price is given by the Community, and in the end one takes it or leaves it. There have been arguments, but in the end the ACPs have to face reality and accept what is offered, because the alternative is nothing at all. And that has always been a cause of very great resentment for the ACPs, and in particular, among the ACP sugar-producers. And I have had the fortune—or misfortune — of being Chairman of the ACP Sugar Group and therefore spokesman for the ACP on sugar for many years. The second issue is that the calculation of price is supposed to take account of relevant economic factors. In practical terms, what happens is that the ACP countries get the same percentage increase which the Community gives its own farmers. But then, if one looks at the question objectively, one can see that in such a situation the EEC farmers in fact get a higher increase, because those farmers don't have the cost of freight and so on. So I believe that unless those two major issues are resolved, there will continue to be friction over the implementation of the Sugar Protocol — and the ACP countries will continue to be disappointed with its operations.

► *What about the future of the private sector in Guyana? In past years there have been problems with confidence in the investment climate. What is the outlook now, as regards both domestic and foreign investment?*

— Now there's always been this rather superficial statement made by people — and even by some of our own private sector people. The fact of the matter is that up to about 1970, our private sector consisted mainly of traders. We tried to point out to them,

that there was really no future in this country, as I believe there is little future in most of the developing countries, for them if they merely remained importers of foreign goods, and sellers of foreign goods. And what we wanted the private sector to do was to get into



*The non-aligned monument in Georgetown with busts of four of the movement's greatest protagonists: Nasser, Nkrumah, Nehru and Tito*

manufacturing — particularly manufacturing which would be based on the use of local materials. Obviously some people couldn't change. They were so wedded to the old ways, and we were asking them to do new things — and that's always traumatic for most of us.

However, the second thing I want to point out is that prior to 1970, there was very low investment in this country. The people who had investments were the bauxite people, Alcan, and Bookers, the sugar people. All this had nothing to do with any Government of an independent Guyana, it had to do with colonial policy and the policies of Great Britain. So that we came very late, in terms of CARICOM, even, into manufacturing: Jamaica, Barbados, Trinidad have had a longer tradition of manufacturing than we have. Our private sector, our manufacturers, are really pretty late in the game.

**“A new breed of private businessman has sprung up over the years”**

However, a new breed of private businessman has sprung up over the

years: young, dynamic, enthusiastic people. We have given them all of the encouragement which is required. We've had for years a regime of fiscal incentives, tax holidays, accelerated write-offs, the whole lot. But, of course, you don't just come into a new area and make a success of it overnight. It takes time. When I was Minister of Economic Development I held monthly meetings with the representatives of the Chamber of Commerce and the Guyana Manufacturers Association not only to encourage the private sector, not only to indicate to them that the government was serious about its support for the private sector, but to help them over the numerous hurdles they might have faced as they attempted to get on with their business. And I think we developed an extraordinarily good relationship, and I would like to believe that that relationship continues today.

During the period between 1970 and now, we have seen the emergence of various manufacturing concerns — some of them pretty large. Some of them have established industries which require a large proportion of foreign imports. Because of the situation we are facing now—the foreign exchange stringency—it is very difficult for them to get raw materials to keep their industries going, so that some are working to reduced capacity, some of them, I suspect, have had to close shop for the time being.

This emphasizes the point we have been trying to make to them all the time, that they should try to establish industries which utilize large proportions of the local materials which we have in great abundance.

In December last year, we established an agency we call The Guyana Manufacturing and Industrial Development Agency popularly known as GUYMIDA, with a specific mandate to help manufacturers. It is intended to be a kind of one-stop agency to which investors, manufacturers and so on can go to get a package deal. In the short period that GUYMIDA has

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been in existence I think it is fair to say that it has done an extremely good job with helping people to establish new activities, and also in helping the established foreign investor to solve problems.

If I may give a small example. We have a number of small manufacturers doing small things, but important in that they are generating a lot of activity and getting people to create employment for themselves. The foreign exchange requirements of these people are minimal, but that in itself is a problem. If one of those fellows goes to the Government Central Bank, and says: "I want a US\$ 100 loan", he would be chased out. The Bank is dealing with problems of hundreds of thousands. So what GUYMIDA has done quite successfully is to have got them together, consolidate their foreign exchange requirements, and then go to the Central Bank, and say: "Look, we want US\$ 50 000 to bring in these small items for a whole group of people". And that has been quite successful — the people at the Central Bank can deal with that!

Now that's just one small example, but they have done well in all areas. I would say that the private sector has a role in Guyana, firstly because the Constitution provides them with such a role. Our Constitution in effect recognizes a trisectoral economy. Secondly, the Government is kindly disposed to and supportive of the private sector, and has given assurances that it is ready to do everything possible to help the private sector.

### **"We never said that we opposed external investment"**

Now external investment. Again we have never said that we were opposed to external investment. We now have three Canadian firms, for example, exploring in the mineral sector. We have at the moment a number of joint-venture proposals from CARICOM businessmen—because this is one direction in which we have been urging our private sector to go—to try to get the CARICOM businessmen who have financial and other resources to join with them and to exploit our natural resources. Not only CARICOM businessmen, but also businessmen from outside the region. Our position has

been one of flexibility, and we treat each case on its own merits.

We do have very significant oil resources, though seismic work is necessary. We are about to mount a seminar in London during the first quarter of 1986, and we are going to talk to a large number of oilmen there, presenting them data with the necessary explanations given by our technical people with a view to encouraging them to exploit some of the offshore and on-shore resources. We'll be looking around for people who would like to invest in oil, and we, as a responsible Government, will honour to the letter any agreement we signed with any investor.

► *You talked about the lack of foreign exchange. Now, you are very much part of the non-aligned movement, but I wonder do you sometimes wish that you weren't, in order to attract more external investment?*

### **"Non-alignment is fundamental to us"**

— Not at all. I think non-alignment is fundamental to us. There is no way we are going to join any foreign bloc. I think we value our independence and sovereignty too much. We are too close to the colonial period to want to get into that situation again. Furthermore, I don't believe that people help you because you say you are aligned with them, or you jump up and vote at their beck and call. I don't want to be invidious, I wouldn't want to name the countries, but we've had countries in this region which have taken that position and have really got nothing.

I believe that a developed country will help you if it's in its geo-strategic interests to do so. I think it was Palmerston, or one of the British Prime Ministers who used to say that a country hasn't got permanent friends, it's got permanent interests. I've seen too many countries being jettisoned when the smaller, weaker country was no longer of political importance to the patron country.

We feel that way, and yet we have had help from countries on both sides of the so-called ideological divide. The Chinese have helped us to build a textile mill, and, more than that, that mill has functioned for the whole of this year because of the generosity of the

Chinese supplying us with cotton. Now we have been reviving our cotton industry but we have not yet reached a position where we could supply our own total needs. The Japanese have also helped us with whaling factories. We have developed a fish port complex through grants from the Japanese government. The Canadians have been financing infrastructure for artisanal fishermen...

► *May I conclude by asking something about CARICOM, which has had difficulties since the US intervention in Grenada in 1983. How confident are you that the next CARICOM Summit can be a success?*

— Supremely confident. CARICOM has had its problems, its strains and stresses, but I think the EEC also has! One has to overcome these difficulties in developing a economic community. There were problems arising from the fact that CARICOM countries took differing positions on the invasion. We would never accept that what happened in Grenada, was right or was good for CARICOM States. We think that it was a dangerous step, and still has very dangerous implications for our security and independence. However, at the last CARICOM Heads of Government meeting, which was held in July in Bridgetown, the Heads took a very statesmanlike position, I think, and agreed that one couldn't undo what was done.

Positions had been taken, points of view had been very forcefully expressed, but what the CARICOM leaders needed to do was to look to the future. They were all committed to the policies of the community, they all adhered to the principles of the Treaty of Chaguaramas, and they felt that there was no value in harping on the past and continuing futile and sterile polemics. They did agree to work very closely towards achieving the real objectives of CARICOM — trying to increase the quality of life and the standard of living of the CARICOM peoples. So that the last summit was particularly successful in what I would call a reconciling of differences and settling into a more harmonious relationship in the years ahead. It is in that context that I believe we can look forward with confidence to a successful future Summit. ○

Interview by M.v.d.V.



## Profile

**Area:** 214 000 km<sup>2</sup>

**Capital:** Georgetown

**Population:** 800 000

**Rate of population growth:** 1%

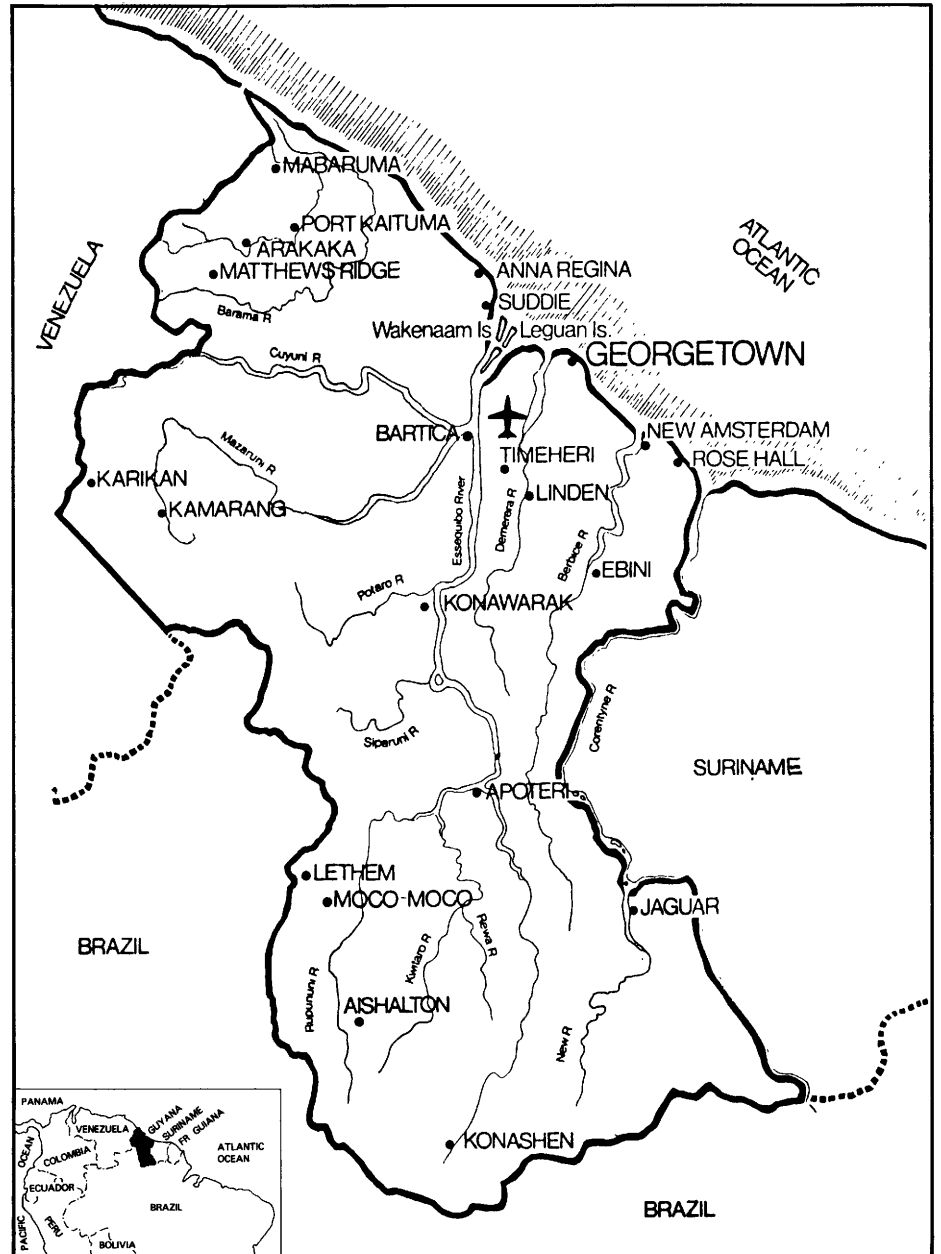
Lying on the north-east coast of South America, Guyana borders on Venezuela to the west, Suriname to the east and Brazil to the south, with a 270-mile Atlantic coastline to the north. The country, broken by countless rivers (Guyana is an Amerindian word meaning "Land of many rivers"), is divided into three distinct types of terrain: the low-lying coastal belt (partially below tidal level), some 20 miles wide; the middle belt, consisting of savannah to the east and rain forest in the centre and west and the highland region to the south, comprising savannah and high mountain ranges.

Historically speaking, there are five Guianas — Spanish (now Venezuela), Portuguese (now Brazil), French (Cayenne), British (Guyana) and Dutch (now Suriname). Present-day Guyana consists of former Dutch, French and British settlements, brought together in a single colony under British rule in 1831. Independence was gained on 26 May 1966 and on 23 February 1970 Guyana became a Co-operative Republic.

The country has six main ethnic groups: Amerindians (the original inhabitants, now making up some 5% of the population); Afro-Guyanese (descendants of slaves, 35% of the present population); Guyanese of Indian and Chinese origin (descendants of indentured labour imported in the 19th century, now 50% of the population) and a small minority of Guyanese of Portuguese and other European descent.



The National Coat of Arms



## Economic outline

**GNP at market prices (1984):**  
US\$ 396.8 m (\*)

**GNP per capita (1983):** US\$ 520

**Value of exports (1984):**  
US\$ 230.5 m

**Value of imports (1984):** US\$ 301 m

**Change in terms of trade (1981-83):**  
- 12.5%

**Total external public debt (1984):**  
US\$ 1 085 m

**Principal exports (1984):** sugar (32%), rice (9%), bauxite (38%), alumina (6%);

**Principal imports (1984):** fuels and lubricants (45%), chemicals (7%), building materials (2.3%), agricultural machinery (3.5%), foodstuffs (3.2%), textiles, clothing & footwear (2.4%), mining and transport equipment (0.8%)

**Major industries:** mining (bauxite, gold, diamonds); agricultural processing (rice and sugar milling, rum, beer); agriculture (sugar and rice); forestry; fishing.

(\*) GUY \$ 1 = US\$ 0.24 (December 1985).

# “Defending the Revolution by training young people”

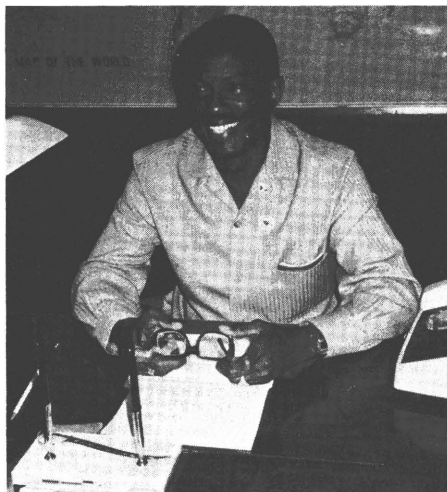
## An interview with Prime Minister Hamilton Green

Hamilton Green succeeded Prime Minister (now President) Desmond Hoyte as Guyana's Premier and first Vice-President on the death of former President Forbes Burnham in mid-1985. Comrade Green, a cousin of the late President and a leading member of the People's National Congress, was previously Vice-President for Production, with responsibilities including agriculture, fisheries, forestry and mines and had, before that, held various senior ministerial portfolios.

A man of considerable charm, enjoying great popularity with the Party's rank and file, Prime Minister Green talked to *The Courier* about his country's present economic plight and the efforts being made to sustain and promote overseas trade, and commented on the role of the Guyana Defence Force.

### On the economy in general

— “I suppose we are going through difficult times and we continue to experience what I believe are the main problems, deteriorating terms of trade, rising interest rates and restricted access to credit. We have massive arrears and, as a result, extensive under-utilized capacity. Behind all this is the unfair, unfortunate world economic order, which I think is something that many countries don't recognize as the base of our problem. Because even if we were to increase our productivity, we still face these unfair terms of trade. We did some work just a few days ago, and we came to some interesting figures. To buy a tractor in 1974, we needed only to sell 14 tonnes of sugar, to get the necessary foreign exchange. Ten years after, by 1984, to buy a similar-sized tractor, we have to sell 96 tonnes of sugar. I think that dramatises the kind of problems we



*Price of a tractor (1974): 14 tonnes of sugar. New price (1984): 96 tonnes*

are facing. And if it were that you just sold 96 tonnes of sugar, it would be alright. But the price of the cutters has gone up, the price of the shirt that the cane cutter has to buy has gone up, and the cost of the cup he has to use has gone up. We have no control over those things.

An assessment of performance for the first half of this year reveals that real production turns out to be about the same overall level as 1984. Significant increases were recorded in the production of several key commodities. In sugar we had a 9% increase; in edible oil we quadrupled our production of 1984; in gold a 12% increase — that's a little disappointing because we hoped to increase that substantially. Diamonds were up by 30%, metal grade bauxite by 79%, abrasive grade calcine bauxite by 185%—very good—and rum by 79%. That's as compared to the first quarter of 1984. Rice production is a disappointment. We've witnessed a 26% reduction. Beef—we are hardly witnessing an increase because we've got herds all over the country that we have not yet effectively mobilized, because of transportation problems but that's around 6%. Fish 3% and timber 4%. It's instructive to note that the increases signify the response of the sectors to special

initiatives which we have taken, and this is particularly so in terms of oil and gold and diamonds. And at the end of June of this year, export of goods amounted to 420 million Guyana dollars, as compared to G\$ 369 over a similar period last year. Of course, we continue to attach great importance to the systematic pursuit of our growth and consider it imperative that ways and means be found to utilize our under-utilized capacity in the various sectors”.

On the vulnerability of Guyana's economic base to outside market forces

— “Our base, as you know, is still basically rice, sugar and bauxite. These are all primary products, which underlines the problem. It's a well known fact that export proceeds from these products have all been adversely affected by the situation to which I referred a moment ago, plus recession. In the case of bauxite, particularly last year, there has been a drop in demand. It looks as if things are turning around — I'm sure they're going to need bauxite for Star Wars! But we've had low prices and we've had competition in some areas, for example sugar. They've substituted these artificial sweeteners, which are themselves chemicals, and harmful. Even in the developed world where we could sell our sugar, there is less demand because of this very massive propaganda programme, supported by the various health agencies, whereby they blame every fat North American and European on our sugar!

In order to lessen this vulnerability efforts have been made to secure long-term market arrangements, including access to new markets for exports, and research is being conducted to develop new products based on these exports. As you know, traditionally we exported these things to the West. We've moved to the East and we will sell anywhere, except in South Africa. There is a concerted effort to diversify the economic base of the country and to reduce our dependence on primary products. This includes development of the mining industry, mainly gold and diamonds. We are also trying to develop the country's agricultural base, other than rice and sugar. In fact we are looking very seriously at sugar. Sugar has all kinds of problems, the first being how to move out of sugar,

as I personally feel we should have done some time ago. We need massive capital to do it because sugar, as you know, is a big employer of labour and still earns us foreign exchange in spite of the difficulties. To convert those sugar estates into another crop is not easy. But the Sugar Corporation itself is going into fish, legumes, and research, so that they can improve on the strains that they have.

We are also developing our forestry resources — timber and wood products. Development of the manufacturing and industrial sectors — we are attempting to improve on the quality of the products currently being produced. There are a number of things that we are doing that will come on stream, I suspect, in the next couple of years.

Of course you know that the economy is extremely dependent on petroleum-based fuel. That is our big problem and we are encouraging both the private sector and industrial sector to conserve on the use of this fuel, while we are seeking to develop alternative sources. For example, in my own house, I don't use an electric stove, but I use a coal pot. In terms of cost there is not much difference, but as the coal is produced by our own timber, it's a saving on fuel which you have to import. There is a group working on solar power and of course hydro power, and we've done some interesting experiments with bagasse".

On increasing productivity in the rice sector

— "We are attempting to put in place institutional arrangements. We have just reorganized the rice industry, and set up what we call the Guyana Rice Marketing and Milling Corporation. We are attempting to involve both the millers and the farmers by dialogue and discussion and to improve the techniques. We are examining, in the case of rice, the new varieties that we produced over the past few years. As you know, in the early '70s and the late '60s we moved to what were then considered new and high-yielding varieties. We abandoned traditional varieties which were hardy and went for sophisticated new varieties which demanded almost perfect drainage and irrigation conditions, which we did not have. They demanded a precision which we have not yet achieved in the farming com-

munity in terms of when you reap and when you sow. And worst of all, they demanded input of particular kinds and quantities of fertilizers which we had to import. So you had a vicious circle. Yes, you got improved yields. Yes, there were so-called better varieties, but it depended entirely on these factors, some of which were in our control and some outside. Fertilizers were completely outside our control. And the need for ideal drainage and irrigation conditions demanded a kind of infrastructure which we could not, and we still can't, afford in all areas. We are also subject to unpredictable weather. I don't know what has happened to the world. When I was a youngster, we knew we had a long and a short dry season, and we knew we had a long and a short rainy season, and the farmers could, with some amount of precision, predict what was happening. We plant rice on flat terrain, on land which is often below sea level. So, unless you have sea dams and structures to let out the water when the rain falls and put that water out to sea, you are in lot of trouble. Unless you have structures to keep the sea out, you are also in trouble..."

On the possibilities of capturing other markets

— "Every minister who travels abroad in both the non-aligned world and the developed world, seeks to establish economic relations and trade contacts. For two reasons. First to ensure that we can buy things at the best price possible and, second, to sell our primary and secondary products to anyone who is willing to buy them and pays good prices.

You perhaps know that we are part of the new phenomenon of counter trade. We've just got some helicopters and aircraft from the Soviets, in exchange for bauxite and timber. We've had counter trade dealings with Cuba and Western countries, just about everybody, because that's the new currency these days. Once we can produce the goods, we will certainly look for new markets. I repeat what I said: we sell to anybody except South Africa.

The difficulty of trade with new states, particularly Asian and African has been the shipping routes. Because of our geographic location, shipping routes are traditionally to North America, London and Europe via London, and I am afraid that until there is massive build-up of trade in

the region with these other countries, that is a serious constraint. Guyana is the only English-speaking country in the region that is doing any significant trade with the non-western states. Of course it should be easy to do trade with African countries because you are nearby. In fact that's how my ancestors were brought here. But, after the the slave trade, I'm afraid they dismantled the route!"

On the proportion of the budget consumed by defence spending

— "I think we need to define defence in terms of the budget. Our army, first of all, is not a traditional kind of army. Our defence force operates at a physical level in terms of actual defence of our borders. Really it is a part of our educational institutions. In that defence budget we have national service, which was designed to help to prepare our young people for service to Guyana. They are given some exposure to military training, taught agriculture, exposed to other people who have come from different levels within society. They are all doing the same thing, learning to work together, to share ideas, to share difficulties. In any event the expenditure on defence, both current and capital, amounts to less than 10% of our national budget. The role of the people's army is also developmental. In every community you have the GDF (Guyana Defence Force) working with local communities. They clean the communities, provide health services, rescue services and help with the agricultural drive. When the average soldier leaves the army, he's prepared to go into agriculture and to a number of other areas that provide development. Building in hinterland areas is done by the army. Work is currently being carried out on the construction of the hydro power facility by the army. So, sometimes for weeks, they don't see guns, they see spades, bulldozers, tractors and fertilizers. Of course, in our context, the threat of external aggression in not to be ignored because we have extensive borders with Venezuela, Brazil and Suriname. Not to mention the Atlantic, which we have to defend ourselves against constantly. So I don't think by any standard that our spending on defence is high. Again, you have to define defence. Defence is physical and psychological. We are defending the revolution by training young people". o

Interview by M.v.d.V.

## EEC-Guyana cooperation (\*)

The European Community's cooperation with Guyana consists of three parts: the Sugar Protocol, food aid and assistance under the Lomé Convention.

### Sugar Protocol

The Sugar Protocol guarantees Guyana unrestricted access to the EEC at a guaranteed price for a quantity of 157 700 metric tonnes equivalent of white sugar. This gives Guyana the third largest sugar quota after Mauritius and Fiji.

Since the beginning, Guyana has taken up its full quota. With the exception of 1980, the world market price has been below the EEC price, particularly so in recent years, during which the world price for sugar has reached a historic low. Between 1975 and 1984, the implementation of the Sugar Protocol has resulted in an increase in revenue to Guyana of some ECU 212 million.

This amount indicates the difference between sugar exports to the EEC at the Protocol price as compared with the same quantity of sugar had it been sold on the world market.

This figure of ECU 212 m shows the importance of the Sugar Protocol as a safety net. It underlines at the same time the dramatic consequences of the dependence of a sugar-exporting country on the vagaries of the world market.

### Food Aid

The first EEC food aid deliveries to Guyana started in 1979 and consisted of butteroil and skimmed milk powder to be reconstituted into milk in the Georgetown Milk Plant. From 1979 to 1981, wheat flour was also provided, but deliveries of wheat flour were curtailed in 1982, when the Government no longer made the request, in execution of its import ban on this commodity.

The total value of EEC food aid to Guyana, estimated at world market prices, amounts to ECU 3.7 m.

In the first few years, the Community's food aid was supplementary to

the commercial imports of milk powder and wheat which, until 1982, were far in excess of the quantities delivered under the food aid programme. Since then this situation has changed. The dairy products supplied by the EEC as food aid have become the only source of milk available to the population of Georgetown. Revenue from the sale of EEC food aid is paid into a special account. The past operation of this account has not been in accordance with the conditions governing the supply of EEC food aid and the government has undertaken to remedy this situation.

### Assistance under the Lomé Convention

The Indicative Programme under Lomé I was ECU 12.8 million and, under Lomé II, ECU 14.6 million. As at mid-1985, the EDF IV Indicative Programme was 100% committed and fully disbursed; the EDF V Indicative Programme was 88% committed and 35% disbursed.

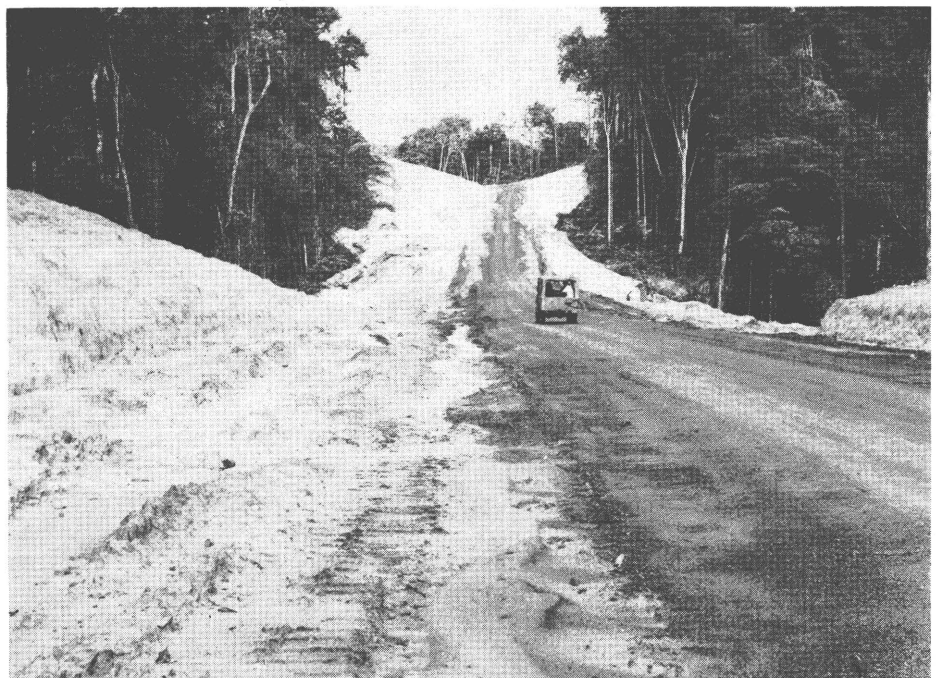
Funds have been concentrated upon

two principal sectors, rural production and alternative energy. In the rural production sector, EDF assistance has been concentrated upon fisheries development. Under Lomé I, fish processing equipment was supplied to a local factory, which is in operation, but at a low level of production. Under Lomé II, funds are being provided for the establishment of an inshore fish port, including a market, at Hous-ton, on the outskirts of Georgetown.

In addition, an agricultural study of the East Berbice area was undertaken under Lomé I to link up with an EDF-financed road along the East Berbice river. Following on from this, a further study of the drainage of the area has been undertaken. Finance has also been provided for culverts to drain plantations alongside the road, but the work has been delayed by problems concerning the choice of contractor.

EDF assistance in the alternative energy sector has focussed upon the provision of a wood gasification power plant for the Upper Demerara Forestry Project. The first months of test running of the wood gasification system has shown the performance of the equipment to be below the required specification and the need for certain adaptations has become evident.

As mentioned above, EDF intervention in the transport sector involved the construction of a 22-kilometre



*The access road to the co-financed Upper Demerara Forestry Project. EDF participation consisted of supplying a power plant*

(\*) Based on information provided by the Delegation of the Commission of the European Communities in Guyana.

road along the East Berbice river. This project has now been completed, albeit after substantial delays. A study of the extension of the road is under-way.

Other support under Lomé I and II has been given to water supply and sewerage rehabilitation in Georgetown, assistance to small and medium-sized enterprises and to technical assistance and training.

### Regional cooperation

Guyana will be one of two beneficiaries of a recently-approved major regional project, the object of which is to provide an efficient ferry service between Guyana and Suriname across the Corentyne river along which their border runs. The existing ferries, for passengers and light goods only, are old, overcrowded and subject to frequent breakdowns. The project, which will cost an estimated ECU 9.83 m, to be paid from the 4th, 5th and 6th EDFs, will involve the building of two new terminals and the approach roads to the new terminal sites, together with the provision of one roll-on roll-off vessel.

### Operational summary

Assistance under the 4th and 5th EDFs is summarised in the table opposite and indicates how EDF involvement has adapted to the changing economic and social conditions of Guyana. Under the fully disbursed Lomé I, two thirds of the indicative programme were in the form of loans; under Lomé II and III, all EDF interventions under the indicative programme are grants. At the same time, the character of the projects has changed. Under Lomé I, the accent was on development in new fields, as shown by the investment in forestry and fisheries. Under Lomé II, the accent has shifted to rehabilitation of existing equipment as illustrated by the projects in the fields of sewerage and water. This change is even more marked under Lomé III under which the Government of Guyana has requested the complete allocation of ECU 20.5 m to be used for rehabilitation of basic infrastructure in the fields of transport, drainage, and coastal protection. This need for rehabilitation is furthermore shown by the SYSMIN intervention under Lomé II. The SYSMIN

<b>EDF financing to Guyana ('000 ECU)</b>			
<b>(L = loan; X = outside Indicative Programme)</b>			
	<b>Lomé I Disbursements</b>	<b>Lomé II Financing decisions</b>	<b>Total</b>
<b>Agriculture and Rural Development</b>			
– Development East Bank Berbice			
• road	3 624.4	500	
• drainage		900	
• feasibility studies	126.4	85	
– GAIBANK (agriculture sector)			
• technical assistance	85	240	
• credit line	L 700		
– Microprojects	165.6		
– Equipment Milk Plant	L 123.8		6 550.2
<b>Forestry – Alternative Energy</b>			
Studies, technical assistance	662.5	160	
Power plant, equipment	L 5 000	2 832.5	
Risk capital EIB-DWL (X)	L 3 200		11 855
<b>Fisheries</b>			
Studies, technical assistance	511.7		
Equipment, fish plant (L 532)	656.8		
Artisanal fish port		4 800	5 968.5
<b>Sanitation</b>			
Sewerage		1 600	
Water		400	2 000
<b>Industry and Trade Promotion</b>			
Technical assistance	60.7	19	
Credit line GAIBANK (ind. sector)	L 450		
Credit line GAIBANK EIB (X)	L	4 000	
Rehabilitation bauxite – SYSMIN advance (X)	L	3 000	7 529.7
<b>Training</b>	430	960	1 390
<b>Studies – general or preparatory</b>	79.3	460	539.3
<b>Uncommitted under Indicative Programme</b>	123.8	1 643.5	1 767.3
<b>Total</b>	16 000	21 600	37 600
Of which			
– Indicative Programme	12 800	14 600	
– Outside Indicative Programme	3 200	7 000	
– Grants	5 994.2	14 600	
– Loans	10 005.8	7 000	

MIN intervention in favour of Guyana's bauxite industry only figures in the table as far as the advance is concerned, no financing decision having yet been taken for the main SYSMIN project.

As for that project, the EEC Commission informed the Government of Guyana in December 1984 that a total amount of up to ECU 35 m could be made available. In April 1985, the Government called a meeting in Georgetown to request IBRD, EIB and EDF to examine the possible co-financing of a complete rehabilitation programme of the Guyanese bauxite industry. The participating donors declared their readiness to co-finance this programme.

The preceding summary of EEC activity in Guyana shows the importance of the interventions provided under the Lomé Conventions as well as some of their limitations.

A small economy like the Guyanese one, based on three export products, is vulnerable. The Sugar Protocol, Stabex and SYSMIN can and do help the ACP countries to alleviate their difficulties, but these instruments cannot by themselves compensate for the wild price fluctuations on the world market. If trade remains a major objective to pursue, the promotion of trade at a fair price should remain in the forefront of international negotiations to cover the main commodities with mechanisms to stabilize prices. o

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# DJIBOUTI

## The Love of Liberty

There are no peoples in Africa today whose optimism about the future, in the face of impossible odds, baffles foreigners more than that of Djiboutians. These traditionally nomadic people appear alone in believing that their 23 000 sq km lunarlike territory, for long given up as at least 95% barren, can be used to reduce substantially the artificial and dependent lives that colonialism and modernization have forced upon them. It is, of course, a measure of that rugged determination that characterizes the Semites with whom Djiboutians are anthropologically classified, but there is a much more fundamental reason for that attitude: the love of liberty.

To outsiders, particularly Africans, that love of liberty may ring hollow for a country which became independent from France in 1977 but which, to date, harbours a French military base and depends mainly on external financial assistance for its capital, and to some extent, budgetary expenditures. Contradictory as it seems, it stands to reason: Djibouti is located in one of the most strategic points on the globe—in the Horn of Africa, at the mouth of the Red Sea and the Gulf of Aden. It is thus at the crossroads of Africa, Europe, the Middle East and the Far East. With a deep-water and well-equipped port linked by a direct railway to Addis Ababa in Ethiopia, Djibouti is inevitably a tantalising prize for either of the superpowers. Furthermore, it is situated in a turbulent region with regimes whose particular ideological or religious hues are the antitheses of what Djibouti stands for.

A small country, Djibouti at independence had neither an army nor a police force of its own. These have now been set up. The army is of such size, though, that it can be described as symbolic. The French military presence is therefore seen as a dissuading factor and a guarantor of the people's liberty—and that liberty is manifested in the free-

doms of movement, of speech and of religion (Djibouti is overwhelmingly Islamic).

Advocates of multi-party democracy may reject the word "freedom" and point to the institution of a one-party state in Djibouti in 1981, but a simple comparison of the political stability that the country enjoys today with the instability of the past would convert many to the idea that it was perhaps the best possible solution for Djibouti. The National Assembly and the President are elected by direct universal suffrage.

It would have been inconceivable eight years ago that Djibouti would be a haven of peace in this region of Africa and that, in addition to its regional and international economic roles, it would become also a centre of regional and international conferences, relatively unknown to the outside world as it was. Djibouti is looking forward to hosting more of these conferences and is poised, if asked, to mediate in the various regional conflicts and squabbles.

Meanwhile, Djiboutians' love for liberty is reflected in the country's liberal economic policy, but with an economy entirely based on the port, the railway and the airport there is considerable unease about the artificiality and precariousness of their lives.

A century and half ago, these people were entirely nomadic and completely independent of the outside world. With colonialism and the development of the port and the expansion of the city of Djibouti, they have become more sedentary, seeking jobs, mainly in the capital where more than half of the country's estimated 400 000 people now live. With little agriculture, they survive virtually on food imports. Thus Djiboutians are today dependent on all fronts. They believe they can develop agriculture and diversify the economy—and that indeed is an immense task. ◦

AUGUSTINE OYOWE



Inf. Serv. Djibouti

## The struggle for greater self-reliance

A high-ranking Djiboutian official could not have expressed his country's worry better: "Supposing", he said, "there is an outbreak of war and we are completely cut off from the rest of the world, what will we do?". In an inter-dependent world, no nation would cherish being cut off but where-as many, as in the last world war, would try to survive on internal resources, Djibouti would literally be asphyxiated, because it has not much to rely on. It largely works for and lives on the world, providing services, receiving financial assistance from rich countries and international organizations and importing almost everything, including food. Although Djibouti has one of the highest GDP growth rates in Africa (an average 15.8% from 1970 to 1982), no economy could be more artificial and dependent, and this is as much the result of an accident of history as of geography.

### Historical background

It all began in 1859 when the French pitched camp in the small port of Obock. The Suez canal project was on

and, realizing the need for a supply base for ships travelling between Suez and Saigon, they decided to establish a more permanent presence in this part of Africa.

As it happened, Obock was near the kingdom of Abyssinia (Ethiopia) with which European powers had long sought the establishment of trade relations without much success because of difficulties of access. Through a treaty with the local chiefs in 1862, the French secured the right of settlement on Obock as well as mooring rights along the coast and territories between Ras Doumeira and Ras Ali.

In 1884, the Sultan of Gobaad ceded the Gulf of Tadjoura to the French, and, a year later, signed a treaty placing all his territory under their protection, and so was born the French Protectorate of Somaliland which was duly recognized by the local chiefs under a separate treaty.

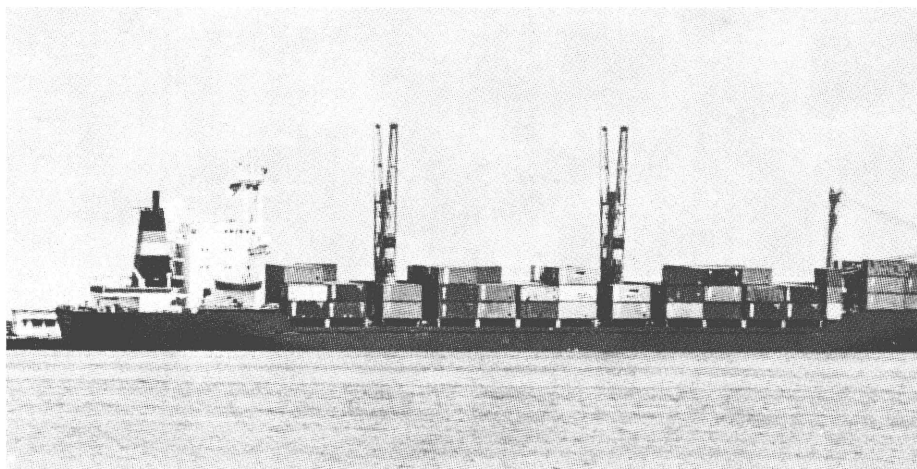
In 1892, the Governor of Obock, Léonce Lagarde, transferred his headquarters to Djibouti whose port had the advantages of being deeper and better sheltered. After much hesitation and calculations the French in 1897,

finally agreed to the construction of a railway through French Somaliland to Ethiopia, proposed three years earlier by Emperor Ménélik. This was completed in 1917 and it ran from Djibouti to Addis Ababa giving Ethiopia a direct access to the coast and French Somaliland its economic lifeblood. The port of Djibouti became the centre of attraction for jobs for the territory's inhabitants. It was the beginning of the profound changes that were to occur in the lifestyle of these people, the traditionally nomadic Afars and Issas.

Like all colonial possessions in Africa, French Somaliland evolved politically. In 1946, it acceded to the status of an Overseas Territory enabling it to have its own National Assembly and, ten years later, through the "loi cadre", its own governing council. In 1967, after a controversial referendum on association with France, the country was renamed the French Territory of the Afars and Issas and, in 1977, achieved independence as the Republic of Djibouti, but not before social and economic changes had taken place: the people had become more

# DJIBOUTI

sedentary, concentrating on Obock, Tadjoura, Dikhil, Ali Sabieh and the capital, Djibouti. Feeding patterns had also changed for the majority, with serious implications for a people with no agricultural tradition and whose lands, in any case, are at least 95% barren. Food imports and a high cost of living were the results. Worse still, drought and thirst were periodically exerting high tolls on human and animal life, mostly in the rural areas. With an economy still based on services, French financial assistance and the salaries of French military personnel in the country, Djibouti's independence was seen by many as being more or less in name only and talks



*A container carrier arriving at Djibouti port where there is now a new terminal for these kinds of cargoes*

**Table I: Port of Djibouti, receipts and expenditures 1972-1979 (in millions of DF)**

	1972	1973	1974	1975	1976	1977	1978	1979
Receipts	642.9	550.0	792.9	878.0	1 096.3	856.6	939.3	825.1
Expenditures	635.5	546.9	607.1	853.7	1 011.5	853.1	739.9	804.7
Balance (1)	7.4	3.1	185.8	24.3	84.8	3.5	199.4	20.4

(1) Payment to the Reserve Fund. Source: Port of Djibouti.

**Table II: Destination/origin of goods passing through the port of Djibouti, 1974-1975 (thousands of tonnes)**

	1974	1975	1976	1977	1978	1979
Djibouti	99	98	118	124	167	178
Ethiopia (2)	249	281	283	106	56	92
Transshipment (3)	45	70	215	155	141	61
Sail-boats	13	15	25	30	30	32
Total	406	464	640	415	394	363

(2) Ethiopian trade shown in these statistics does not correspond to goods transported through the railway. Road transport is negligible and livestock brought by foot to the port are included in the exports of Djibouti.  
 (3) Total goods loaded and off-loaded.  
 Source: Port of Djibouti.

about being more self-reliant in certain quarters appeared utterly ridiculous.

Eight years after independence, the young Republic has done very well economically recording, as already said, one of the highest (if not the highest) growth rates in Africa. This in spite of the decline of French budgetary subsidies from 30% to less than 10% and the high value of the dollar

which diminished the purchasing powers of French soldiers and their families in the country. Djibouti's franc<sup>(1)</sup>, it should be noted, is fixed to the American dollar. This is backed by deposits in dollars in an American bank. It is, as a result, one of the strongest and most stable currencies in Africa and one in which foreign confidence is high.

(1) 1 US \$ = 177DF.

Djibouti's economic growth can be attributed mainly to the substantial financial assistance it has received on the one hand from oil-rich Arab states, notably Saudi Arabia, Iraq and Libya (and that is the benefit of the country's membership of the Arab League) and on the other from Western countries. It should be underlined that the government's policy of strict neutrality and friendship towards all nations has been of immense help in generating goodwill from all. A donor's conference organized for the country in November 1983 drew a large attendance from Western and Arab countries. Djibouti presented to that conference a series of projects touching every aspect of its social and economic life. It was in effect its Five-year Development Plan (1983-88). Sixty-two per cent of the projects received financial support. The remainder concerned youth and sports development which the donors felt were less urgent under the prevailing economic climate.

The development strategy adopted by the government has been to



strengthen the service sector in an import substitution drive through the exploitation of available natural resources and through the imports of those raw materials that can be obtained cheaply.

## The service sector

The port of Djibouti, which had serious setbacks in the years prior and immediately after independence in the closure of the Suez canal (1967-75), in the disruption of rail traffic in the 1977-78 Ogaden war and in the diminution generally of Ethiopian traffic, came in for expansion and diversification (see page 39). A container terminal was built and a cold-storage plant installed in bids to ward off competition from neighbouring ports in bunkering, watering and transshipment. The Djibouti-Addis Ababa railway, indispensable to the port and to Ethiopian imports and exports, was provided with rolling stock financed by the EEC. The airport, on the other hand, was enlarged and equipped to take wide-bodied jets in efforts to open up the country to the outside world, develop tourism and facilitate the imports and exports of landlocked African states which might want to use Djibouti's airport and port. Zaïre and Sudan are said to have already made use of these facilities.

In addition to improving the traditional pillars of the service sector, the

country acquired a satellite communication system using particularly the Arab Intelsat.

With the banks, hotels, saloons and supermarkets doing brisk business there was a risk that Djibouti's economic expansion would obscure in the minds of the authorities its artificial and dependent nature and the serious imbalances it has given rise to; i.e. the import of almost everything, the high cost of living, the increase in urban migration, slums and unemployment, and strains on social amenities. But this has not been so.

Responding adequately to these problems seemed impossible for a country whose natural resources are limited to underground water, geothermal energy, salt, perlite, limestone and patches of arable land. Many do not believe the authorities when they claim that they can reduce Djibouti's heavy dependence on the outside world with such limited resources. However, a careful examination of the government's past and present actions and plans for the future reveals a coherent whole that might just help it make significant impact in the struggle, providing, of course, foreign financial assistance is uninterrupted.

## Food production — vegetables, meat and fish

Djibouti, being rich in underground water, the first move was to overcome



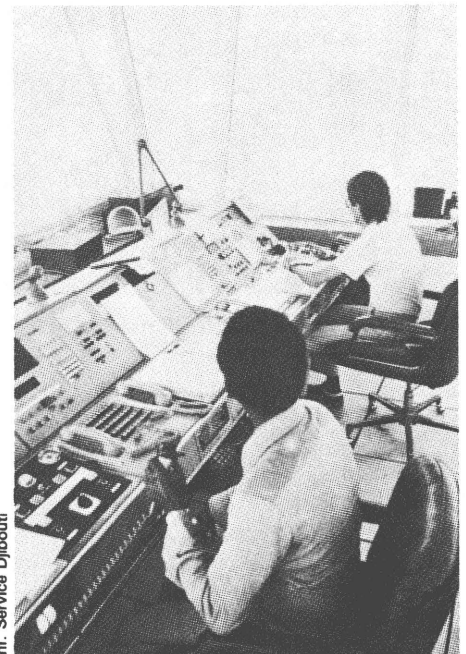
Satellite communication equipment at the Djibouti town post office.

*"In addition to improving the traditional pillars of the service sector, the country acquired a satellite communication system using particularly the Arab Intelsat"*

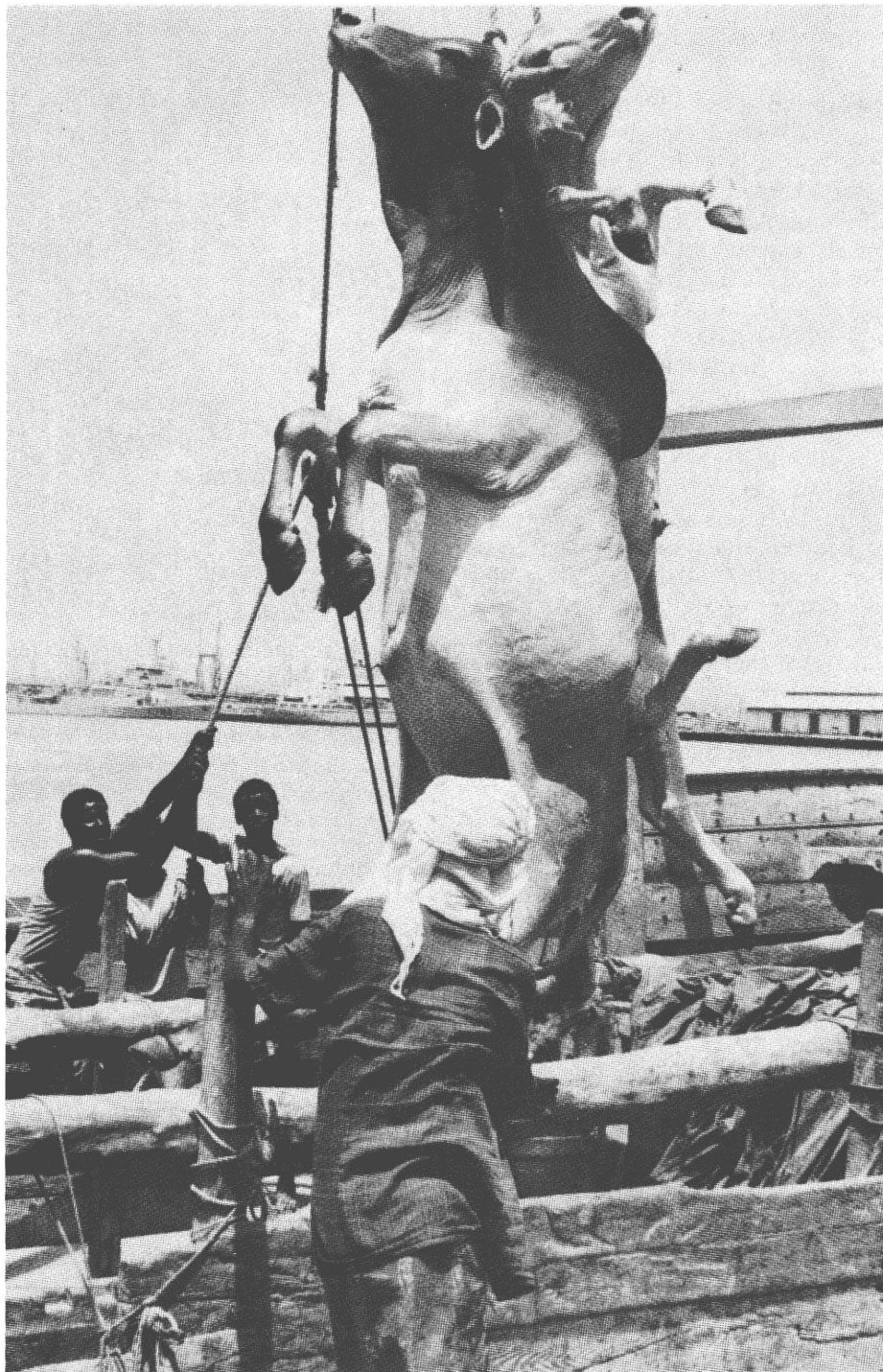
the problem of thirst from which men and animal died in the bouts of severe drought that afflict this part of the Sahel. This they did by drilling boreholes on salt-free water tables throughout the country with financial assistance from Saudi Arabia. The next move was, and still is, to obtain water to



A busy scene on the Djibouti-Addis Ababa railway



The control tower at the newly enlarged international airport



Inf. Service Djibouti

*Live cattle being loaded on a dhow at Djibouti port for the Saudi Arabian market*

develop agriculture on the altogether 6 000 hectares of arable lands in the north around Tadjoura and in the south around Ali 'Sabiḥ—high altitude areas where rainfalls are over 200 mm annually—between Djibouti town and Loyada and in the districts of Dihkil and Obock. Results so far are good. Pilot projects in vegetable and fruit cultivation are proving successful thanks mainly to refugees with agricultural traditions who have been

grouped together with Djiboutians into co-operatives. Locally produced maize, onions, tomatoes, oranges, papaya and watermelons are now common sights in market stalls in Djibouti. According to the Minister of Agriculture and Rural Development, Ahmed Hassan Lian, internal vegetable and fruit productions now represent 10% of imports—a very small percentage but in the drive for greater self-reliance this is an encouraging

trend that deserves support. The arid climate (high temperatures and irregular and small rainfalls), high winds and barrenness of lands nevertheless remain great handicaps.

Cultivation concerns a very small number of people and a very small proportion of land. Over 100 000 Djiboutians remain pastoral nomads living as they have always done on milk and meat and herding their animals<sup>(2)</sup> along the coast and on mountain slopes where rainfall is higher and there is some vegetation.

Djibouti exports live cattle to Saudi Arabia and it appears that most nomads replenish their stocks by buying from either Ethiopia or Somalia and smuggling them across the border. This illegal trade is said to have declined as a result of tighter border controls by Ethiopian and Somalian authorities. It is a trade which, in the view of many, is vital and should be regulated and legalized through agreements between Djibouti and her neighbours.

The expansion of the livestock industry is, of course, restricted by the arid and hot climate, the inadequacy of watering-points and forages. These are, however, being tackled by the government. An inventory of watering-points is being undertaken to determine requirements (which will be met eventually through borehole drillings) and programmes of re-afforestation of "doum" palms, including forage cultivation, have begun. These are aimed at protecting the existing vegetation covers and at providing fodder and shelter for herds. The success of these programmes will largely determine the course of the livestock industry—that is, whether or not ranching should be introduced on a wider scale. There are talks of importing animal feed from Ethiopia and of establishing an animal feed factory in Djibouti which could make use of the by-products of the fishing industry and of the abattoirs to ensure a more intensive animal husbandry. Losses of animals through disease have already been curtailed thanks to EDF-financed projects of animal health in the country. The expansion of the livestock industry is important not only for dairy

<sup>(2)</sup> Animal population: 500 000 sheep, 400 000 goats, 30 000 bovine, 50 000 camels and about 500 donkeys.

production but also, as we shall see later, for two proposed industrial projects, shoe-making and tannery.

If the food resources of the land appear meagre, those of the sea are not. Djibouti's 370 km coastline gives it considerable fishing potential. Studies have shown that 3000-4000 tons of fish can be taken annually from its territorial waters without danger to stocks. Unfortunately, Djiboutians have, again here, neither the tradition nor a taste for fish. The 500 tons annual local needs are those of expatriates and hotel businesses. While the campaign is on to get the indigenous population interested in this important source of protein (frozen fish depots have been built in Ali Sahieh, Dikhil and Tadjoura), the government has, since 1980, intervened in the industry with a view to ensuring that domestic fish requirements are met locally and if possible to earn foreign exchange through exports: 180 or so fishermen in Djibouti town, Obock and Tadjoura have been trained, equipped and organized into a cooperative. Annual fish production has, as a result, risen to close to the 500 ton mark of domestic consumption—a not negligible achievement but one that is a long way from the 4000 tons annual capacity.

## Mineral resources

Djibouti has valuable minerals which could play a significant role in the development of manufacturing industries. There are salt deposits in Lake Assal (a breathtaking lake 153 metres below sea-level, believed to be the lowest place in Africa), the exploitation of which will become possible once the Djibouti-Tadjoura road under construction has been completed. The deposits are large and pure. There are limestone deposits which could give rise to a cement factory and there is also perlyte, an insulation material used in building which is apparently found only in Djibouti and Turkey and for which there is a considerable market in the Gulf States. The biggest and by far the most important mineral resource of Djibouti is geothermal energy, Djibouti being situated in a region of active volcanoes and blessed with hot underground waters. Steams of these can, in fact, sometimes be seen from the air. If there is any natu-

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**Workers at an agricultural pilot project**  
*Djibouti now produces 10% of its food requirements*

ral resource Djiboutians are determined to exploit, it is this source of energy, as fuel-generated electricity on which it currently relies is very expensive and is one of the factors that could make or break the economy.

The exploitation of this source of energy would have been realized by now but for technical and financial problems. Discoveries were made way back in the early 1960s by the colonial regime between Lake Assal and the Goubet and near Lake Abbé and the government has, since independence, placed emphasis on new and renewable energy sources. The salinity of deposits in the Lake Assal area, the most promising of the two has made them technically difficult to exploit and moreover there has been a lack of finance. It should be noted that experiments are currently being made in the United States on the use of saline geothermal water and that Djibouti is fol-

lowing them very closely. Positive results will revive interest in the Lake Assal geothermal project.

Djiboutians are now looking elsewhere in the country to exploit their first geothermal energy. The Italians have discovered another deposit they believe is as promising as Lake Assal in Hanlé. It is salt-free and the government has decided to exploit it on the advice of a group of scientists it brought together from all over the world. It has been able to raise US \$ 16.6 million from several international financial institutions (mainly from the African Development Bank (ADB), the OPEC Fund and the World Bank) for this project. Drilling of up to 2000 metres will begin this January to confirm the importance of the reservoir and the quality of the gush. "We are very optimistic", says Minister of Industry Fahmy Ahmed Elhadj, "we now think that geothermal energy is

Inf. Service Djibouti



*Fishing: a new industry for Djiboutians*

# DJIBOUTI

no longer a hope but rather a certainty. We are therefore very confident about the future. We hope to be able to start building our first geothermal power station by the end of 1989”.

## Manufacturing: emphasis on import substitution

It is on the industrial front that Djibouti's plans are most ambitious. Before independence, manufacturing was limited to soft drinks. Now the government plans a whole range of small and medium-sized industries based on local resources and, if possible, on imported raw materials. The emphasis is, of course, on import substitution in order to conserve foreign exchange and reduce dependence on foreign countries but the government has its eyes also on exports.

There have been some notable achievements in this sector since independence; in 1981, a mineral-water factory, which uses local water resources, was commissioned at Tadjoura. It was the first industrial experience of the young Republic and, so far, a very successful one. Started with foreign expertise, Djiboutians have today acquired the technology and are running the factory themselves and making an annual profit of between DF45 million and DF 50 million. A dairy plant, a paper-mill and a bottling factory, all depending on imported raw materials, have since seen the light of day. A tannery, a shoe factory and a joinery are planned. It is expected as already indicated that once the livestock industry has been sufficiently organized and is working well, the raw materials for the dairy plant, the tannery and the shoe factory will be provided locally.

A plan for a cement factory for which limestone is available is proving more difficult to realize. Djibouti's domestic consumption of cement stands at between 35 000 and 40 000 tons annually. Feasibility studies, first for a 300 000 ton-capacity and then for a 100 000 ton-capacity factory gave negative results: the cost of production in both cases would have been too high to make operation viable and there would have been, in any case, no customers for the surpluses that would have arisen, the markets of neighbouring countries being already saturated. A 60 000 ton-capacity factory seems

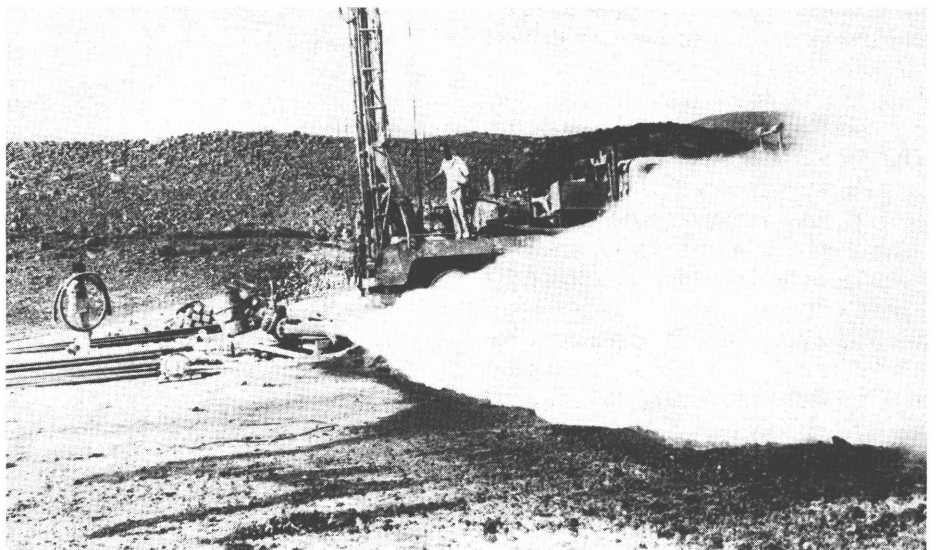


*Lake Assal with its mounds of salt*

likely to be set up in the near future. Another study has shown that, with appropriate technology (using coal, for example, for the furnace) costs can be reduced considerably. Furthermore, domestic consumption of cement is forecast to rise to 100 000 tons annually by 1995. Austria and Sweden have shown interest in this project and talks are continuing, according to the Minister.

Industries that depend on imported raw-materials are welcomed in Djibouti providing the unit cost of production is lower than the cost of importing the finished product. Raw materials can, in fact, be imported cheaply from neighbouring countries and sometimes from as far away as Bulgaria in the case of wood, for example.

The government expects foreign investments in these areas, preferably in partnership with Djiboutians. It is confident that its liberal economic policy (one of the most liberal in Africa) and incentives such as tax exemption on equipments and means of production, on raw materials and on profit are sufficiently attractive. The invitation to foreign investors is not only aimed at finance but also at technology. The case of the mineral water factory of Tadjoura has proved to the government that Djiboutians have the aptitude to acquire technology fast. It all fits into its desire for greater self-reliance—a desire that also extends to capital. The Ministry of Industry is doing everything, according to Fahmy Ahmed Elhadj, to encourage Djibou-



*A geothermal drilling site*

tians with money to invest in the various projects that have been outlined. A development Fund has been created to grant loans at low interest rates to them.

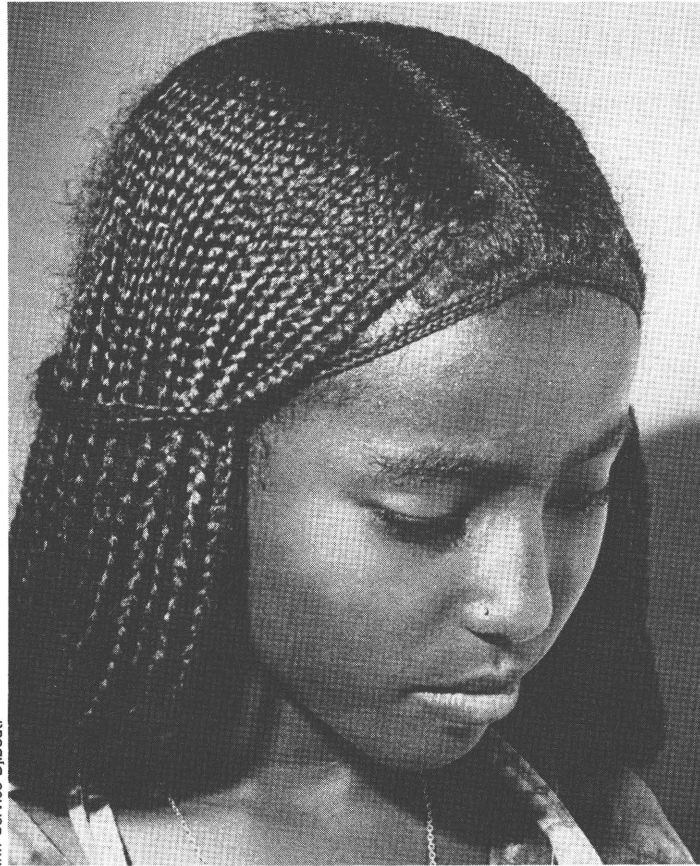
Surprising as it may seem, the government is planning to cash in on Djibouti's strategic position as an international cross-roads by establishing industries that are geared towards foreign markets. At the Free Zone area of the port of Djibouti where transit goods to neighbouring countries are stored tax-free, the products of export-oriented industries located in this area will be given the same treatment as the transit goods...

## Urban unemployment

All these efforts in agricultural and industrial development have employment as their overall objective. The urban population, as already indicated, has increased tremendously over the years. Swelled by refugees, victims of war and famine in the neighbouring countries, unemployment is a major problem for the cities, especially for Djibouti town. The problem is so acute that the authorities, with foreign exchange also in mind, once contemplated encouraging Djiboutians to emigrate to the Gulf oil-rich states. That plan has apparently been abandoned.

Djibouti has one of the highest population growth rates in the world. In this Islamic state, talk of birth control is taboo and is a sensitive issue of which the government is fully conscious. However, population pressure is not yet a problem, small though the country may be. Population distribution and rural exodus are the issues, as the director of the Office of the President, Ismael Guedi Harved, pointed out to *The Courier*.

Unemployment may be a problem beyond the ability of the government to solve, but the latter is nevertheless rising up, to a large extent, to some of the social problems urban migration has posed, notably housing and electricity. During the colonial regime urban planning was non-existent here. Now it plays an important role as the 5000 housing units planned by the government at independence in 1977 are built (entire old quarters are being demolished), the electricity cable net-



Inf. Service Djibouti

*A young Djibouti girl*



Inf. Service Djibouti

*Over 100 000 Djiboutians remain pastoral nomads*

works are revised and the drainage systems are constructed. Water supply, especially in Djibouti town remains a major headache.

There is no doubt that in terms of social amenities Djibouti stands head and shoulders over many African countries. Its health service is one of the best, it has with well-equipped hospitals and a doctor/population ratio of one for every 3700 people. The hospital in Djibouti town is said to attract many foreigners and is already unable to cope with demands.

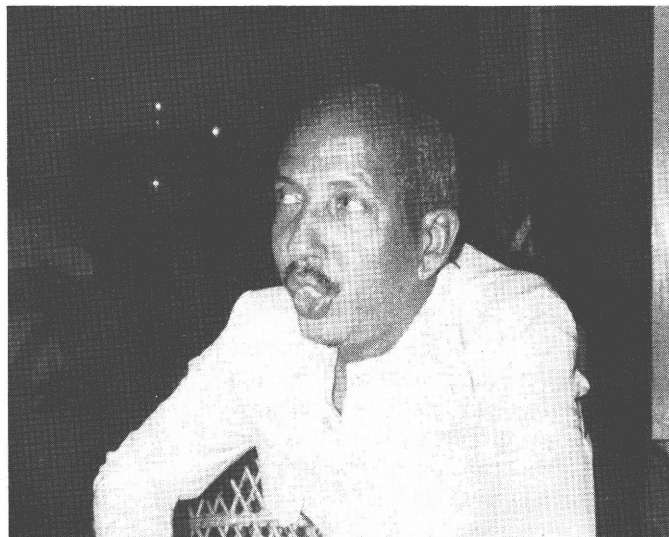
All in all, therefore, Djibouti's eight years of independence have been ones of economic and social progress and ones in which a coherent strategy for greater self reliance has been drawn up. Achieving that objective will be a long haul indeed in view of the immense disadvantages facing the country but, as Ismael Guedi Hared, the director of the Office of the President told this writer in a conversation, the success or failure of any country depends on the quality of its leaders. Djibouti's leaders appear to have the qualities that will see the country through the difficult years ahead in the battle for greater self-reliance. o A.O.

## “Djibouti is doing all it can for peace”

Interview with the Director  
of the Office of the President  
Ismael Guedi Hared

Although a very small country with very limited resources, Djibouti has, since independence in 1977, secured the goodwill of many nations with its policy of neutrality and friendship. It has done well economically during these years, strengthening at the same time its economic and political roles in the Horn of Africa.

In this interview, Mr Ismael Guedi Hared, Director of the Office of the President, speaks of his country's difficulties and achievements.



Ismael Guedi Hared

► *This is a difficult time for the whole of the Third World. How do you see the Djibouti's economic situation at present?*

— Djibouti is obviously going through a difficult period, as are all the countries of the Third World. The very structure of our economy, which has small primary and secondary sectors, means that we depend on international economic activity. Our transport and trade are affected by the stagnation of international trade and business, although new policies in the port sector particularly, with the creation of a container terminal so we can handle transshipment traffic, will enable us to cope with economic problems in other areas.

► *To what extent has the drought which has hit this region particularly hard also affected your country and how have you responded to the problem?*

— As I said before, there is very little farming in Djibouti and the drought which has hit us several years running has had a disastrous effect on our herds and our nomads.

The first response to this drama has been to provide relief for the afflicted populations through the mobilization of national and international aid. Then there are agricultural development projects to help families who have lost everything to resettle and, lastly, schemes to provide new water

points and reconstitute pastureland have been started.

► *How does your Government manage to run a policy of neutrality in a part of the world that is fraught with regional and international political tension?*

— Our Government's policy of neutrality is based on respect for all peoples and their Governments whatever the economic and political régimes they have chosen. The one aim of the Republic of Djibouti is to do all it can for peace.

► *This part of Africa does not have a regional organization as they do, say, in western or southern Africa. Yet stronger regional cooperation was one of the recommendations of the 21st OAU summit. Does Djibouti cooperate with its neighbours and how?*

— Although the Republic of Djibouti's economic resources are poor, it is currently involved in fairly costly schemes to set up a regional drought-combatting organization, IGGAD, which will group our country with Ethiopia, Sudan, Somalia and Uganda. But well before this, Djibouti had joined its neighbours in regional cooperation projects — the railway with Ethiopia and a highway with Somalia.

### The donors kept their word

► *More than \$250 million was earmarked for projects in Djibouti at the*

*donors conference in November 1983. Did the donors keep their word and what major projects have been carried out?*

— Overall, yes they did. Since November 1983, we have had to produce financing dossiers and technical studies and coordinate the funders, as many of the projects called for cofinancing.

The main projects will start in 1986. In particular, there will be a \$16 million urban development scheme cofinanced by the World Bank, USAID and the CCCE; two school building projects cofinanced by the World Bank (\$7 million) and the ADB (\$8 million); a \$21 million project to extend Djibouti airport (cofinanced by Saudi, Kuwaiti and Abu Dhabi funds), a drinking water supply and drainage scheme costing \$12 million (which the ADB will be providing), a \$7 million AFESD-financed project to build a slaughterhouse and a cattlefeed factory and a \$6 million electricity power station extension scheme.

Further projects will start in 1987, — the Tadjourah road (called Unity Highway) construction scheme, worth about \$40 million, is already under way.

### Less foreign subsidising of national budget

► *Djibouti is very dependent on foreign aid, both for its budget and its*

*development schemes. What likelihood is there of a more autonomous economy?*

— Djibouti used to be extremely dependent on foreign aid for its budget, but this is no longer the case today. Foreign subsidies only account for 5% of the national budget now whereas it was more than 30% at independence.

Until we have set up projects that will generate new resources, it is clear that we will have to call on foreign assistance with our development schemes. Do not forget the efforts Djibouti's Government has had to make just in education where our urban facilities were very poorly developed before independence.

► *What are your Government's priority sectors today?*

— The Government's current policy is to encourage productive projects and help the most underprivileged sections of the population. This is why the primary sector — developing agriculture and livestock and fishing and water resources — is top priority.

► *How important were Lomé I and II to your country and what do you expect of Lomé III which is shortly to come into effect?*

— Independence, on 27 June 1977, came when Lomé I was already under way, so it was difficult to get much aid from the EEC at that stage.

The new Convention, which is due to start in 1986, represents the same amount (in millions of dollars) as we got from Lomé II, so the EEC does not seem to have taken account of the specific case of Djibouti's currency, the Djibouti franc, which is fixed to the dollar. So the new Convention will not give us a grant of aid from the 6th EDF expressed in our own developing currency as other ACP countries get.

► *What do you see as the significance of your country belonging to the ACP Group which celebrated its 10th anniversary this year?*

— For us it is the hope of being able to negotiate with the Europeans as equals one day, so we can bring greater justice to ACP-EEC relations ◦

Interview by A.O.

## Djibouti in brief

### Physical characteristics

Djibouti has an area of 23 000 km<sup>2</sup>. It is mainly arid, with scattered volcanic rocks and a mountain range along the Gulf of Tadjoura. The Day and Mablbas mountain ranges are the only areas where vegetation is found in the whole country. There are patches of arable land around Tadjoura and Ali Sabieh in the south. Off-shore the marine life is spectacular, with a variety of fishes. The country's climate is torrid with temperatures reaching 40°C in the shade between May and September but descending to moderately pleasant 25°C between

point of all races: 20 000 Afars, 75 000 Issas, 60 000 Somalis (immigrants), 18 000 Arabs (Yemenites) and 12 000 Europeans made up mainly of the 6 300-strong French military personnel and their families.

### Political System

Djibouti is a one party state, governed by the "Rassemblement Populaire pour le Progrès" (RPP). The National Assembly and the President are elected by universal suffrage. President Hassan Gouled Aptidon has led the country since independence in June 1977.



President Hassan Gouled Aptidon

October and April. Annual rainfall is not more than 150 mm.

### Population

According to a 1982 estimate, there are 400 000 people in the country. These are made up mainly of the Afars or Danakils and the Issas (of Somali origin), both traditionally classified as Chamite-Semites by anthropologists. Other groups include Arabs (mainly Yemenites) and Europeans (mainly French). The Afars live in the north and the Issas in the south. The capital, Djibouti, where more than half the population live, is the meeting

### Mainstay of the economy

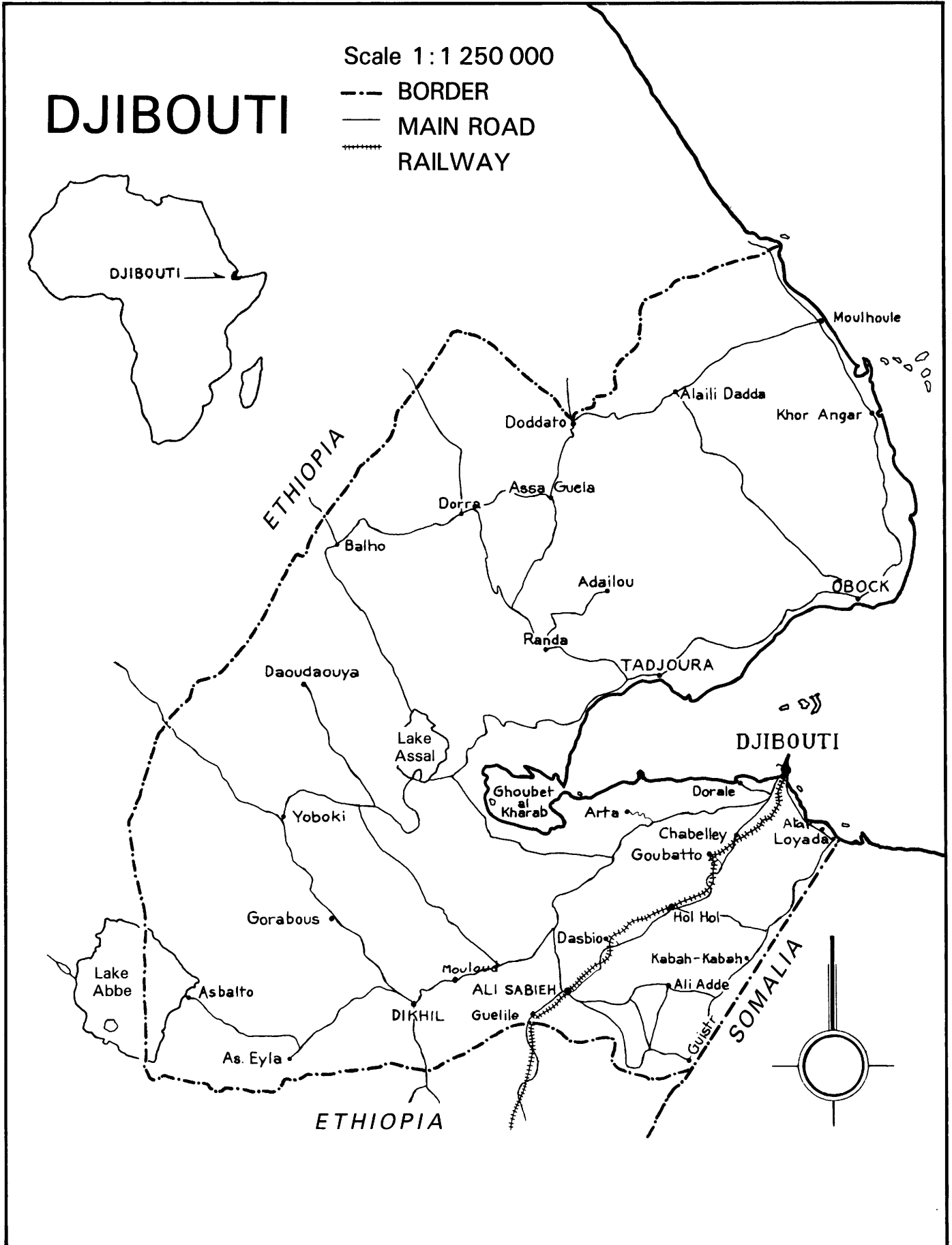
Services of port, railway, airport, hotels and banks. Djibouti depends heavily on foreign financial assistance for capital expenditures. French budgetary assistance has declined from 30% at independence to 5%.

**Currency:** Djibouti franc (fixed to the US dollar at the rate of US\$1 = 177 DF)

**Gross Domestic Product (1982)** US\$ 350 million

**Main towns:** Djibouti, Obock, Tadjoura, Ali Sabieh and Dikhil. ◦

# DJIBOUTI





## The service industry: all roads lead to the port

Eight months ago, at the height of the massive international famine relief operation for Ethiopia, the biggest warehouse at the port of Djibouti was stacked high with bags of grain awaiting transportation to Ethiopia. Dockers had worked flat out off-loading ships laden with the grain and were anxious to see them onto rail wagons bound for Addis Ababa. Bottlenecks at the Ethiopian side of the railway made this very difficult. However, the availability of the warehouse and the diligence of the dockers enabled ships to come with their mercy cargoes and go without waiting for long. This brought once more to the fore the vital importance of the port of Djibouti to Ethiopia and its standing as one of the most well-equipped and efficient in the shipping world!

The port of Djibouti, it should be recalled, edged out Obock in 1892 as a bunkering centre when Governor Léonce Lagarde transferred his headquarters there. The construction of the railway from the port to Addis Ababa at the turn of this century conferred upon it the role of handler of the bulk of Ethiopian imports and exports and, a couple of years later, confirmed its triple vocation of bunkering, transit and transshipment.

The port has remained ever since loyal to these roles, rising in fact at one point to become fourth in the world. The closure of the Suez Canal in 1967 following the Arab-Israeli war put an end to that, as ships diverted to pass through the Cape of Good Hope—a situation that lasted for nearly eight years. The port suffered another blow in the 1977/78 Ogaden war when rebels blew up the Djibouti-Addis Ababa railway to deprive Ethiopia of its import and export lifeline. Although traffic was resumed at the end of hostilities, it has not fully recovered in volume, a fall that at one point threatened to render the operation of the railway unviable. Djibouti has since got Ethiopia to guarantee a volume of traffic at least equal to the viability threshold of 300 000 to 400 000 tons annually or, failing that, to bear 90% of the losses. The railway, it should be noted, is jointly owned and

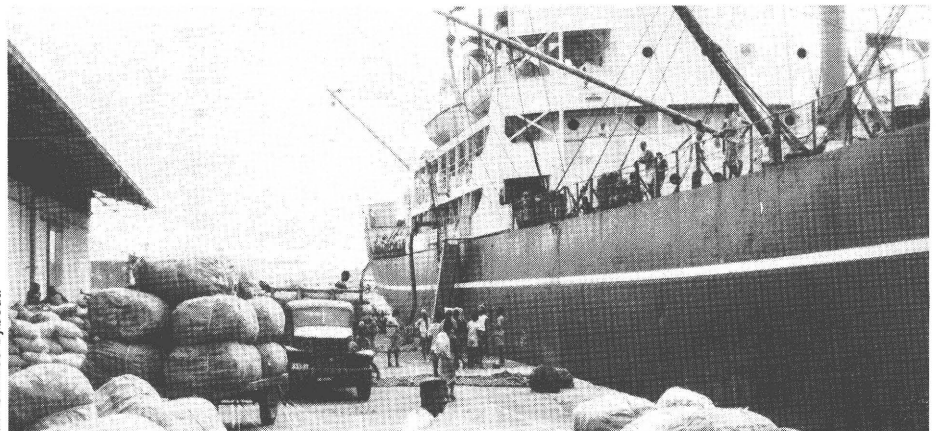
run by the two countries through the Djibouti-Ethiopian Railway Company.

The prospect of Ethiopia having its own direct access to the coast appears remote for the moment. The Ethiopian port of Assab, though being linked with a good road, cannot compete with Djibouti in facilities, speed and efficiency and as such the port of Djibouti will remain, in the foreseeable future, the main point for Ethiopian exports and imports. The port also serves the northern parts of Somalia. This will be reinforced once the Djibouti-Berbera road (the feasibility

are only on goods consumed in the country and charges are made for services rendered on transit goods.

The port's roles of bunkering and transshipment have also been strengthened in recent years to beat off competition from neighbouring ports. A container terminal was opened in February 1985 adding a completely new dimension to its transshipment activities. Bulk cargo carriers, aware of the facilities and efficiency of the port, now prefer to off-load their goods there for other smaller carriers to pick up. They estimate that this practice is cheaper than waiting for a long time at the destinations of the goods in question.

About 1 200 ships berth annually in Djibouti (one out of every 10 is a war-



Inf. Service Djibouti

*A wharf at the port of Djibouti*

study of which was financed by the EEC) has been constructed. So the port of Djibouti is vital to regional cooperation and development.

As for its significance to the Republic's economy, this cannot be overstated. Djibouti's airport has been expanded with the twin objectives of integrating the airport into the port system and boosting tourism. It has been widened and equipped with a 1 100 sq metre warehouse to receive goods brought in by wide-bodied aircraft. Plans are afoot to adjust the rail-line to run from the Free Zone of the port to the airport in a bid to facilitate the airfreighting and transshipment of goods to and from the landlocked African states.

A free port for a long time, the port of Djibouti became autonomous in 1982. The Republic itself is one of its biggest clients. There are no import quotas and the government does not collect import and export duties: taxes

ship, a further illustration not only of the economic significance of Djibouti, but also its strategic military position, at the cross-roads of Europe, Africa, the Middle East, and the Indian Ocean). In 1984, about 380 000 tons of goods were transhipped through the port as against 287 500 tons in 1983 and 298 900 tons in 1982. The port is the biggest employer in the country with some 400 employees and about 1 200 dockers.

These port, rail and airport activities have given rise in recent years to an unprecedented boom in retail trade and banking. Shops, supermarkets and saloons have sprung up, especially in Djibouti town, all dealing with imported goods. In a country where anyone can come and go with any amount of foreign currency, the banks here have found a paradise. There are already seven of them. Djibouti's ambition is to become Africa's banking centre. ○ A.O.

## Developing certain types of tourism

When the Djiboutian authorities decided to develop tourism soon after independence in 1977, reactions everywhere were almost the same: they must be out of their minds. With hardly any of the traditional tourist attractions, spectacular wildlife and fine beaches for example, who in the world, it was asked, would travel to such a remote, largely unknown part of Africa? The young republic had the awesome task of tackling the urgent problems of drought, thirst and hunger. Adverse publicity about the torrid climate and the high cost of travel seemed to nail for good any pretensions the authorities had in this area. Eight years later, many are coming around to the idea that Djibouti does indeed have tourist potential and that this can be developed, thanks to the publicity campaign waged by the Office du Tourisme and its dynamic director, ex-ORTF<sup>(1)</sup> cameraman, Moussa Robleh. Some two billion Djibouti francs have already been invested in this sector, according a report published recently on the industry.

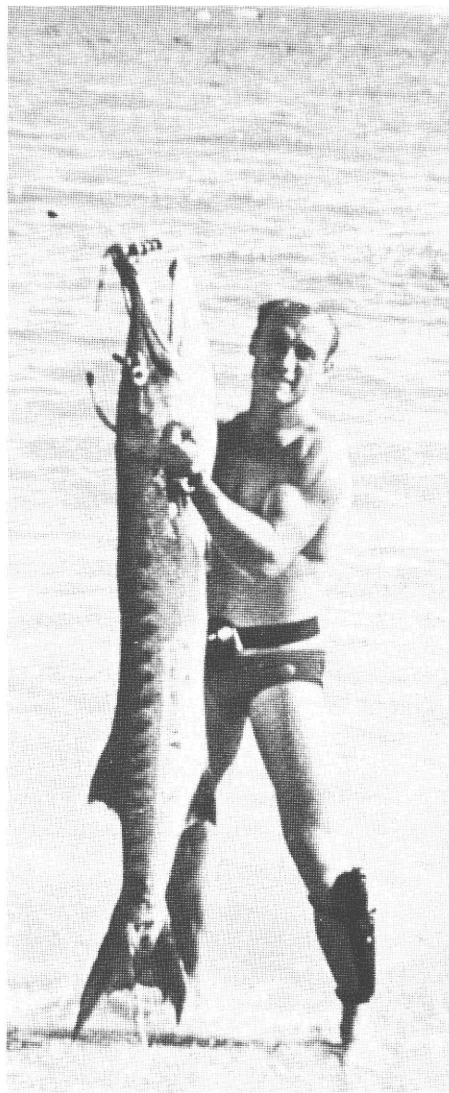
### Good destination

The initial tasks have been to educate the people on what tourism is about and to dispel whatever wrong impressions talks about the country's inhospitable climate may have created in the minds of potential visitors. True enough, in Djibouti, during what they call the "hot season", from May to September, the average temperature is as high as 35°C and the two winds that blow across the country, the south-westerly Sabo and the north-westerly Khamsin are dry and sandy. But the "cool season", from October to April, is entirely mediterranean and pleasant as the average temperature is 25°C and there is occasional rainfall. These are the cold autumn and winter months in the Northern developed countries, making Djibouti a good destination for tourists from this part

of the world in search of real and pleasant sunshine. There are now weekly flights by Air France, Ethiopian Airlines and Djibouti Air, but the great handicap is cost: Djibouti, compared with other destinations, is out of reach of the average tourist in terms of air fares and hotel accommodation.

### Education and adventure

Djiboutians, however, have no illusions about the kind of tourism they intend to develop. Mass tourism is out of the question—and this is welcomed



**A big catch off the coast of Djibouti**  
*Djibouti is a good destination for water sports enthusiasts*

too for an Islamic state that would be hard put to cope with its social consequences. Djiboutians are aiming instead at specialized forms of tourism: education and adventure. Djibouti has a diversity of countryside scenes, is located in one of the rare areas of active volcanoes in Africa and has a marine life teeming with fauna of different types and colours while, on land, there are birds and wild animals of interest: vultures, sea eagles, flamingoes, pelicans, leopards, jackals, hyenas, panthers, wildcats and a variety of monkeys. It could prove a paradise for geologists, ornithologists, ecologists and water sports enthusiasts like divers and skiers.

### Hosting international conferences

Although all the necessary infrastructures are in place in the capital Djibouti (there are seven hotels of which at least three are of international standard), the cost of living, as mentioned earlier, is a great handicap. Bed-occupancy is estimated at between 50 and 60% and there are about 10 000 visitors annually, mainly businessmen. Djibouti, however, has begun to host international and regional conferences and now frequently receives visits from cruise ships. These are areas the authorities want to develop further.

But extending tourism to the rest of the country remains a major problem not only because of the difficulty of access but also because of inadequacy of rest-houses and shelters. The government's desire for private investments in this area has so far met with a complete lack of interest, as was its attempt to slip in projects on rural shelters during the November 1983 donors' conference. This represents a severe blow, as it is at present encouraging domestic tourism as a way not only of enabling Djiboutians to learn more about their country but also of spreading the monies earned in cities from tourism and other service industries. ○

A. O.

(1) Office de Radio et Télévision Françaises.

# EEC-Djibouti cooperation

by Jean-Louis HOUDART (\*)

Since Djibouti became independent on 21 June 1977, cooperation with the EEC has brought it ECU 18.9 million. Programme aid under Lomé I was worth ECU 3.9 million and it rose to ECU 5.4 million under Lomé II. Food and emergency aid worth ECU 6 million were granted to the Republic over that same period (1977-85), in particular for drought victims.

\* \* \*

EEC programme aid has been concentrated on areas that the country saw as priority ones—rural development and the improving of services in the city of Djibouti.

Continuity has been assured in both these sectors during the 4th and 5th EDFs and other means available (food aid counterpart funds) have been used to support projects financed from programme aid.

In order to improve living conditions and reduce poverty in farming and herding, some of the Community's aid has, with the agreement of the authorities, been channelled into the three main areas of rural development—herding, smallholdings and drinking water supplies.

The herding projects that have been run (with other donors) have improved animal health (through epidemiological surveys and the installation of delousing baths), increased the extent to which potential is exploited by building a cattle holding unit for the beasts destined for export and the meat trade. And, in view of the importance of nomadic herding, special schemes have been run to improve the cattle routes (studying the state and potential of various pasturelands and water-points). A doum palm planta-

tion (where transhumance cattle rest) restoration scheme is now being run as part of the campaign against hunger in the world.

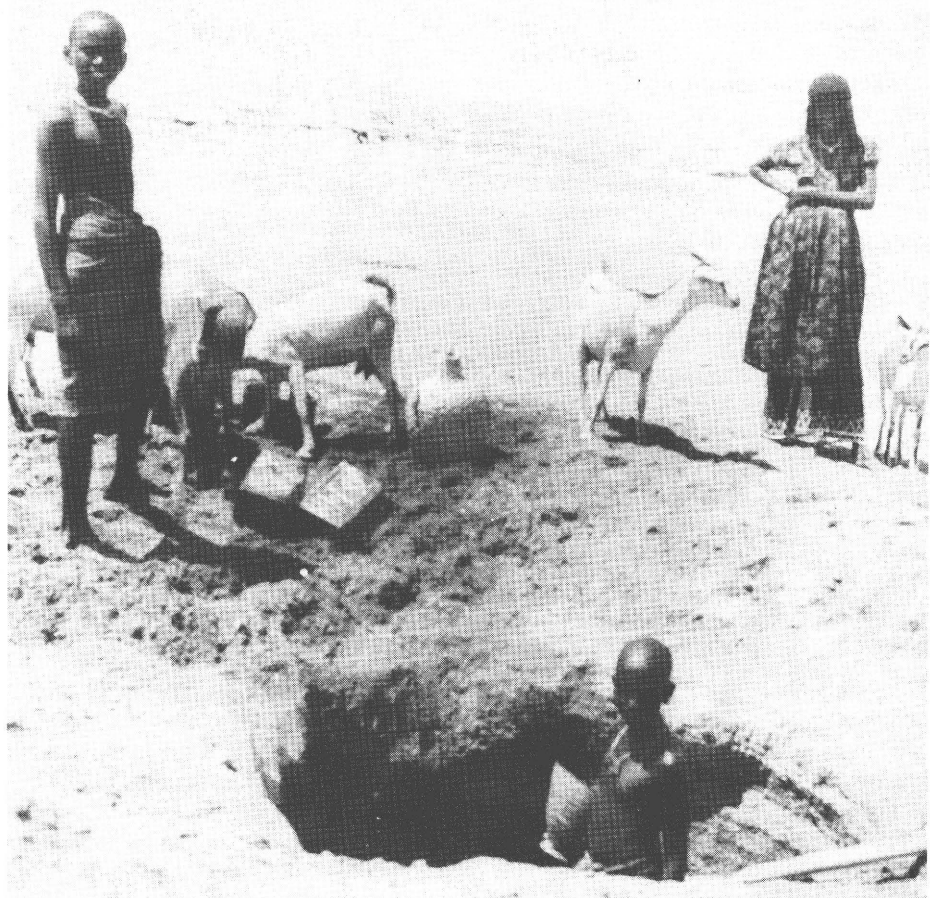
Small (mainly horticultural) farming has been improved by the creation of a pilot plot and the introduction of agricultural training. And the food aid counterpart funds have been an opportunity to finance a number of agricultural plots in northern and southern Djibouti, through non-governmental organizations, thereby making a contribution to the country's agricultural independence.

Lastly, one of the main priorities in the rural world is water control. The anti-drought campaign has involved the Community in supplying equipment for boreholes and wells and financing a micro-project programme to actually sink them. A rural supply scheme has also been run in Rwanda, in the north.

As the idea is to enable the town of Djibouti, where a large percentage of

Community aid to Djibouti (1977-1985)	
	ECU '000 000
<b>Lomé I</b>	
— Indicative programme	3.9
— Risk capital	1.05
	4.95
<b>Lomé II</b>	
— Indicative programme	5.4
— Exceptional aid	0.3
— Risk capital	2.25
	7.95
<b>Non-Convention</b>	
— Food aid	5.7
— NGO and budget lines (1)	0.3
	6.0
<b>Grand total</b>	<b>18.90 (2)</b>

(1) Including ECU 200 000 from the Hunger in the World campaign.  
 (2) Plus regional projects (the Djibouti-Ethiopia railway, for ECU 24.8 million, and the Djibouti-Berbera road, ECU 1.5 million).



**The search for water**

*As part of an "anti-thirst" campaign, the Community has supplied boring equipment and financed a series of microprojects*

(\*) Administrator, Directorate-General for Development.

# DJIBOUTI

## IVth EDF Indicative Programme (ECU 3.9 million) — list of operations

Title of project	Amount committed (ECU)
Pilot plot and agricultural training	579 885.29
Preparatory planning study	158 310.82
Rural water engineering — supply of boring equipment	611 783.45
Extensions to the Djibouti city drainage system	312 987.70
Study grants	703 756.44
Social infrastructure investment	148 958.69
Adult vocational training centre, Djibouti	30 915.82
Study of the port	353 166.37
Study of housing	221 950.38
Study of the health care development plan	160 000
Finalization of lists of equipment for the Hôpital Peltier	11 836.47
Outline study of the development of the tourist trade	34 000
1st microproject programme	315 000
<b>Total</b>	<b>3 642 551.43</b>

## IVth EDF Indicative Programme (ECU 5.4 million) — list of operations

Title of project	Amount committed (ECU) by end December
Training (study grants)	100 000
Improvement of animal health	1 123 000
Equipment for the Hôpital Peltier	759 000
Djibouti water supply system	918 000
Administrative training centre	270 000
Study of water supplies for herdsmen	80 000
Cattle reserve	1 030 000
Study of the pastureland map	150 000
Study of water points	150 000
<b>Total</b>	<b>4 580 000</b>

the population lives, to play its full part as a major international maritime city, EEC-Djibouti cooperation has been geared mainly to training in municipal activities and studying the potential of the town and its facilities.

In addition to general training (study grants), special training for port workers (pilots) and administrative workers (administrative training centre) and vocational training (at an adult centre) has been started.

The economic structures of the town have been covered by two studies (one on the port and the other on the tourist trade), which have made it possible to define development prospects in these two sectors.

Lastly, the standard of living has gone up thanks to drainage, water supply (in particular to the Beballa district) and health (fitting out of the Hôpital Peltier) schemes.

The European Investment Bank has channelled a total of ECU 3.3 million into Djibouti, in particular for energy installations at Tadjoura and Boulaos.

These schemes, which have been evenly spread over the various parts of the country and the different sectors of economic life, have been backed up by food aid contributions which have directly cut the cost of food dependence (about 4 000 t of cereals has been supplied every year) and made it possible to feed the vulnerable sections of the population, the refugees, drought victims and so on, who get the benefit of



*Small (mainly horticultural) farming has been improved by the creation of a pilot plot and the introduction of agricultural training*

the food and medical programmes run by the NGOs and the international bodies (UNHCR). Counterpart funds from sales of aid on the local market have also been used to finance a number of agricultural and social projects.

But EEC-Djibouti cooperation has also looked to the important regional role which the Republic has to play. The Community has given help with improving communications in the region and a project to rehabilitate the Djibouti-Addis Ababa railway (supply of rolling stock, installation of telecommunications and relaying of part of the track) is being carried out, ECU 24.9 million having been committed for this. A feasibility study of the Dji-

bouti-Berbera road has also been financed by the Community. EEC aid to regional development in this part of the world now amounts to ECU 26.4 million, which is over and above the sums channelled directly into the Republic of Djibouti itself.

Lastly, the Community attended the first IGADD (Inter-Governmental Authority on Drought and Development) preparatory meeting held in Djibouti, the host country, in February 1985 and is very interested in the prospects of regional cooperation on development and anti-desertification that this institution could produce. ○

J-L. H.



## “Southern Africa is standing on the edge of a precipice”

declares Simba Makoni, SADCC Executive Secretary



CEC

Created in April 1980, the Southern African Development Coordination Conference (SADCC) is now on the verge of entering the second half of its first decade. The more than 60 million people living in its nine Member States—Angola, Botswana, Lesotho, Mozambique, Malawi, Swaziland, Tanzania, Zambia and Zimbabwe—live in “a focal point of conflict” as their Lusaka Declaration, which forms the basis for their economic development and liberation programme, states.

On the eve of its January 1986 Annual Consultative Conference, SADCC's Executive Secretary Simba Makoni left his Botswana headquarters to discuss future cooperation with major donors based in New York, Washington, Ottawa, London, Brussels and Oslo. He left the Zimbabwean Cabinet, where he had been a minister since independence, to take up in September 1984, SADCC's top job, left vacant by the sudden and tragic death of his predecessor Arthur Blumeris. In the following interview he reviews SADCC's past performance, points out its main priorities for the near and not so near future, assesses cooperation with the EEC so far and puts South Africa's aggression and destabilization into perspective.

► *SADCC has recently reviewed its first five years of operations. What are the main conclusions of this review?*

— The main conclusions are that our approach to regional cooperation, our basic institutional structure and our mode for operations are all relevant to the circumstances of Southern Africa. There is no need for a revision of our policy, programmes and fundamental concepts, which define SADCC's objectives and strategies for regional economic cooperation. However, the review also identified areas where it is possible to improve, particularly on the operational efficiency of the SADCC machine. We felt that there was need to strengthen some of our organizational structures, like the Secretariat itself, by an increase in the number of personnel <sup>(1)</sup> to address specific aspects and that the sector coor-

dinating units which are established within the various governments might themselves also be strengthened.

We also felt that there is a need for SADCC Member States and the organization as a whole to put into perspective the contributions which our own governments are making towards our programme of action. External contributions, certainly as far as resources are concerned, have been more emphasized so far. Most of our project documentation quantifies the external contributions. We have not highlighted what our own governments are contributing towards these programmes and projects, but they are contributing a lot. With effect from the documentation that we will be producing during the course of this year, and onwards — we will reflect the local contribution as well as the foreign contribution. These are some of the conclusions of our internal review.

### Reducing dependence on South Africa's transport system

► *Within SADCC's programme of action, transport and communications clearly rank as priority no 1. In view of the rapidly escalating crisis in South Africa, what is SADCC doing to step up its independence in this field?*

— Our main approach is that the implementation of the programmes and projects which we have already defined in the field of transport and communications should be speeded up. And to the extent, possibly, that even those that have been implemented should be secured adequately, because one of the major bottlenecks to our effective utilization of transport and communications means, particularly airways, ports and harbours, has been the sabotage to which they have been subjected by either by South African commandos directly, or by

(1) Excluding secretarial staff, executives at SADCC's headquarters member only 3.

bandit groups sponsored by South Africa.

► *Some of these attacks have directly hit projects benefitting from bilateral EEC Member States' aid. Could you give a few of these examples?*

— Yes, we have a number of such examples. In the port of Beira, which we have been developing right from the beginning—one of the earliest projects which SADCC agreed upon with the Netherlands Government—the South Africans, in 1982, detonated explosives in the entrance channel which destroyed the channel lighting and the buoy conditions. The petroleum section of this complex, which was vital for the supply of fuel to Zimbabwe, Malawi, and Mozambique itself was blown up.

In the southern region of Mozambique, the Limpopo Valley railway line which links the south-west of Zimbabwe to the port of Maputo, has been inoperative for a long time. We've had a British Government commitment of finance for it going back to 1981, which we have not been able to utilize because most parts of the railway line are inaccessible due to bandit activity. The Benguela railway line to the port of Lobito which is also one of our major trunk routes to the sea, again has been inoperative. This is one we have mobilized resources for and would have liked to rehabilitate it again very early on in the life of our organization, but it has not been possible to do so because of UNITA bandit activity.

There are a number of other facilities like the Luanda refinery, which is very critical for our efforts to reduce our dependence on petroleum imports, which was blown up by the South Africans in 1983. These are only some examples of projects and programmes which have become priority targets for South African attacks.

► *What particular corridors are you aiming for to create alternatives in view of what could happen in South Africa itself?*

— There are really four transport systems which have featured already, and will continue to feature centrally in our efforts to increase our transport self-sufficiency and these are: the Beira transport system, which mainly means two railways and port systems

into Zimbabwe to the west and Malawi to the north-west; the Dar es Salaam port transport system, which mainly means the Tazara railway line, but there is also now an eastern connection from Karonga in Malawi, a road connection which will then go on to the Tazara railhead; there is, of course, the Maputo port system, which is also critical for Zimbabwe; finally the Benguela-Lobito transport system, which is important not only for Angola but also for Zambia.

These four systems really remain critical, but because of the security problems which I have indicated earlier, the concentration now is more on the Beira and Dar es Salaam port systems — and the Nakala port system, which is also very important for Malawi. Fortunately the security situation around these three systems enables us to make some reasonable progress.

### Suffering from drought

► *To what extent have SADCC's agricultural and overall development objectives been hampered by the persistent drought that affects this region?*

— Naturally they have been hampered in various respects. The first one is that governments have found themselves forced over the last three years—and for some of our member states it will now be four, nearly five years of drought—to divert resources away from development projects into drought relief: the mere purchase and the distribution of food and other requirements. We have not at this stage finalized some kind of financial costing, but you may recall that in 1984 at the Lusaka annual conference, we submitted a coordinated regional drought appeal in which we estimated at that time that the cost of short-term relief alone would be of the order of US\$ 920 million, and we had not counted at that time the longer term costs of rehabilitation and other factors which were difficult to evaluate at that time, like the losses of livestock which we are continuing to incur, particularly in Botswana, even at this stage.

### Destabilization: a US\$ 10 billion bill

► *You estimate the economic consequences of South Africa's destabiliza-*

*tion and aggression at almost US\$ 10 billion over the past five years. What is the harsh reality behind this figure?*

— It's not "almost"; we put it conservatively at US\$ 10 billion. It is more than US\$ 10 billion. There are a number of factors which it is difficult to interpret in financial figures. But the harsh realities can be interpreted in a different context. The first one is that Southern African states which are poor developing countries—we have some of the countries classified by the United Nations as landlocked, least developed countries—are bearing a very heavy financial burden as a result of South Africa's destabilization.

Put in some perspective, US\$ 10 billion equals one third of the total exports of all our Member States combined. It also just about balances with the total official development assistance which we have received. This means that whatever aid the international community has given to us, has gone straight into, if you will, annulling the effects of South African destabilization, and therefore, put in a different respect, we have not managed to benefit from the development assistance which has been extended to us.

But it must also be understood in the context of the areas in which these costs have been borne: we have catalogued some specific indicative categories like the direct war damage—the bridges, the railways, the equipment and the machinery which are being blown up—or the increased defence expenditure which our countries can hardly afford. The latter accounts for about US\$ 3.6 billion in five years for a small poor region like ours, money, which if it had gone into industries, into farms, into mines and other productive sectors, even health and social welfare, would have borne massive benefits for our people.

It accounts for lost exports with products bound for the export market being pilfered and damaged on the way. Take the example of Zimbabwean sugar which is derailed en route to Maputo and just gets thrown out—you cannot reclaim it—and a lot of other products which are not able to reach their markets because it is not possible to transport them. Also, lost economic and industrial output, because factories are not working to capacity, there is no money to import spares, keep up



BELGA



BELGA

Left, Angolan village destroyed by a South African attack; right, Mozambican railwaymen doing repair work, prepared for all eventualities. Total damage to SADCC Member States over the past five years is estimated at over US\$ 10 billion

maintenance or even provide necessary raw material inputs, because we are obliged to divert money away to defence expenditure or other sectors.

There is even a factor of lost investment opportunities, and this has been one of the major telling effects which is difficult to quantify and put into concrete terms. But we know, and it has been a direct target of South African propaganda, that businessmen who come and want to invest in Mozambique, in Zimbabwe, in Tanzania, get to hear that: "You're ploughing your money down the drain because those countries are unstable, you will not realise the profits of your investment...". Even tourists who would have wanted to come and visit Serengeti, Ngorongoro, Great Zimbabwe or the Victoria Falls, they can't come because they are told that: "You will not be able to get back". All these are valuable, important economic aspects.

### Urging effective sanctions against South Africa

► *Over the past few weeks South Africa has stepped up its threats of retaliation and punitive measures against SADCC States if sanctions were to be imposed on South Africa itself. How seriously do you take these threats and what do you expect from Europe in this context?*

— We take the threats very seriously. Indeed, we have come to realize

that when South Africans make a threat, they mean it, not only because of the desperation in which they find themselves, but because we have lived with not only the threats, but with the actual effects, the invasion, the subversion, the destabilization and aggression we are talking about. So we take them very seriously.

What do we expect Europe to do? There are various things which can be done. The first, and we believe very strongly, ultimate, solution to our problems, to the problems of South Africa, is obviously the elimination of apartheid. And measures and steps which can be taken to help to speed up the eradication of apartheid from South Africa will offer us the permanent and lasting solution which we need. But in the meantime we think it is important, particularly for European countries who have some degree of influence in political, but more importantly in economic matters, to impress upon South Africa that there is a cost to be borne by herself for being aggressive and subversive to small neighbouring states who mean no ill, other than to live in peace and stability in their territories, and that there are specific and concrete measures which have to be taken — some of them are the subjects of international debate and controversy. Our countries have been very clear in urging that effective economic sanctions be imposed on South Africa.

I think that talking in the context of the direct targets of South African destabilization, some of which are being developed with European assistance, we must not limit ourselves to mere political protestations, making representations or even imposing economic sanctions; we must make it clear to South Africa that attacking the Beira railway line, or the Beira port which is being developed with Netherlands government support, to attack the Tazara railway line, or the Nakala railway line which is being developed with Canadian and Italian government support, is attacking Italy or attacking the Netherlands and therefore that these governments will not just sit and make protests. We think that it is not merely polemic or emotional to talk about these things — governments are devoting millions of dollars, pounds, deutschmarks into infrastructures which the South Africans and their protégés come and blow up into ashes the following morning. We think that we must start talking and doing these things with the Europeans.

► *You remain convinced that, notwithstanding outside pressures, be it European pressure, be it pressure by SADCC Member States, the long-term solution in South Africa is in the hands of the South Africans themselves?*

— Absolutely. We don't have the right, nor do we have the will, to dictate to South Africans what their fu-

ture should be, other than beyond the general guidelines which all nations have agreed, that it must be a truly democratic dispensation which carries the support of the majority of all South Africans. But what that means, what constitution they have, what internal structures and institutions they develop, is entirely their affair, in the same way that all of us would have taken umbrage at anybody coming to dictate internal arrangements for ourselves. We are sure that South Africans and Namibians would not accept that either.

So yes, the solution must be internal, it must be found by the South Africans amongst themselves. And this means that Botha must not look for scapegoats for the problems of South Africa. If he can't speak to his own people, how can he expect to find peace and friendship outside his own territory, if he can't create that with his own people?

**EEC-SADCC  
"A strong basis exists  
for greater cooperation"**

► *All SADCC Member States are now signatories to the Lomé Convention. What does this imply for the use of future Lomé resources by SADCC?*

*How do you review cooperation with the EEC so far, and how do you look upon the future of this cooperation?*

— We see that the fact of all our Member States now having joined the ACP and being signatories to the Lomé Convention will have two immediate effects: first of all, more of us will be eligible to benefit from resources available in the Lomé Convention in the sense that Angola and Mozambique which were not directly accessible to those facilities, will now be accessible to them. Proportionately, we expect that the volume of resources available to Southern Africa will increase in accordance with the number of eligible beneficiaries, and that therefore we can look forward to a higher volume of resources than was the case in the Lomé II Convention, or that would have been the case in Lomé III without these two SADCC Member States.

The relationships between SADCC and the Community and the Commission at the moment are very good. I have indicated in certain aspects of our discussions some of the areas where we have benefitted from either bilateral Community Member State or Community support. Our own Secretariat has benefitted substantially from

the technical assistance extended to us by the Commission and a number of our sector coordinating units in the different Member States are also beneficiaries of technical assistance support from the Commission. We obviously look forward to greater benefits from the Lomé III Convention than was the case before, both in terms of the resources available from the Convention itself, and hopefully supplemented by or coupled with resources available from the Community Member States themselves.

The discussions which we had over the past two days have been very useful, and certainly very profitable. We certainly have thought up some of the areas where we think the resources will need to be directed, and it is fortunate that our lines of thinking have been coincident with those of the Commission in many areas, and we have been able to reach broad agreement on sectoral targeting.

On the whole, we are satisfied that a strong basis exists for greater cooperation. We still remain concerned and eager to have a clearer indication of what size of resources we can expect for Southern Africa. It's not just a matter of clamour for the cake, as it were, but we would like to impress upon our colleagues in the Community and the Commission that Southern Africa at the moment is standing on the edge of a precipice and therefore that there is need for real, substantial resources to be deployed in our region, not only to make good the damage which we have suffered, or even to give us a start in catching up with some of those areas we have lost out on, because we have been concentrating either on liberating ourselves, or after that on defending our fragile independence and sovereignties which are threatened by South Africa. Therefore there has been a lot of time and opportunity lost, as it were, because of the turbulence of our region. Without sounding ungrateful, we believe that there will be need for substantial resources to be mobilized; certainly some of the figures we hear, which are not yet finalized we understand, would give us cause for concern that we may not be able to realise the full benefits that are possible from the Lomé III Convention. ◦

Interview by  
Roger DE BACKER



*Simba Makoni (left)—who also called upon the ACP Committee of Ambassadors and the EP Development Committee—with Geoffrey Garebamo, Botswana's Secretary for External Affairs and Chairman of the SADCC Standing Committee of Officials, and Dieter Frisch, Director-General for Development at the European Commission*

CEC





Pierre Peeters

## A window on three worlds

The accession of Spain to the European Community can be said to complete, or almost complete, the process of collecting the differing strains which go to make up European civilization.

Spain has been at the centre of European affairs from the earliest times. Conquered in the days of the Roman Republic, partly because it bade fair to become a Carthaginian colony, it was providing senior officials and even emperors like Trajan, at a time when Britain was a difficult outpost and Germany provided only literary exemplars of the 'noble savage' delineated in Tacitus' 'Germania'.

Thus by the Middle Ages, it can be seen that Spain was a window on two worlds — the world of chivalric northern Europe (exemplified by the Emperor Charlemagne, the feudal social structure and the Roman Catholic Church) and the world of Islam (the religion brought from the Arabian peninsula, but influenced by its passage through North Africa). In the Christian north, the feudal system was installed, a network of fighting landown-

ers and hardy peasants; colonists, almost, in their own land, looking hungrily at the Moorish south. There in the lands of Andalusia, Valencia and Murcia, arose one of the most glittering of medieval civilizations. Great cosmopolitan cities, Seville, Cordoba, Granada, arose with their skilled craftsmen. In the countryside, great estates flourished, using all the techniques of irrigation learned in the Arabian peninsula and the North African

In post-classical times, Spain was conquered by the Visigoths, who passed through it to occupy the fertile lands of the north African littoral. Three centuries later, in the first half of the 8th century, the tide of invasion swung in the opposite direction, and the Arabs, who had swept across North Africa, flooded into Spain. They provided the basic material for one of medieval Europe's greatest romances, the 'Chanson de Roland', the story of how the Christian Emperor Charlemagne's gallant rearguard under Roland fought the Moslems at overwhelming odds and how they died in the highest tradition of Christian chivalry.

littoral. And this remains the case for agriculture today: the great estates lie in the south and represent considerable potential for development, while 1.9 m out of 2.6 m current holdings in Spain are of less than 5 ha, and lie mostly in the north and centre.

But the most remarkable aspect of medieval Spain was not the division between Christian North and Muslim South. It was, indeed, the opposite. At a time when both Christendom and

Islam were becoming more militant, Spain provided a bridge between the two 'ideologies', a unique opportunity for academics, artists and merchants to communicate and to interact. Christian Europe was undoubtedly the gainer in this exchange since, until the 15th century, Islamic civilization was undoubtedly the more sophisticated, learned, wealthy and tolerant.

1492 is a crucial year in the history of Spain, and indeed of the world. In that year, Ferdinand and Isabella completed the 'reconquista', the final subjection of the last Moorish caliphate (Granada) on the Iberian peninsula. It was a major triumph of the 'North' over the 'South', a domestic European crusade which replaced the civilized but decadent culture of the caliphates with the tougher, harsher frontier mentality of Christendom. And, in the same year, Ferdinand and Isabella financed the Genoese sailor Christopher Columbus in his search for the Indies, which was to lead to the discovery of the New World and lay the foundation for one of Europe's greatest colonial empires.

Ferdinand and Isabella were succeeded by Charles V — the Habsburg emperor of the Holy Roman Empire, and Spain found itself at the very centre of European affairs. As the paymaster and guarantor of this Empire, which in Europe stretched from Holland to the Adriatic and from the Atlantic to the Carpathians, Spain was obliged to operate in wholly separate environments. In Northern Europe, in the throes of the Reformation and

Counter-Reformation, Spanish troops and merchants stood guard in the thriving commercial cities of Antwerp and Ghent. Spanish soldiers in Germany helped to consolidate the Peace of Augsburg in 1545 between Protestants and Catholics. In the Mediterranean, Spanish military and civil governors attempted to stabilise the fluid politics of Italy, and were drawn irrevocably into the maelstrom of Renaissance war and diplomacy. The culmination of this Mediterranean policy was the Spanish naval victory of Lepanto against the Turks in 1571, but the effects were broader — Italian methods and Spanish styles were intermingled, and a short-lived boost was given to the mercantile republic of Barcelona which resembled Genoa or Pisa more than any other Spanish city.

But while Spain expended its treasure and manpower on war and politics well beyond its frontiers, there was also the African context. The struggle with the Moors in Spain itself was transferred to the North African coast where the kingdoms had degenerated into small city-states which preyed on Christian commerce. Spain established colonies on the North African coast and, in the intervals of peace, began to carve out an African sphere of interest.

### A new world in the image of the old

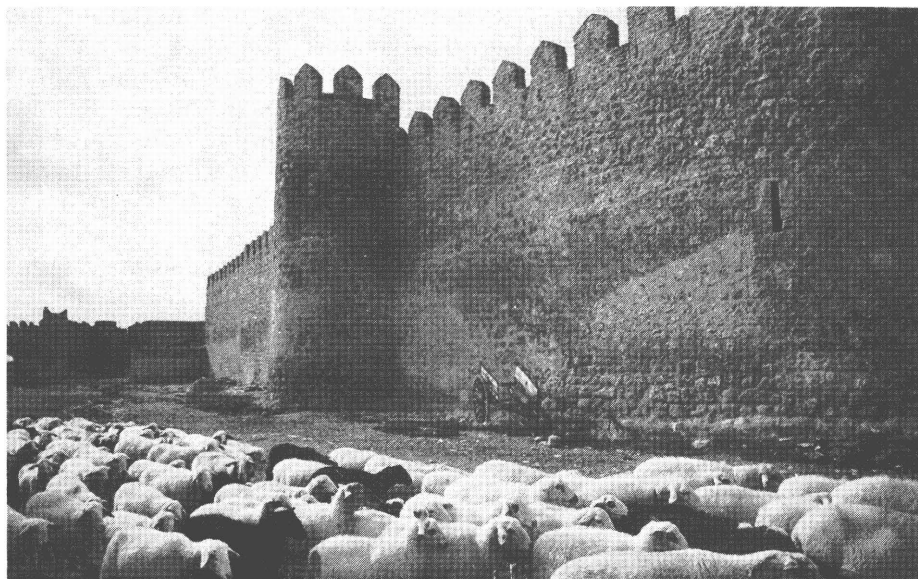
America, the Americas, were Spain's third world — a world of exotic products, seemingly limitless silver

and, above all, of teeming populations waiting, in the eyes of their conquerors, to be converted (often by forcible means) to the religion and the habits of Europe. Soldiers, settlers, merchants and priests all took a hand in constructing, almost literally, a New World. It was a new world made in the image of the old, with no competition from envious neighbours and with boundless resources.

Perhaps the real significance of Spain is in this last achievement, an empire which imposed on an alien continent, indeed on two, the culture, religion and social structure of Europe. It was in many ways the forerunner of the other European empires whose rise and fall have left their indelible imprint on the shape of the modern world. Spain's legacy to the world is therefore the transformation of European civilization into a world civilization; today Spanish is the fourth most spoken language in the world, with 266 million speakers.

It is by no means paradoxical that Spain's internal robustness was to be weakened by her external triumphs. On the one hand, the internal crusade against the Moorish South had caused a grim rigidity to appear in the country's social and religious fabric. Although the 'reconquista' was politically accomplished in 1492, the state continued to fear the Muslim and Jewish minorities (Moriscos and Marranos) even after they had officially converted to Christianity and they were increasingly harassed and persecuted. Between 1509—the expulsion of the Marranos, and 1610—the final massive expulsion of the Moriscos — Spain's ideology had considerably hardened. The self-reliant feudal society had settled into a rigid caste-system, where the nobleman-hidalgo—was forbidden to engage in trade or even agriculture and was obliged either to enter the monastic life or to become one of the far-too-numerous bureaucracy if he wished to avoid starvation or the perils of a soldier's life. The profoundly religious nature of the national struggle gave a primacy to the Church which it achieved nowhere else in Europe, and it is significant that Spain was touched only marginally by the Renaissance and not at all by the Reformation.

The possession of a huge overseas empire also had a negative effect upon



*The walls of this castle near Toledo recall Spain's turbulent past*

Pierre Peeters

the domestic economy. Since it brought in its train a host of economic changes—including the silver from the mines of Potosi—the empire might have served as a stimulus to the growth of new social classes at home. But the empire was controlled by a complex and efficient bureaucracy, the Council of the Indies, and indeed, the existence of empire stunted the growth of bourgeois economic and political centres like Barcelona. The money which could have stimulated economic growth was spent instead on war and diplomacy and economic development passed the population by.

If Spain remained relatively isolated from some of the major social and intellectual movements of Europe, it remains a fact that Spanish art, architecture and literature have had an honoured place in the European gallery. One has merely to mention painters like El Greco, Velasquez or Goya, Murillo, Ribera and Zurbaran, or writers like Lope de Vega or Cervantes, Calderón, Tirso de Molina and Quevedo to realise that Spanish culture forms part of the European mainstream. In architecture, Spain offers not only the influence of Islam, often taken up by its Christian conquerors, or the soaring aspiration of the Gothic, but also an astounding flowering of Baroque which not only took root in Spain itself, but implanted itself across the oceans in the Americas.

More recently, Spain has undergone a cultural renaissance — in art, Picasso, Miró and Dali, in architecture, Gaudi, in music, Rodrigo, Casals and Segovia. In the world of cinema, too, Spain has produced its share of famous directors, the names Buñuel, Berlanga and Saura coming to mind. As far as literature is concerned, if Spain's voice has been muted for the past two or three decades, the world has come to know Latin-American literature largely through the efforts of Catalan publishers, and there is no doubt that this external stimulus is not without influence on today's literature in Spain itself.

During the last two centuries, Spain has been the victim of foreign intervention, civil wars and political instability. But the ferment has been productive of ideas. In the 1820s, the opposition to the absolutism of Ferdinand VII, the restored Bourbon King, called itself 'liberal' and gave the



*The Giralda in Seville — the epitome of Spain's blend of Islam and Christianity. This bell-tower of the cathedral previously served as the minaret of Seville's main mosque*

word to the European political lexicon. In 1883, Pablo Iglesias founded the PSOE, the oldest socialist party in Europe, and, indeed the party which today forms the government in Spain. This should be borne in mind when Spain's contribution to European civilization is recalled — there is more to the Spanish political dictionary than 'junta' and 'fifth column'.

In summary, then, Spain's history and culture have been marked by influences which have barely touched most other European countries, which have marked it profoundly and have made it, as no other European country has been, a window on three worlds. Yet it remains indelibly European.

### The economic framework

All windows, however, need a framework, and since 1970, Spain has seen its framework in the EEC. Its political complexion, still set in the mould of the victorious parties of the Civil War (1936-39), was a major drawback, but it was generally anticipated that economic liberalization, begun in the late 1950s would, in the end, lead to political liberalization. Spain's climate—those hot, dry summers so unpropitious to agriculture—made it one of the top tourist destinations during the 'Golden Sixties', when holidays abroad became the accepted norm for European citizens. In 1983, after twenty years of steady

growth, Spain was host to some 20 million tourists, almost all from EEC countries.

Spain has an area of over 500 000 km<sup>2</sup>, a population of almost 38 million and a per capita GDP (1984) of about \$ US 4200, just over half the EEC average. Unemployment currently stands very high, at over 20%, twice the EEC average, and inflation at 9.6% annually, well over the Community level of 5.2%. Spain's remarkable industrial growth during the decade before the world recession of 1979, averaging about 7% per year, was achieved behind a wall of protective measures — customs duties and para-tariff measures. During this period, Spain grew to be the world's tenth industrial power, and will rank fifth in the enlarged EEC.

This industrial muscle has been built up in a rather lopsided manner. On the one hand, a large modern sector was built up with foreign investment while on the other, a more precarious prosperity was arrived at by the 'traditional' industrial sector, made up of numerous small and medium-sized companies, sheltering behind a tariff wall. Moreover, even in the sector of large-scale industrial undertakings there are those which are currently in decline—steel and shipbuilding—and those which have a more assured future — electronics, motorcars and certain parts of the textile industry. In 1974, Spanish steel making capacity was 13.5 m tonnes, production was 11.4 m tonnes, and the proportion exported was 8.8%. By 1980, capacity had risen to 16.9 m tonnes, production to 12.7 m tonnes, the proportion exported was 46.5% and a large part of that was specialized steels in which Spain enjoys a preponderance of well over the Community average. This position was built up on the basis of low turnover taxes levied on steelmakers (only 2.5% up to 1982), no VAT, export subsidies and countervailing duties, a structure which accession to the EEC will modify.

The automobile industry provides another example. In 1980, the motor industry provided 14.4% of Spain's industrial exports; 81% of the exports went to EEC countries. The Common Market's own tariff wall is a lowly affair, 4.4%, compared with Spain's 36.7% duty on imported cars. Three

The Courier



*Bilbao — a modern industrial and maritime centre. Spain's average annual growth in the 1960s and 1970s was an impressive 7%*

years after Spain's accession, this duty will fall to a still considerable 17.4% and full tariff parity with European carmakers is not expected until 1993.

Despite the protection offered by tariffs and incentives, and despite the impressive growth of Spanish industry over the past 25 years, the picture is not wholly optimistic. Industrial exports cover industrial imports only by about 60%, and overall industrial productivity is 40% less than the Community average. Furthermore, there has been a decline in the level and volume of investment over the last few years. It was estimated in the 1970s that, with a 30% stake in the 200 largest Spanish companies, foreign investment provided nearly half the production and employment in the most modern industrial sectors.

Agriculture is a sector of considerable importance, employing 16% of the working population and accounting for 9% of the country's GDP (as opposed to 3.9% for the Europe of Ten). On the one hand, there is a thriving, large-scale capital-intensive sector, in mainly 'Mediterranean' products (fruit, especially citrus fruits, vegetables, wine and olive oil) and on the other, there is the backward livestock, dairy and cereals sector. Spain is dominated by arable farming which represents almost 60% of final agricultural production. Fruit and vegetables account for 43% of arable farming and for a quarter of final production. The disparity in the size of Spanish farms is considerable — three quarters of

Spain's holdings are of less than 5 hectares, while 0.3% exceed 1000 hectares and cover no less than 22% of utilized agricultural land. It is these latter which will provide not only a challenge to the farmers of the Community but also to the administrative structures: it is on these large irrigated estates that the Community of Twelve may begin to create a new range of surpluses if measures are not taken, this time in products which cannot be stored, such as fruit and vegetables.

Spain's agricultural growth rate is a healthy 3.8% per annum, and this represents only a part of Spain's enormous potential. At the moment the high levels of exports (20% of the total) are mirrored by high imports (17% of the total) and despite the weight of its agricultural sector, Spain's balance of trade in agricultural goods is nearly 25% in the red. It imports feed grains (maize), oilseeds and beef and milk products, mostly from the Americas. Spain's major weaknesses, apart from the small size of most holdings, are apparent in those sectors 'downstream' of the field or the pasture. Marketing structures are, in many cases, deficient or outmoded, where they exist at all. Internal marketing is characterized by the predominance of very small undertakings: 63% of wholesalers and 80% of retailers employ only one or two persons.

The agrifood industry is the leading industrial employer, with 335 000 employees representing 14% of all industrial jobs and it accounts for 13% of

GNP. But it is a collection of tiny enterprises, 65 000 of them, employing an average of less than six people, with only 3% employing more than 50. It is a sector which will feel a chill wind of competition when Spain must compete on even terms with her EEC partners.

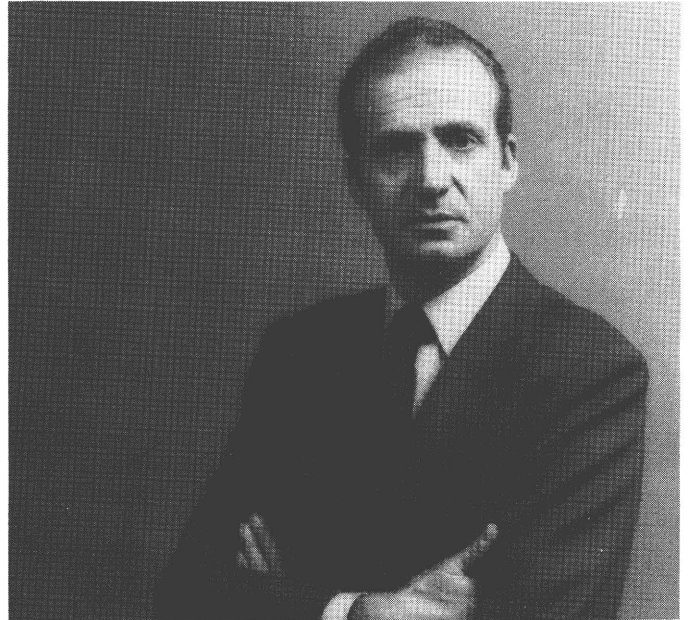
Spain is a major fishing nation, too, one of the world's most powerful. It has an average production of well over a million tonnes for human consumption, employs over 100 000 fishermen directly and another 700 000 in connected activities. The enlarged EEC is the third largest fishing bloc in the world. The Spanish fleet can be divided into four major components — non-industrial vessels of less than 20 tons which make up 73% of the fleet numbers and employ 40 000 fishermen; inshore vessels of between 20 and 100 tonnes, making up 15% of the fleet and employing 32 500 fishermen; middle-range vessels of between 100 and 250 tonnes, employing 20 000 men, engaged on fisheries in Community waters, and the Spanish continental shelf, but also moving as far as Morocco and Mauritania; and the distant-water fleet, which accounts for over 45% of the total tonnage (with only 4.2% of numbers) which fish all over the North and South Atlantic, from Canada to the Falklands and from Norway to South Africa.

Although production, at over 1 million tonnes, ranks only fourth in Europe (after Norway, Denmark and Iceland) it is the highest in value, with a higher proportion of 'noble' species, hake, tuna, angler and crustaceans. But despite this high-value, high-level catch, Spain is a net importer of fish, since fish is far more important in the Spanish diet than in most of the EEC, average per capita annual consumption being around 36 kg.

Resources began to diminish during the late '70s, the 200-mile exclusive economic zone was introduced, and, in Community waters, alarms were sounded about conservation of stocks. Spain responded with a drive towards even more distant zones (with consequent loss of profitability in an era of fuel price rises) and began to negotiate with a Community that was close to establishing its own Common Fisheries Policy. The result was, from 1977, a series of increasingly bitter disputes



Lumifor Madrid



*H.M. King Juan Carlos (right) and Prime Minister Felipe Gonzalez (left), twin architects of Spain's political transformation*

with the EEC, involving punitive fines and even, in March 1984, exchange of gunfire with the French navy!

### A durable transition

All in all, then, the economic picture for Spain is a chiaroscuro of light and dark — of areas of up-to-date competitive excellence and of other areas where the next decade will prove at best a challenge and at worst a severe shock. It was under the shelter of the state that Spain's industry and fisheries grew to their present shape and strength behind tariff walls, public investment programmes and state agencies, yet it was the wish of the Spanish people to risk the chill wind of competition and to join the EEC. Part of this desire was no doubt commercial zeal, the desire to break into this potentially-rich market, but there were also profound political considerations.

Entry into the EEC will also present Spain with changes as far as her foreign policy is concerned. Up to the present, Spain's external relations have been based on a triad of interests — extensive commercial and diplomatic relations with Latin America, which is also the principal recipient of Spain's annual foreign aid budget of around ECUs 100 m; increasingly close identification with Western Europe, and especially since 1975, with the move towards integration into NATO and the EEC; and relations

with the Arab world, most especially an understanding with moderate Arab governments.

Spain's African policy has, up to now, consisted of decolonization of Equatorial Guinea and the Western Sahara, a close relationship with Morocco, and the retention of two enclaves, Ceuta and Melilla in that country. Upon accession, Spain will, as part of the 'acquis', become a signatory to the Lomé Convention and will contribute about ECU 100 m annually to the overall financial package. As the only Spanish-speaking ACP country, Equatorial Guinea must feel reassured of linguistic support, and all ACP states will welcome Spanish expertise in for instance, civil engineering, ship-building skills and irrigation techniques.

Since the end of Spain's civil war in 1939, the country developed, economically and politically, in relative isolation from the rest of Europe. Stability was the first objective of General Franco's regime, and economic growth the next. But economic progress brought the desire for political liberalization in its train and in 1970 Spain signed its first commercial agreement with the EEC. It was made abundantly clear at the time that no closer arrangement could be considered between the EEC and any country which did not conform broadly to the liberal democratic pluralist community of nations. On General Franco's death in

1975, the country reverted to a monarchy, the young king Juan Carlos coming to the throne. With consummate tact and skill, the young monarch gathered the reins of power in order to effect that most difficult political manoeuvre, a revolution of moderation. Within a little more than a year, a referendum had been held on a new constitution; a drafting committee representing all shades of opinion was set up, and Spain's new democratic constitution was approved in 1978. Elections were called and a coalition, the Union of the Democratic Centre, under Adolfo Suarez, came to power. In 1982, the PSOE, Europe's oldest Socialist party, under Europe's youngest leader, Felipe Gonzalez, won a landslide electoral victory. Spain was, from the moment that the new Constitution was promulgated, a welcome candidate to the EEC, and indeed, on 18 July 1977 the request for accession was made, while the negotiations opened formally on 5 February 1979.

The accession treaty was signed on 12 June 1985 in Madrid.

Spain will bring to Europe far more than its special steels, its wines and oil or its distant water fishing fleet. It will bring, not only its own cultural heritage, which has always been Europe's, but also its links with Latin America, its Atlantic side as well as its Mediterranean; and will widen Europe's own window on the world. ◊

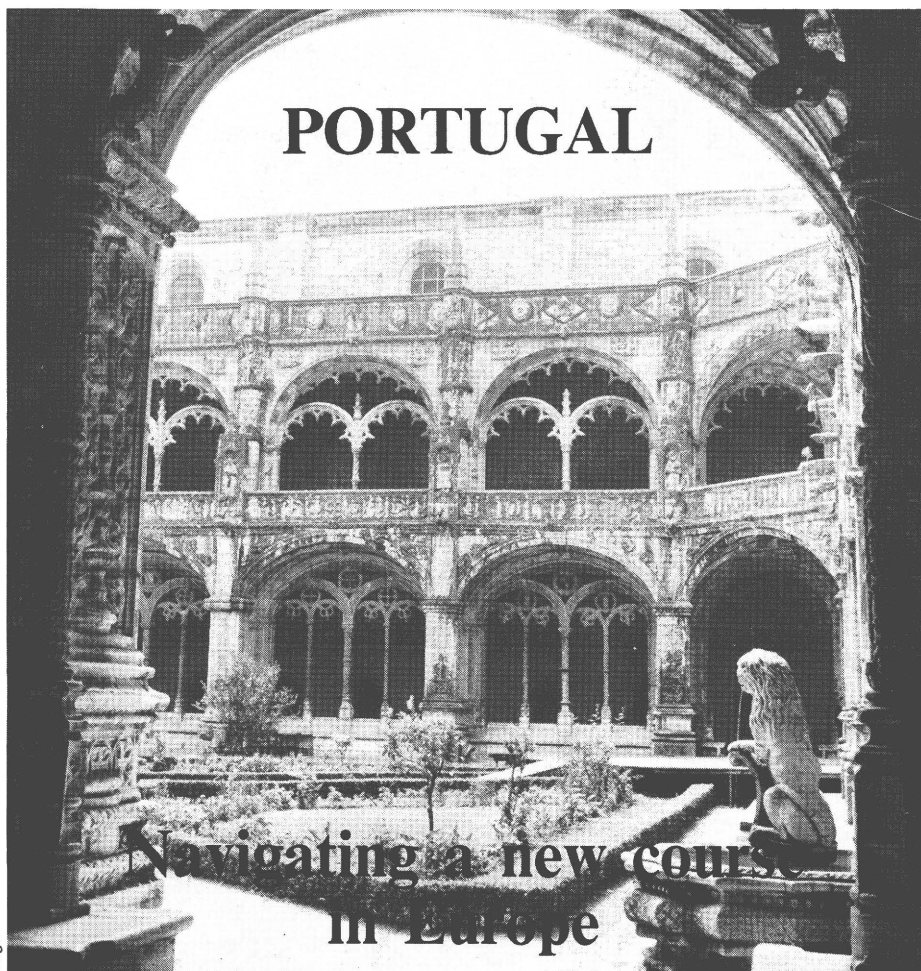
Tom GLASER

## The origins of a world empire

The story of Portugal's world empire begins in the 11th century when Christian knights from Spain began the reconquest of what is now Portugal from the Moorish settlers who had arrived two centuries before. It was as a vassal of the King of Leon that Count Henry of Burgundy ascended the Portuguese throne in 1095 and by 1279, the frontiers of the kingdom reached their present extent (91 600 km<sup>2</sup> of which 88 500 km<sup>2</sup> makes up the mainland).

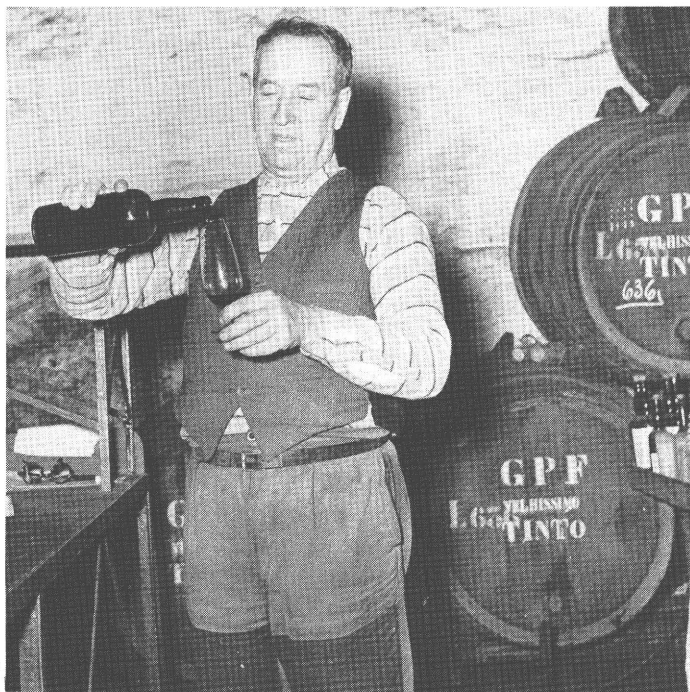
For a further two hundred years, the monarchy was obliged to consolidate its powers, fighting off attacks from the nobles and the Church. In 1386, the Treaty of Windsor was signed, cementing an Anglo-Portuguese alliance that has never been broken. And the 15th century saw the astounding expansion of Portuguese exploration and overseas expansion, primarily under the heroic Henry the Navigator, Portugal's sailor-king. The Gambia river was explored in 1456, the Guinea coast in 1458, the Cape of Good Hope rounded in 1488. Vasco da Gama and Magellan circumnavigated the globe and Portuguese military and commercial communities were established in East and West Africa, Persia, Oman, Malabar, Ceylon, Indo-China and the Malay archipelago. In 1494, Spain and Portugal agreed to Papal mediation on their respective spheres of influence and signed the Treaty of Tordesillas which gave Spain everything west of a longitudinal line and Portugal everything to the east. It explains why Brazil alone in Latin America remained Portuguese — it was situated to the east of the Pope's designated line.

This far-flung empire was established just at a time when nations arose that were less respectful than Portugal of the Pope's competence in imperial matters, notably the Dutch and the English. Their merchant adventurers, half-pirate and half-trader, crossed swords with the Portuguese in Africa, India and South-East Asia. By 1580, Portugal was hard-pressed to maintain its many scattered possessions, and, in that year, a further blow fell — it came under Spanish rule. When Portugal regained its independence in 1640, it was only to experience a long and



Portugal has the power to evoke a number of images. For many, it is the sun-soaked Algarve, a holiday paradise of fishing villages and luxurious villas; for connoisseurs, it is the home of wines, the exhilarating *vinho verde*, the amiable rosé, or the mellifluous grandeur of a vintage port; for others, it is the artistic heritage of a talented and industrious people, the splendid architecture of castles and churches, the rolling cantos of Camoens' epic poem the "Lusiad" or the haunting notes of the *fado*; but for a number of visitors, the image of Portugal is bound up with the image of a country which was once the heart of a world-wide empire, of Henry the Navigator, Vasco da Gama and Magellan. Portugal, a nation of 10 millions today, created a world-wide empire and exhausted itself utterly in maintaining it.

One might claim that all this happened a long time ago, but in fact, in 1800, Portugal was still the world's third largest colonial empire, and, in 1900, it was still the fourth. And it was only in 1975 that it relinquished, after a long struggle, its final colonies in Africa, Angola and Mozambique. Great cities, indeed great countries, owe their existence to Portugal — Brazil, an empire in its own right in the 19th century, for example. Bombay—Bom Bahia—the Good Bay, the commercial centre of India, and one of the world's great metropolises, derives its name from the Portuguese trading station established in the 16th century. Countries which have no living link with Portugal today still echo the passage of Portuguese merchants, soldiers and priests. The name of Sierra Leone, the English-speaking West African country, is of Portuguese origin. The name of capital of Nigeria, Lagos, was given to it by the Portuguese. Portuguese family names are found in Sri Lanka, and the facade of a magnificent baroque cathedral still stands in Macao on the mainland of China.



*Sampling an export that has made Portugal world famous: port*



*Traditional grain lofts — "espigeros"*

painful decline. One by one, the more aggressive northern states, Britain, France and Holland, penetrated the areas the Portuguese had discovered, the British in India, the Dutch in Indonesia, the French in West Africa and, later, Indo-China. Portugal still played its part on the European scene, but a diminished part, just as its colonies were a pale reflection of the original dream. The empire of India had sunk to the town and province of Goa, the empire of Indonesia to the island of Timor. In the early 19th century, the colony of Brazil became an empire in its own right, and threw off allegiance to Portugal.

What remained in the 20th century was Portugal's empire in Africa and Portugal's continuing legacy of decline at home—government succeeded government, coup followed coup—the country experimented in turn with monarchy, democracy and dictatorship. It was this last which was installed in 1927 and which lasted, with one or two changes (first General Carmona, then Dr Salazar, finally Sr Caetano) until 1974. Portugal's empire, which had given so much to the world, had exhausted the mother country, stifled initiative and held it in relative poverty.

Today, Portugal has a per capita GNP of US\$ 2 100, lower than several

ACP countries, and certainly the lowest in the enlarged EEC. Inflation stands currently at nearly 26% and unemployment at around 11.5%. The average Portuguese spends almost 50% of his disposable income on food, while the Community average is 19%. The population stands at 10 million — this might well have been more had not over 2 million people emigrated between 1960 and 1974, in search of work in the richer countries to the north and east, an emigration which is continuing today though at the lower rate of around 25 000 per year. In 1979, it was estimated that there were almost over one million migrant workers in Community countries, nearly 80% in France. Portugal is thus, by European standards, a poor country for whom entry to the EEC will not be an unmixed blessing. Despite the existence of a 7-10 year transitional period, Portugal will be exposed to extremely harsh competition and will only derive maximum benefit from Community membership if industry, agriculture and administration are comprehensively overhauled.

#### **Industry: modern and traditional**

Portuguese industry employs about 35% of the working population and accounts for 40% of GDP and 70% of

all exports. It is characterized—as is Spain's—by a cleavage between a modern, competitive sector and a large number of small and medium-sized enterprises whose profitability had been based on sales to the home market and exports to captive colonial markets. A further problem is that industry is concentrated on the coastal area between Setubal and Braga. Finally, it should not be overlooked that a number of the most capital-intensive industries are either partly or wholly state-owned, while chemicals, steel, oil refining, cement and shipbuilding are nationalized.

The modern sector is frequently backed by foreign capital which has taken advantage of the low rate of pay (one fifth of the Community average) and the traditional skill and industriousness of the Portuguese worker. The sector combines exports of modern products (chemicals, electronics and metallurgical engineering) with traditional products (textiles, footwear, ceramics and food products). The scale of industry is very varied — only 70 companies in Portugal employ over 1000 people, while 25% of all companies employ less than ten.

The traditional sector is handicapped by a variety of adverse factors, including lack of experience in dealing

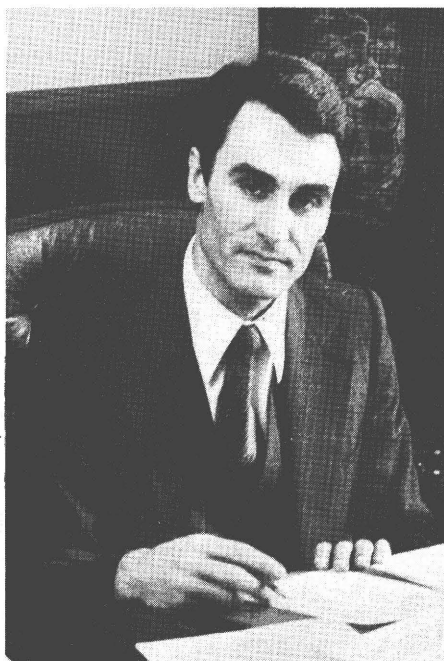
with international competition, erosion of the competitive low-wage advantage by high inflation, poorly-organized distribution networks, lack of capital, technology and access to managerial know-how. In 1980, Portugal's total exports were valued at \$4.6 bn of which \$4.0 bn were industrial. The main exports were, in descending order of importance, clothing, textiles, cork and cork materials, paper, pulp and paperboard and wines.

In order to survive the effects of competition on this fragile, vulnerable sector, Portugal has erected a barrier of tariffs and non-tariff restrictions on goods coming from third countries. Customs tariffs of up to 50%, import surcharges also up to 50%, surcharges (on plastics) of up to 60% and quantitative restrictions have all been marshalled to protect Portuguese industry during the difficult period of its transformation.

### Agriculture: a situation of imbalance

Insofar as agriculture is concerned, the picture is no less mixed. In the early 1980s it was estimated that per capita agricultural output (representing 14% of GDP) had actually declined over the previous decade. Over the previous 20 years it had shrunk from being about 35% of the EEC average to about 20%. In the same period, per capita agricultural production rose from 26% to 43% of the EEC average in Greece and from 31% to 47% in Spain. It is nonetheless an important sector, employing as it does about 28% of Portugal's working population (compared with a Community average of 8%) and providing a favourable trade balance with the EEC in agricultural products (notably wine, sardines, tomato paste and fruit).

Agriculture, as in Spain, is heavily marked by disparities and handicaps. The quality of the soil and rainfall in the north of the country are quite good, but estates are limited by topography and ownership. The numerous hills and valleys in the north have hampered the creation of large farms, and 80% of the farms are of less than 4 hectares in extent. The situation in the south is the converse — soil is poorer, rainfall less abundant and



Direcção-Geral da Comunicação Social

*Sr Cavaco Silva, Portugal's new Prime Minister. "The Government, the entrepreneurs and other groups must not delay measures to modernize the economy"*

farms of over 100 ha cover 63.5% of the utilized agricultural area. The large farms are said to contribute to an under-use of land and labour, though this is partially disguised by the recruitment of huge numbers of seasonal workers. After the revolution of 1974, an ambitious land-reform programme was undertaken, aimed at the large estates (which occupied 3.8 out of 4.1 million hectares under cultivation). In the end, however, it was estimated that fewer than 500 000 hectares were definitively redistributed.

Portugal is deficient in a large selection of agricultural products. It is 50% short of butter, 30% short of beef and 60% of cereals. Up to the late 1960s, the country's agricultural exports covered imports, but today the situation has deteriorated to the extent that exports only cover 40% of imports. The new Prime Minister, Sr Cavaco Silva, was quick to point out the value of the European connection in stimulating change for the better. "The Government, the entrepreneurs and the other groups must not delay measures to modernize the economy, or the results will be disastrous. Portugal will have to depend on its capacity to prepare projects to receive regional funds and on the good will of the

Community. As the least developed country in the EEC, Portugal has to be a net receiver".

In short, then, agriculture, like industry, is in a situation of imbalance; undercapitalized, over-specialized and incapable of meeting a good part of the country's needs, especially in dairy products, meat and cereals.

### A nation of fishermen

Fisheries are an important economic sector for Portugal and more tranquil than agriculture. Almost 40 000 fishermen are employed, mostly on in-shore fisheries, and a further 12 000 jobs depend directly on fisheries in the processing and deep-freezing industries. The Portuguese fleet numbers 18 000 vessels with a total of 220 000 gross registered tons, average tonnage being half the Community average and less than 35% that of Spain's. Productivity corresponds with the nature of the fleet and does not exceed 50% of the productivity of the Community's fleet.

Most of the fleet, 15 000 vessels out of 18 000, fishes around the Portuguese and Spanish coasts, providing fresh fish for a market that is avid for the product. Portuguese eat an average of 30 kg of fish each year, compared with a Community average of 13 kg. The home market has determined the shape and dispositions of the fisheries industry to no small extent. It is small-scale, perhaps, but it is also flexible and pervasive, able to reach all but the most inland markets. The catch of fresh fish which is thus landed directly to small communities accounts for 25% of the total. About 300 inshore vessels work for the processing industry, catching the sardines and tuna which are the backbone of Portugal's fisheries exports. Tinned sardines amount to 83% of fish exports. These exports were worth around US\$ 100 million in 1980, and 55% went to the EEC. This vital export earner is responsible for about 40% of the catch. The remainder is sought by Portugal's distant-water fleet which concentrates on North American, and South and Centre-East Atlantic fishing zones. Portugal also imports fish, but import cover is amply provided by the sardines and tuna, and exports exceed imports by some 40% in value. It is



significant to note that, although fisheries figured largely in the accession negotiations, they were not considered a major stumbling block by either side. Despite a shrinkage in the total catch (down from 343 000 tons in 1973 to 250 000 tons in 1983) the fisheries sector is not likely to undergo any radical change after accession, and certainly not the shocks that will be felt in agriculture or by industry.

### The legacy of an empire — for good and ill

Portugal thus presents a picture of a country hampered in its development by the possession of an empire — in many ways, it is a classically anti-imperialist object lesson. The nature of its industry, the imbalances in its agriculture can all be traced to the presence of a colonial economic base larger than the mother country's which had the effect of protecting production, whether industrial or agricultural, from competition. But if there are tragic economic consequences to be noted from the existence of empire, there is also an overriding note of optimism. Before 1974, Portugal was under authoritarian government, the lineal descendent of a military dictatorship installed in 1927. Opposition existed, but was effectively stifled, and it was the colonial wars in Guinea, Angola and Mozambique which caused the Portuguese colonisers to rethink their attitudes to society. After the revolution of 1974, the following declaration was made by the MFA — the Armed Forces Movement, which had spearheaded the actual revolution:

“The colonized peoples and the people of Portugal are allies. The struggle for national liberation has contributed powerfully to the overthrow of fascism and, in a large degree, has lain at the base of the Armed Forces Movement whose officers have learned, in Africa, the horrors of a war without prospect, and have therefore understood the roots of the evils which afflict the society of Portugal”.

So, in a very real sense, the organizers of the revolution at home paid tribute to the inspiration of the anti-colonial fighters in Africa.

It was thus Africa and the events in Africa which seem to have contributed



*At Belem, at the mouth of the Tagus, stands the memorial to Henry the Navigator. Portugal's destiny lay overseas for more than five centuries*

to Portugal's accession to the European Community, since without full democratic credentials no application could have been accepted. The legacy of empire is with Portugal yet. It is estimated, for example, that 150 million people in Europe, Africa, Asia and America speak Portuguese as their first language making it one of the world's most-used languages, and that while Portugal is an extremely poor country, it spent 292 m Escudos (US\$ 2 m) on development aid in 1984. The countries to which this aid was disbursed were all (with some exceptions) Portugal's former African colonies, Cape Verde, Guinea Bissau, Sao Tomé and Principe, Angola and

Mozambique. The exceptions amounted only to about 10% of the total.

Portugal remains a world influence — diminished in role and scope, like all the former colonial powers but whose language and links with Africa form an important complement in the evolving destinies of the ACP and EEC countries. Portugal was the first European country to develop a colonial empire and the last to relinquish one and her accession to the EEC can be said to mark the end of that chapter and, more hopefully, the beginning of a new one. ○

T.G.

## THE EEC AND CENTRAL AMERICA

# A Cooperation Agreement signed and a "political dialogue" institutionalized

*Europe's desire to make its own contribution to peace, democracy, economic and social development and political stability in Central America led to an historic conference of ministers at San José in Costa Rica in September 1984. A second conference followed on from this in Luxembourg on 11 and 12 November last, when the Community and the countries of the Central American Isthmus (the MCCA—Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua—and Panama) signed an Economic Cooperation Agreement and a Final Act on the political dialogue*

*between the two regions, plus a political and an economic communiqué, were adopted.*

*The Final Act provides for an annual meeting of ministers from the Community, the countries of the Isthmus and the countries of the Contadora Group (Colombia, Mexico, Panama and Venezuela). This is the first time that the Community has instituted a regular political dialogue with third countries and it is a clear indication of its determination to contribute to peace in the world.*

"This is a step of great political importance. We are doing what 21 foreign affairs ministers suggested at an unprecedented meeting in Costa Rica", said EEC Commission representative Claude Cheysson, who, as many speakers mentioned, had instigated the San José meeting. After clearly manifesting their political will to work together in the medium and the long term, the EEC and Central America had to show they could act, he said, going on to make a fervent plea for regional cooperation, "which enables us to beyond conflict, brings adversaries together and exploit everyone's potential". Through cooperation of this kind, which it fosters throughout the world, the Community is contributing to a new phase of international cooperation between one region and another.

Jacques Poos, President-in-Office of the EEC Council of Ministers, launched an appeal on behalf of the Twelve for the Central American countries to make general, balanced commitments about security and disarmament in the negotiations with the Contadora Group and said he hoped that the Peace Agreement presented in Panama on 12 September could be signed rapidly by all the parties concerned. Security, said the Luxembourg Minister of Foreign Affairs, was, in the Community's eyes, also inseparably linked to respect for human rights. The creation of a new structure for economic cooperation and political dialogue between the two regions was

not just aimed at strengthening economic and political relations but at supporting the drive for stabilization and peace in Central America. Carlos José Gutierrez, the Costa Rican Foreign Affairs Minister, spoke on behalf of the Central American States, stressing the singular importance of the agreement with the EEC. In spite of the fact that "this Treaty is not all we hoped", it marks the beginning of a new and much more promising stage in reciprocal relations.

European integration, he felt, was a lesson to be learned and if there was a community spirit in Central America, the economic and social problems would be easier to solve, as would the debt.

Augusto Ramirez Ocampo, Colombia's Foreign Affairs Minister, spoke for the Contadora Group, saying that meetings like the San José and Luxembourg ones were an opportunity to institutionalize a partial but promising dialogue. The EEC, he felt, could pro-



*The signing of the Cooperation Agreement: left to right, Claude Cheysson, European Commissioner for Mediterranean policy and North-South relations, Jacques Poos (Luxembourg), President-in-Office of the EEC Council of Ministers and Carlos José Gutierrez, Costa Rica's Minister of Foreign Affairs*



*A view of the rostrum showing representatives of Central American countries*

vide "a formidable amount of help" in restoring peace in Central America, not just through the support it had given to the Contadora process so far but also by being directly involved in some of the machinery set up to implement and follow up the compromises laid down in the Final Act, over and above any development projects and financial and technical assistance.

### **Cooperation Agreement with the countries of the Central American Isthmus**

This Agreement, which has been concluded between the European Community and the parties to the general Treaty on Central American Economic Integration (i.e. Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua) plus Panama is an evolutive one which lays down the aims of and arrangements for action in the fields of economic, commercial and development cooperation.

Under the economic cooperation heading, the two parties have agreed, as far as their scope allows, to establish as broad cooperation as possible between the two regions. No field of cooperation is excluded and the differ-

ent degrees of development of all concerned will be taken into account.

The aim here is to make a general contribution to the development of the economies of the parties and to raising their standards of living, in particular by:

- promoting the development of farming and livestock and industrial, agro-industrial and energy development;
- encouraging technological and scientific progress;
- creating new job possibilities;
- encouraging regional development and fostering regional economic integration and the development of intra-regional trade;
- protecting and improving the environment;
- encouraging rural development;
- tapping new sources of supply and opening new markets.

The Agreement also provides for the promotion of contact between firms and industries in the two regions and encourages European investment in Central America.

\* \* \*

In the matter of commercial cooperation, the contracting parties have undertaken to promote the harmonious development, diversification and qual-

itative improvement of trade between them by all available means, including consultations in cases of difficulty.

The two parties will accord each other most favoured nation treatment, bearing in mind that most of the countries on the Central American Isthmus do not belong to GATT. In an annex to the agreement, the Community also states its willingness to look into the possibility of improving its system of generalized preferences to take account of the interests and economic situation of the countries on the Isthmus.

\* \* \*

Development cooperation involves the community in confirming its desire to go on giving financial and technical assistance to Central America through its developing country assistance programmes.

One of the aims here is to encourage regional integration through integrated rural projects, joint training schemes and projects to boost self-sufficiency in food and improve the health situation at regional level.

As to financing — the Community has undertaken (in a declaration attached to the Agreement) to make a substantial increase in the global aid that goes to Central America during

### Structure and development of trade between the EEC and the Isthmus

Trade relations between the Community and these countries are non-preferential ones based on the most-favoured nation clause.

The Community system of generalized preferences is open to the countries of Central America, but the structure of exports from there to the Community (coffee and bananas in the main) rather restricts the benefits they can derive.

The Community is their second biggest market after the USA and represents more than 20% of its exports. The five countries of Central America are one of the Community's biggest suppliers of tropical products as they represent 39% of the EEC's banana imports and 17% of its coffee imports. The Community's main exports to Central America are machinery, steel, chemicals and pharmaceuticals.

### Trade between the Community and the MCCA

(ECU '000 000)

	Total	Guatemala	Honduras	El Salvador	Nicaragua	Costa Rica	Panama
EEC Imports	1276	180	159	206	130	274	327
EEC Exports	1240	157	129	100	106	141	607
EEC Balance	-36	-23	-30	-106	-24	-133	280

Source: EUROSTAT.

ECU 1 = US\$0.83 (1984)

### Community aid to Central America in 1984

(ECU '000 000)

Country	Financial & technical aid (Articles 930 & 958 of the Budget)	Food aid (at world prices)	Emergency aid (Article 950)	Trade promotion	Training	EEC aid via NGOs	Relief for displaced persons	Total
Mexico				0.60		0.28		0.88
Guatemala		1.75	0.15	0.04		0.16		2.10
Dominican Republic	6.00	0.53				0.04		6.57
Haiti		3.31				0.74		4.05
El Salvador		3.46	0.50			0.32		4.28
Honduras		3.14		0.15		0.06		3.35
Nicaragua		9.11	0.15			1.19	0.33	10.78
Costa Rica				0.25		0.02		0.27
Panama								
CIME (1)								
Regional schemes	20.00							20.00
Radar (2)								
<b>Total Central America</b>	<b>26.00</b>	<b>21.30</b>	<b>0.80</b>	<b>1.04</b>	<b>0.10</b>	<b>2.81</b>	<b>0.33</b>	<b>52.38</b>

#### Previous years

Aid 1983	17.99	22.55	0.25	1.27	0.232	2.63	44.922
Aid 1982	66.50	27.38	10.30	1.75		2.17	108.10
Aid 1981	9.85	23.69	1.05	1.70		1.09	37.38
Aid 1980	22.00	17.65		1.45		0.81	41.91
Aid 1979	12.30	11.03	0.95	0.66		0.57	25.51

(1) Intergovernmental committee for migration.

(2) There is a radar unit on Hispaniola to track down hurricanes.

the initial period of the Agreement and within the framework of implementation of the relevant Community procedures. This aid has amounted to an average of something like ECU 40 million p.a. so far.

Here, the Community pointed out that it had supplied ECU 180 million-worth of aid of various types to MCCA countries between 1976 and 1983 and the major part of it had been food aid (ECU 78 million) and financial and technical assistance, primarily for rural development (also ECU 78 million). Other amounts had gone into trade promotion and emergency aid via NGOs and as technical assistance to regional institutions.

This ECU 180 m included special aid worth ECU 30 m that the Community had granted in 1982 to show its particular interest in promoting economic development in Central America with a view to solving the social and political problems there.

And lastly, institutionally speaking, the Agreement sets up a Joint Cooperation Committee whose main job is to study and encourage schemes that will put into practice the content of the cooperation thus established.

The initial period of the agreement is five years and it can be extended tacitly for two years at a time.

### Two communiqués

In the first communiqué, a political one signed by the 21 ministers, the EEC gives its support to the Contadora Group. The parties express their conviction of the importance of all countries having links and interests in the region that will contribute to the creation of conditions that are conducive to the conclusion of the Contadora Agreement. Lastly, the Twelve say that, if they are asked to do so, they are willing to support the action of the countries invited to implement the terms of the agreement for peace and cooperation and help with the evaluation, control and verification procedures. In the economic section (adopted only by the parties to the economic agreement), the signatories express, amongst other things, similar views on launching a fresh round of GATT negotiations and on the role of financial and monetary problems in trade imbalances. ○

F. Th.

# The technology challenge

by Barney TRENCH (\*)

This January, holiday brochures will be offering familiar images of Europe's historical towns and comfortable traditions to American and Japanese businessmen who increasingly see Europe as a place of the past. Yet in 1986, a new European Community is on the drawing-board: the European Technology Community.

This year will confirm major new Community initiatives designed to maintain Europe's place in the technological revolution that will dominate living and working conditions into the 21st century.

High technology has introduced a new, world-wide, industrial revolution. Research into the fundamental mechanisms of matter, energy and genetics has allowed the development of new areas of technology very different from those of the 19th century industrial revolution. Deriving from such a fundamental level, the new technologies have a huge range of applications, both civil and military. They are bringing rapid change simultaneously across whole sectors of the economy. While they are vital to maintaining competitiveness in existing industries and services, they are also creating new economic opportunities.

Europe cannot afford to miss these new opportunities. The holiday brochure images are no comfort to the Community's 14 million unemployed, who have been made sharply aware of the effects of the technology challenge world-wide.

## Adaptation in Europe

Europe can no longer earn its living out of the material resources such as coal and steel on which the Community was founded. The USA has six times more land per head, the USSR twice as much. As the world's leading trade partner, the Community is economically dependent on the value it can add to goods and services for export. New technology is essential to maintaining a sufficient value-added level.

Europe's long industrial traditions and well-established ways of life make rapid adaptation more difficult. The compartmentalization of the Community into 12 different countries has hindered and dispersed Europe's efforts to introduce new technology, in contrast to Japan's national consensus and concentrated approach to specific sectors. While Europe maintains its traditional role in defence, free trade and development aid, Japan looks resolutely to its own commercial success.

From 1972 to 1985, annual growth in production of high-technology products remained at 5% in Europe as

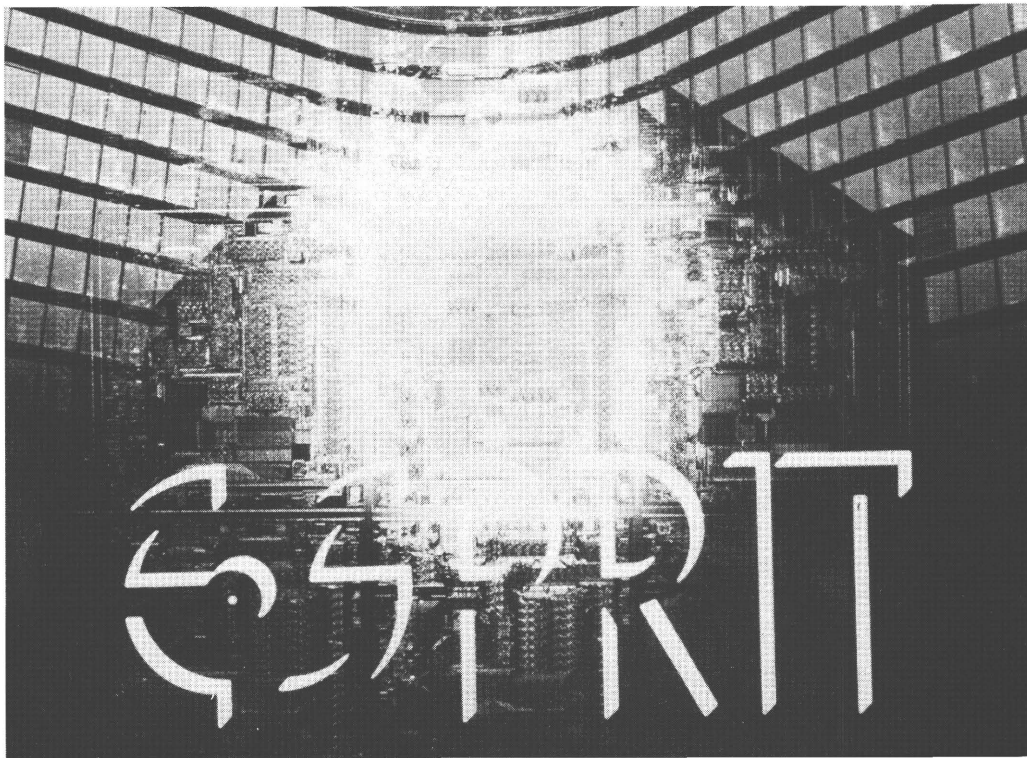
against 7.6% for the USA and 14% for Japan. The percentage of high-tech products in total Community exports was at the same level in 1983 (25%) as 20 years before, while it rose from 29% to 38% for the USA and from 16% to 42% for Japan. In the vital information technology sector, the Community's positive trade balance of \$ 1.7 billion 10 years ago has now turned into a deficit of \$ 6 billion or more.

Yet the modern world has been significantly shaped by European techno-

logy and the Community has a scientific capacity fully equal to that of the USA or Japan. A representative of an American consultancy recently gave his opinion that "Europe probably produces more fundamental technology developments than the rest of the world, and will continue to do so". Why, then, is the Community lagging behind its international competitors in meeting the technology challenge?

Perhaps it is a question of attitudes. High technology is a high risk business and Europe has a colder attitude than the USA to business failure. Professors tend to be more highly regarded and have more security than industrial managers. European education and training are not sufficiently oriented to technology: Japan produces twice as many electronic engineering graduates per capita as the Community, besides having a generally higher level of education than Europe and the USA. European executives are less willing to move home in pursuit of new opportunity. Workers resist technological innovations requiring new skills. After being battered by recession for a decade, perhaps the European economy has lost its nerve.

Yet, given the right conditions, European scientists, technologists and managers are highly successful, and nowhere more so than in the USA. The key to the Community's future is **creating the conditions** in which Europe can compete and cooperate on equal terms with the world leaders in building the high-tech economy and society of the 1990s.



(\*) Administrator, Information and Telecommunications Technology Task Force.

### The conditions for success

The single major condition for success is size—the introduction of the economies of scale and of scope required to recover the costs of research and development. New technology is developing so fast that companies can no longer recover these costs without a significant share of the world market. And companies that are too highly specialized in one product area run high risks in a sector subject to such rapid change.

High-tech companies need perhaps 8-10% of the world market if they are to stay in business in the front line of the technology challenge. Yet no EEC country represents more than about 5% of the market.

Faced with these simple mathematical facts, European companies have tended to seek government protection and subsidies. There is a natural tendency for governments to support their national “champions” in areas of such strategic importance, especially in view of the military implications, but this does not make for internationally competitive firms. Moreover, it reinforces the tendency for national companies to design products for their national markets, leading to different technical specifications which make the products unsaleable abroad.

Another approach has been for European companies to buy the latest technology under licensing or partnership agreements with American or Japanese leaders. This may hold short-term advantages, but there are major disadvantages. Due to the speed of technological advance, the short sales life of new technology products and systems means that the market may already be captured by the time a product is developed from imported technology. One technology breakthrough leads to another and European companies cannot afford to miss a link in the chain without running the risk of falling permanently behind. The best researchers may be

drawn overseas if they cannot remain at the frontier of the technology challenge at home. And Europe cannot count on being able to obtain technology with such important strategic implications, both military and commercial.

The Community must meet the technology challenge with its own resources if it is to ensure its future competitiveness, security, autonomy and identity—in short, its place in the world. These resources are considerable, in terms of scientific ability, R & D funding and market potential. But they have remained unfocussed due to Europe’s compartmentalization into different countries with different

Creating a fully integrated internal market is of fundamental importance to Europe’s high technology performance. Although individual national Community markets are below the critical size for international competitiveness, collectively the Community represents perhaps 25% of the world market for new technology.

Yet creating a sufficiently large home market is not enough in itself. Unless European companies maintain and improve their technological capacity, they will find their overseas competitors exploiting the market once it is fully integrated. And European companies must themselves achieve sufficient “critical mass”, both in their R & D efforts and in commercialization, not to be elbowed out of the race to be first on to high-technology markets that are increasingly becoming world-wide.

### The ESPRIT model

At a rough estimate each agricultural worker in the Community represents capital investment of ECU 50 000, each industrial worker ECU 5 000 and each office worker ECU 500. European agriculture is successful — yet it employs less than 8% of the workforce, whereas the bulk of value-added in the modern economy, and employment, is now created in offices. Value-added increasingly means information-added. While biotechnology, new materials, new energy and

new industrial processes are vital to competitiveness in the material economy on which Europe will continue to depend, it is above all the application of information technology that offers new opportunities for a Community poor in natural resources but rich in creative intelligence.

Information technology (IT) is not only a major industry in itself but is also vital to competitiveness in the modern economy as a whole. It will be one of the dominant sources of technology advance until the end of the century. This was the sector chosen by the Commission for a significant new technology initiative at the start of the



*New technology held centre stage at the European Parliament's early October session (see above extract from the Parliament's poster). "The real challenge for Europe in the year 2000 is its technological independence and beyond that its independence itself." (Pierre Pflimlin, President of the EP)*

industrial structures, traditions and policies. Upstream, too much research is duplicated. In the innovation process, too many research results remain in the laboratory instead of being developed and commercialized. Downstream, the potential Common Market remains divided by formalities and slow to adopt new technology in working and social life.

The creation of a fully integrated European market has been the principal ambition of the Commission since the start of 1985. In June last year, the Community heads of government approved the Commission's plan for achieving this by 1992.

1980s, when representatives of the major European IT companies, researchers, smaller companies and national authorities came together to launch a European response to the IT challenge. The result was ESPRIT — the European strategic programme for research and development in information technology. After a pilot phase in 1983, the ESPRIT programme entered its main phase in 1984, with total funding of ECU 1.5 billion for the first five years.

The ESPRIT formula primarily aims at three essential conditions for success in realizing Europe's high technology potential.

- It focusses Europe's R & D effort, by bringing together government representatives, industrialists and academics to concentrate on the key issues conditioning the Community's IT performance; and it rationalizes this effort, through an annual workplan drawn up by experts which takes account of technology developments and national programmes both in Europe and world-wide.

- It aims to maintain Europe's place in the technological front line, through high-level research projects in the key IT areas at the precompetitive stage, strengthening the technology base needed for commercial success in the 1990s.

- It transfers technology across national borders and from laboratories to industry — ESPRIT projects are carried out by teams from different Member States, including at least two separate companies from different countries, and the results are shared across the Community.

At the same time, the ESPRIT formula is bringing together companies in a European framework that already goes some way to introducing the economies of scale and of scope afforded by the Community dimension. Firms that do research together are more naturally inclined to think of commercial partnerships, and ESPRIT research aims not only at the generic technologies but at the principal application areas for IT: office systems and computer integrated manufacturing. The programme is paving the way for standards — the Community's main IT companies, brought together in ESPRIT, are committed to Open Systems Interconnect standards which



*Young Europeans are eager to get a grip on new technologies*

should ensure end-to-end communication between IT systems from different manufacturers.

Less than two years after the start of its main phase, ESPRIT has already launched over 170 projects selected out of nearly 1 000 proposals. It has significantly increased the proportion of overall European IT R & D funding at precompetitive level, shifting European technology from yesterday to tomorrow, and mobilized some 450 separate IT organizations in the Community.

This is a model for success. It is a new strategy, bringing industry and the Community into direct partnership for the first time. There are additional overheads involved in working together across frontiers, but the Community's 50% share of the funding compensates for these. More importantly, focussing the Community's R & D drive releases resources that were being lost in duplication; it brings together scattered expertise into multidisciplinary teams, working on projects with sufficient "critical mass" to be effective; and it catalyses a new will to succeed, through friendly rivalry between companies that previously saw each other merely as competitors.

#### **Building on success: RACE, BRITE...**

Since the start of ESPRIT, new Community programmes have fol-

lowed the same successful formula. RACE (Research in Advanced Communications for Europe) is helping prepare the technology base for the Community's future telecommunications, a sector of vital importance which will require over ECU 500 billion in new investment before the end of the century. BRITE (Basic Research in Industrial Technologies for Europe) is focussing the Community's R & D effort in new technology required for the competitiveness of more established industries, from jet engines to textiles and furniture. These precompetitive, collaborative, 50% co-funded programmes are industry-oriented. They aim at Europe's fundamental failure since the post-war reconstruction period to apply new technology fast enough to industry and the economy in general.

But they are only part of what needs to be done. The Community is turning its attention to the whole range of conditions for success in facing the technology challenge. New initiatives have been launched to stimulate exchanges between industry and university, dynamize the market through transnational pilot projects, accelerate work on standardization, improve innovation through better access to research results and funding facilities, consider intellectual property laws, commercial and competition policy and social measures that will help the Community during this transition period.

## Towards the European Technology Community

These horizontal measures are the necessary accompaniment to a European technology drive for which there is now a blueprint covering a range of sectors. The European Technology Community, first proposed to the heads of government as a memorandum by the Commission last summer, covers not only information (ESPRIT), communication (RACE) industrial (BRITE) technology, but a list of suggested themes chosen for their potential industrial and socio-economic impact.

These include biotechnology (for health and agro-industry), new materials (e.g. superconductors and ceramics), lasers and optics, large scientific instruments (such as particle sources and advanced wind-tunnels), new means of transport, exploration of space, the ocean and the Earth's crust, and technology for education and training. Projects in such areas could mobilize European technology not only among the specialists but by capturing the imagination of people in general.

Shared-cost research programmes, such as ESPRIT, are only one model for the mobilization of Europe's science and technology potential. Other successful examples are Airbus, the aircraft jointly developed by companies in different countries; Ariane, the satellite launcher developed by the intergovernmental European Space Agency; and JET, the European nuclear fusion project. From European laboratories to information exchange networks and new legislation, a variety of measures are being discussed, with a variety of accompanying proposals for funding and administration, all of which will make 1986 a turning-point not only for the Community but also for its overseas partners, who will benefit from stronger European technology.

Mobilizing European high technology can be done at national, Community and intergovernmental level, where the initiative is not taken by companies themselves. The French government's EUREKA initiative, an example of the intergovernmental approach, has generated a far reaching response in Europe in 1985. An important step forward on this new tech-

nology programme was taken in Hannover (Germany) last November at a ministerial conference at which, apart from the 12 countries of the enlarged Community and the European Commission representing this latter, Austria, Finland, Norway, Sweden, Switzerland and Turkey were represented (\*). All these approaches can be complementary—but Europe's process of adaptation must quickly move from planning to reality. While Member State governments are agreed on the need for an integrated Community market, they still place over 90% of their public purchasing orders with their national suppliers, and public purchasing accounts for perhaps half the high technology sales in the Community.

Although Europe has considerable R & D capacity for new technology, these resources must be brought together. The Community has a successful model in ESPRIT, designed and managed by the Commission's Task Force for Information Technology and Telecommunications. And the Community provides a framework for creating the other conditions for suc-

cess, from the internal market to external negotiations.

Industry recognizes the Community's central role in the coordination of European strategy to meet the technology challenge. This strategy will be defined in the next six months, within the outline of a new Community framework programme for 1987-1991. Whatever the final details of the new framework programme, it is already clear that after the European Coal and Steel Community, the European Atomic Community and the European Economic Community, the European Technology Community is becoming a reality.

At the last summit meeting of European Heads of State and Government in Luxembourg on 2 and 3 December 1985, proposals were agreed for the first revision of the Treaty of Rome since it was signed 30 years ago—and among the foremost of those changes was the decision to make technological research and development a Community responsibility by including it in the Treaty. ◊ B.T.

(\*) See The Courier no. 94 — November-December 1985, "News Round-up", page XII.

## EUROSTAT

# FOD-OCT(\*) trade with the EC and their main trading partners

During in-service training at the SOEC, Mr Tocpe, a student at the Centre européen de formation des statisticiens économistes des pays en voie de développement (CESD = European Training Centre for Statisticians from Developing Countries) carried out a statistical analysis of the above topic, one on which there has been relatively little statistical investigation. Some of the author's principal conclusions are given below.

### 1. Trade between FOD-OCT and the Community viewed in the context of world trade

Not surprisingly, the FOD and OCT account for only a very limited proportion of world trade. In 1984 their exports were only just over ECU 5 000 million and their imports just over ECU 10 000 million. The OCT accounts for the major part of this trade, with exports (largely comprising petroleum) in excess of ECU 4 500 m and imports in the region of ECU 7 800 m. This is not the only difference between the FOD and OCT. While the Community is the FOD's trading partner

for 55% of their world exports and 70% of their world imports, 59% of the world exports of the OCT go to the United States and 64% of their imports come from the developing countries (the corresponding figure for the FOD is 20%). The Community and the United States account for roughly the same proportion of these imports (approximately 15%). Thus, the trade of the FOD-OCT with the world is highly specialized from the geographical standpoint, and in this connection the relationship between the Community and the FOD is very significant.

(\*) (French) Overseas Departments and Overseas Countries and Territories; for the complete list see inside front cover (bottom part).



However, this geographical specialization appears to have changed with the passage of time. In the case of both the FOD and OCT, the share of the Community has continued to decline (although it has to be admitted that even as far back as 1970 the Community was not the main trading partner of the OCT). On the other hand, although the proportion of trade accounted for by the United States is small, it has remained constant in the case of the FOD, while its imports from the OCT are increasing. Japan's share of this market continues to be marginal; it is however expanding in the FOD and declining in the OCT.

In contrast, the importance of the developing countries as trading partners of the FOD and OCT is constantly increasing; their share of exports from the FOD has risen 6.5 times and that of imports 1.5 times, compared with 1.2 and 1.5 times respectively in the case of the OCT.

## 2. Structure of the Community's trade with the FOD and the OCT

Between 1970 and 1984 imports by the Community (at nominal value) from the FOD and OCT increased by a multiple of 2.3 and almost 4 respectively. However, exports by the Community to the FOD increased by a multiple of 6.5 whereas exports to the OCT increased only threefold. This slower progress reflects the aforementioned rapid expansion of the share of the developing countries.

There are significant differences between the structure of the Community's imports from the FOD and those from the OCT, in that the former

comprise almost entirely agricultural products, whereas in the case of the latter they are considerably more diversified, although petroleum accounts for the major portion. This structure has remained constant in time in the case of the FOD, whereas the expansion of petroleum exports and, to a lesser extent, exports of agricultural products by the OCT between 1975 and 1980 halved the proportion accounted for by manufactures.

A regional analysis shows that the bulk of the Community's imports from the FOD come from the Caribbean (70%). In the case of the OCT, there is greater regional diversification, with over 90% of petroleum coming from the OCT in the Caribbean, over 85% of manufactured products coming from the OCT in the Pacific and raw materials imported primarily from the OCT in the Pacific (56%) or other OCT (40%).

In contrast, there is a marked similarity in the structure of the Community's exports to its two trading partners, with manufactured products (accounting for almost 80%) and agricultural products predominating. This structure remained virtually stable throughout the period. This stability is also apparent at regional level. Thus, exports of agricultural and manufactured products by the Community to the FOD in the Caribbean remained stable at 69% and 67% respectively, compared with 31% and 33% in the case of the other FOD. Similarly, the ratio of manufactures to agricultural products in the Community's exports to the OCT (whether in the Caribbean, the Pacific or elsewhere) remained virtually constant at 80% and 20%.

A breakdown of the Community's imports by product show that approximately 30 products account for virtually all imports. In the case of the FOD, the main exports are principally agricultural products (fruit, sugar, alcoholic beverages and essential oils) and industrial products, principally organic chemicals. In the case of the OCT, fisheries products, animal feed-stuffs, sugar, non-ferrous metal ores, petroleum by-products and vegetable oils predominate. Many products are imported from both the FOD and the OCT (about 20): sugar, fish, spices, organic chemicals, etc. The products imported from both the FOD-OCT and the ACP countries comprise the 30 products selected, since the ACP countries export fairly similar products to those exported by the FOD and OCT, and the diversity of their exports means that they can cover the same range as FOD-OCT exports.

## 3. Regional trade of the FOD-OCT

Observers interested in the regional aspect might wish to know whether there is any trade between the FOD-OCT and, on a broader front, between these two regions and the ACP countries.

There is, in fact, some trade between the FOD and OCT, but the volume is still small in comparison with the trade with the Community. It is also largely concentrated in the Caribbean area and principally comprises imports and exports from one FOD to another in that region (imports rose from ECU 2.5 m in 1970 to ECU 113 m in 1982), plus imports from the OCT in the same area (the reverse does not apply, however). This conclusion should however be viewed with caution, given the gaps in the external trade statistics of the OCT.

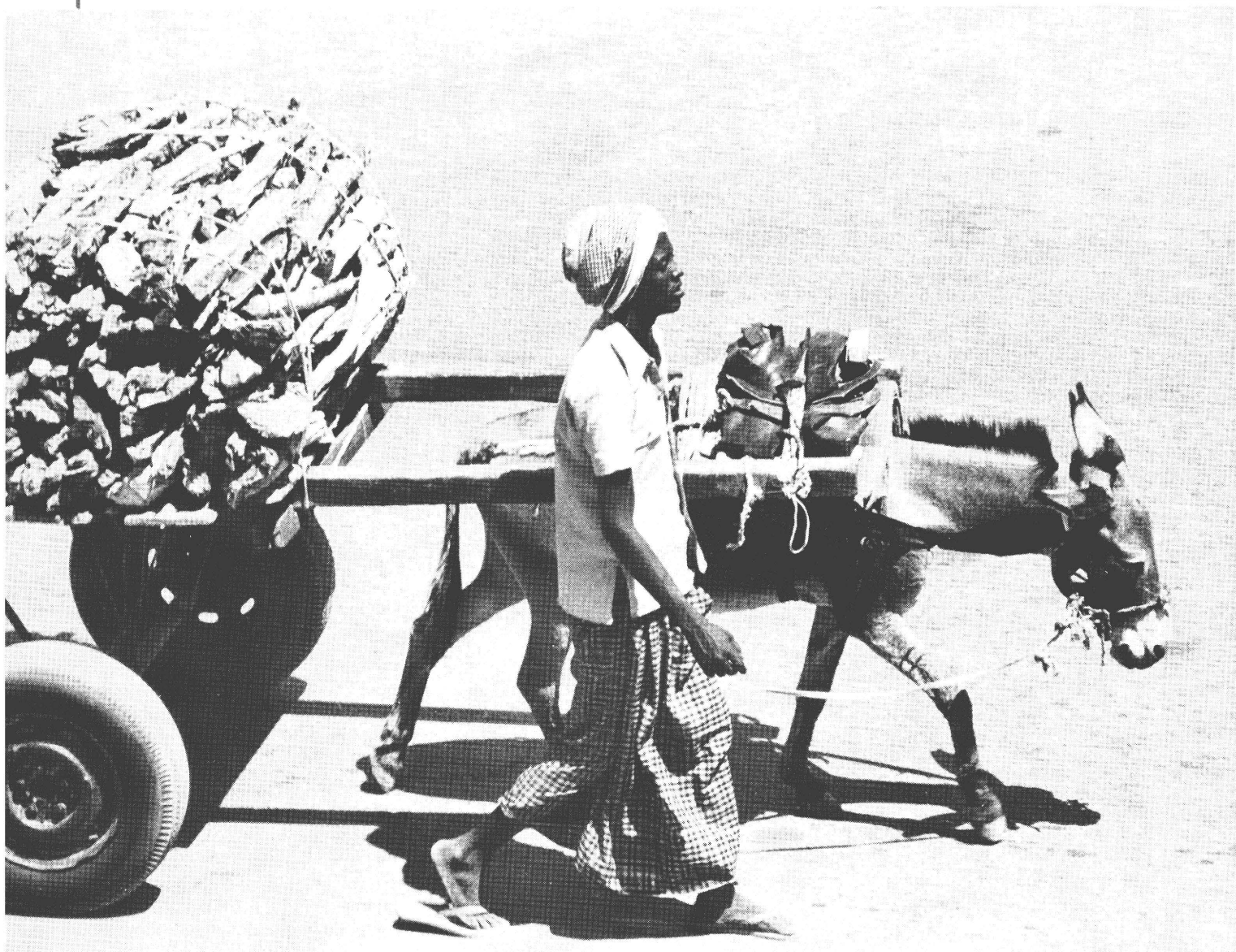
The same can be said of trade between the FOD-OCT-ACP. Insofar as figures are available, it does however appear that the FOD-OCT are net importers from the ACP, rather than the reverse (in 1983 imports totalled approximately ECU 170 m, whereas exports amounted to ECU 50 m), and that petroleum is both the main import (60% in the case of the FOD and 95% in the case of the OCT) and the main export (in the form of refined products and by-products). ◦

**Trade between the FOD and OCT and their leading partners**  
(% breakdown — X: exports; M: imports)

Trading partners	FOD						OCT					
	1970		1975		1984		1970		1975		1984	
	X	M	X	M	X	M	X	M	X	M	X	M
EUR 10	85.5	77.8	84.5	75.2	60.0	70.5	23.3	29.3	21.1	17.5	18.2	16.1
USA	10.1	4.5	3.2	2.9	11.6	4.5	43.4	19.4	54.3	9.8	59.4	14.2
Japan	—	0.5	—	0.9	1.3	1.7	12.4	3.7	3.4	1.8	2.5	2.3
ACP	0.6	8.0	0.8	6.4	4.2	4.1	3.0	4.1	5.2	7.8	0.7	1.0
Dev. count.	3.8	14.4	11.9	18.4	24.6	21.1	13.3	41.3	18.8	66.6	16.3	63.9

# **THE WOODFUEL CRISIS**

Vivant Univers



# TOWARDS A NEW UNDERSTANDING



Over the last ten years, the woodfuel crisis (\*) has thrust its way onto the international development agenda. While the world was still reeling from the oil price shocks of the 1970s, another energy crisis was discovered—the crisis faced by almost half the world's population, those families relying on firewood, charcoal and other biomass fuels for their cooking and other essential energy needs.

This crisis has not gone away. While oil prices may have stabilized for the time being, for millions of families throughout the Third World this has brought little relief. The continuing pressure of expanding woodfuel demands on diminishing supplies is pushing more and more people into a position of increasing scarcity and worsening hardship. And this trend shows no sign of being reversed.

Governments and aid agencies have been mobilized in an attempt to deal with the woodfuel problem. But they have had to learn the hard way. Patterns of woodfuel production and use were virtually unknown a decade ago, and accurate data on consumption levels were practically non-existent. This lack of basic information has hampered many of the early initiatives aimed at solving the woodfuel crisis. Though some programmes have been successful, many have failed.

From the experience that has been gained, however, a clearer picture is beginning to emerge. The picture is a complex one, far more so than was originally portrayed. Patterns of woodfuel use vary widely, the causes of scarcities differ from place to

place, and different people are affected in different ways. As there is no single problem, there are no simple solutions.

This dossier is an attempt to review what has been learnt over the past decade. It looks at the woodfuel crisis from a new and different perspective. Rather than considering the problem and the solutions in a narrow technical sense, as has often been the case in the past, it discusses them from the point of view of the woodfuel users themselves. What problems do they face? How do they see the woodfuel crisis? And what options do they have in coping with woodfuel scarcities?

The dossier has been prepared by a team of woodfuel specialists from both South and North under the aegis of the Association Bois de Feu. It starts with an overview of the woodfuel problems. In the next three articles, it focusses on the problems faced by the three main woodfuel consumer groups: rural households, urban households, and small-scale industry. This is followed by a discussion of the complex and often misunderstood link between firewood cutting, deforestation and desertification in the Sahelian region. In the final article, the diverse elements in the woodfuel debate are drawn together again, and the main conclusions regarding strategies for the future are summarized.

At the end of the dossier, a selected bibliography of useful books and articles is presented, together with information on how these can be obtained. There is also a request for feedback and comments from readers, based on their own experience and local knowledge. ○

(\*) Throughout this dossier, the word "woodfuel" has been used to include both firewood and charcoal.

# Woodfuel: the energy crisis of the poor

by Gerald FOLEY (\*)



Cooking with twigs on a "three stones" fire protected from the wind (northern Niger)

More people rely on wood for their basic energy needs than any other fuel. The irony, and the tragedy, is that this renewable energy source is being depleted more rapidly than the fossil fuels about which there has been so much concern in recent years. The woodfuel supplies of hundreds of millions of people will be exhausted long before the oilfields on which the industrialized world relies have run dry.

But woodfuel consumers have little political power or influence. Most of the wood they use does not even figure in the economic statistics of governments and international agencies. Poor people in the rural areas garner it from the countryside and woodlands about them without any cash payments, bypassing the formal market transactions on which measurements of national economic activity are based.

It is this economic 'invisibility' of woodfuel consumption which caused energy planners to ignore it virtually completely until the mid-1970s. Even now, woodfuel is still omitted from the national energy statistics of many countries. But such lack of official attention should not be allowed to conceal the reality of the woodfuel problem.

## Twice the energy supplied by nuclear power

Wood accounts for about 10% of the total energy used in the world every year. This places it fourth in the ranking order of major fuels, a considerable way behind the big three of oil, coal, and natural gas; but it provides over twice as much energy as nuclear power.

In the developing world, wood has an even greater significance. It accounts for an extremely high proportion of the total energy used at a national level; the poorer the country, the greater its dependence on woodfuel. In some of the drought-stricken countries of the Sahel such as Mali, Chad, Ethiopia, and Somalia, woodfuel supplies over 90% of the total energy consumed for all purposes; even in oil-rich Nigeria, it accounts for over 80% of the total national energy consumption.

Wood or charcoal are also extensively used as domestic fuels in the cities of the developing world, but the proportion of people relying on them varies greatly between different countries. In some cities, such as Dakar in Senegal, almost everyone uses charcoal for at least some of their cooking. In others, woodfuel is confined to the

*This article examines the broad outlines of the woodfuel crisis and how it bears particularly heavily on the poor. It argues that there are no simple technical answers. Aid programmes must be based on the reality of the crisis as experienced by those living through it rather than on outside preconceptions of what should be done.*

poorest; in Bangalore, in India, for example, its use as a cooking fuel is confined to the lowest 16% of the population.

In many countries, wood also supplies a high proportion of fuel consumed by large and small industries (see the article Industry: Creator or Destroyer of Forests). In Tanzania, for example, woodfuel provides almost 90% of the energy consumed by industry.

Such arid statistics, however, do not adequately reveal the true human dimensions of the woodfuel problem. The fact is that there are perhaps two billion poor people relying upon it for their daily necessities of cooking, water-heating, and keeping warm. For many in the rural areas, unable to afford conventional fuels such as kerosene, bottled gas, or electricity, the open fire is also their only source of light. The ambition of countless families to educate their children for a better life depends on homework carried out by the flickering light of a wood fire.

## No simple answers

The woodfuel problem cannot be summarized in any simple formula which applies everywhere. There are enormous differences between countries, cultures, and ecological regions. Generalizations which attempt to cover the dry savannas of Africa, the forested countries of Central America, or the crowded lands of the great Asian river deltas are bound to be suspect.

(\*) Gerald Foley is Head of the Earthscan Energy Information Programme, Earthscan, London. Article prepared with the help and guidance of El Hadji Sene.

Also, the position changes with time. The present patterns of consumption are not necessarily a guide to what will happen in the future. People do not continue using wood at the same rate until all the trees have disappeared from an area; as scarcity builds up, they begin to economize and switch to whatever alternative fuels are available. In other cases, they make voluntary changes, seizing any opportunities which arise to make life easier for themselves. Most families, for example, willingly change to the use of kerosene or bottled gas as soon as they can afford to do so.

When attempts are being made to find solutions to the woodfuel problem this diversity must be recognized. Planners must distinguish between the various groups of woodfuel consumers involved: landowners and landless, urban and rural consumers, rich and poor, those who pay for their wood and those who collect it without any cash payment. They are all affected differently by woodfuel scarcity and this must be taken into account when the plans are being made.

### Sliding into crisis in the rural areas

There is a popular image of rural woodfuel consumers bringing an energy crisis upon themselves by their reckless cutting of trees and wasteful use of wood for fuel. In many areas there have been campaigns to educate people about the problems of impending scarcity and the dangers of environmental degradation as a result of the disappearance of trees. This badly underestimates the skill and perceptiveness of rural people. They do not need visitors from the cities to tell them about what is happening around them. They have been able to survive from generation to generation because of their good knowledge of the environment in which they live.

True, wood consumption is often high in the areas where it is readily available — just as in the industrial countries oil was used with reckless wastefulness up to the time of the price rises of the 1970s. But in areas where trees are scarce, the habit of economy is second nature to people; wood and charcoal are used sparingly; fires are tended carefully, and unburnt wood is saved and reused. The as-

## Clear ideas for efficient actions

by El Hadji SENE (\*)

The following dossier confirms a few basic truths about which there now seems to be a general consensus, whereas it was not all that unanimous a few years ago:

— The farmer trying to supply his energy requirements from surrounding resources is not considered any more as the “irrational person with suicidal tendencies” sawing—I was going to say “macheteing”—the branch which he is sitting on.

— The woodfuel problem, that has too often been tackled separately, will be solved only if it is considered more broadly, and with development objectives; the solutions are no longer considered as emergency actions but as positive steps contributing in the same way as any other economic action, to the generation of income and to the well-being of the household.

— The tree, which has the main role in this scene about “wood, land and man” is no longer considered as simply a producer of wood but as an omnipresent and multifunctional participant dependant on the potential of the land and on the many

needs of man. This is exactly how man feels about the situation.

— Rather than considering the tremendous woodfuel needs of the cities only as handicaps, let us consider them more positively as opportunities to generate activities, create jobs and incomes in surrounding rural areas. It is also an opportunity for all of the small fuelwood consuming industries.

— Wood energy must not stop at the household level, it can—*it must*—take on new forms and new ambitions through technological innovation and improvement.

— Once all these prejudices have been swept away, once new horizons and perspectives have been opened up, once wood has been restored as a source of energy as “noble” as any other, once ideas are clarified, I think the path will be wider and more willingly taken by the ones without whom we would never succeed: the people themselves. We will then have to improve the policy framework to be able to guide the actions: steps to pay better the work achieved, resources to support initiatives, intensify the impact, and... often, what lacks the most, consistency and follow-up, patience in efforts because... “time has no mercy for what is done without it”. ○

(\*) El Hadji Sene, Technical Inspector, Ministry of Nature Protection, Senegal. M. Sene worked in 1985 in the Forestry Department of the FAO as Coordinator of “International Year of the Forest”.



Clearing the ground for planting manioc in Makona, Congo

sumption that people need to be told that wood will become scarce if they cut down the trees from which they obtain it misses the basic point which is obvious to those who are living through the crisis. They are well aware of what is happening but for a large part it is not their fault, and there is usually very little they can do about it.

Pressure comes on woodfuel resources for a variety of reasons. Sometimes, as happened in the Sahel in the 1970s, drought can suddenly kill off large numbers of the trees on which people depend for fuel. But more often scarcity tends to build up gradually, sometimes as a result of changes in agricultural practice. Much has been written about ill-considered schemes of farm mechanization which increase the vulnerability of the soil to erosion and degradation. It also needs to be borne in mind by agricultural planners that projects in which trees are cut down to make room for the use of tractors also reduce local fuel resources.

Improved varieties of crops and more generally the modernization of the rural sector can also bring problems. The use of rapid-growing millet, for example, has advantages from the viewpoint of the farmer; but, unlike the traditional varieties, its stalks are too flimsy and burn too fast when his wife uses them as fuel. Moreover these stalks decay more quickly at the end of the rainy season and the amounts of fuel available are smaller. The family's food supply or cash income may be more secure as a result of the change

in crop, but the woman has to search elsewhere for something to burn.

But above all, the supply of woodfuel comes under pressure as a result of the need to find additional land for growing food. Population growth, migration, war, and drought are driving impoverished people in many countries to extend farming into lands from which woodfuels were formerly collected. As farmers take over these areas, the trees growing on them are cut to make room for crops.

Initially, there may even be a temporary surplus of woodfuel as a result of this tree felling. But inevitably the reduction in the number of trees leads to increasing fuel scarcities. The women, who are responsible for obtaining the family fuel supplies, have to walk further and search longer in their hunt for fuel; eventually they have to start cutting branches from living trees to meet their families' needs. To the unwary outside observer it may look as though they are causing the shortage of woodfuel which is afflicting them. In fact, as the article 'Fuel and the Rural Household' clearly shows, they are its helpless victims.

### The problems of urban consumers

Urban consumers have their own set of problems when woodfuels begin to become scarce; they are not concerned with environmental issues or with having to search further to obtain the wood they need. Conventional fuels such as kerosene, bottled gas and electricity provide an alternative for those who are able to afford them. For

urban consumers, the woodfuel crisis is almost entirely a question of money.

This means that the increasing scarcity of woodfuel bears most heavily on the poor. As woodfuel prices rise, the amount of money poor people have to allocate to fuel increases. Some are forced to cut down on the amount of cooking they do, relying increasingly on precooked foods which are usually less nutritious than traditional dishes. Children's hunger is frequently assuaged by buying them sweets and canned soft drinks.

For some, there is a worse twist of fate, and they find themselves caught in a 'woodfuel trap'. There are places where the price paid by the very poor for the small quantities of wood they buy every day is actually higher than the price of kerosene or bottled gas. They are trapped into continuing dependence on this expensive woodfuel because they cannot afford the initial investment in a gas or kerosene stove.

### The rural impact of urban demands

When dealers from the cities start to buy wood in a rural area, a further dimension of complexity is added to the problems faced by the people living there. Usually it is the men who become interested in these commercial woodfuel dealings. As the anthropologist Jaqueline Ki-Zerbo observed about men in West Africa, the emergence of a commercial market is the recognition of a new situation, that wood has become a rare and therefore valuable commodity deserving the attention of the male sex. The result is that the women gathering fuel for the family can find themselves in competition with the men collecting it for sale.

But the woodfuel trade brings little real or enduring prosperity to the rural areas. This is because the price paid for woodfuel by urban dealers is usually extremely low. It is sufficient to encourage people to cut trees but is rarely enough to encourage farmers to convert some of their land to growing trees to meet the urban market.

As is discussed in the article, "Wood in Towns", the extension of an urban market into a new rural area adds to the pressures being experi-



*Bargaining for firewood in Ayoron, Niger*

Earthscan

enced there and accelerates the depletion of resources. Those collecting woodfuel are usually from the poorest landless families making a precarious living by gathering or stealing wood from wherever it can be found without paying for it. They do not restrict themselves to gathering dead wood; they cut and sell whatever trees they can, knowing that if they do not do it someone else will.

The big problem is that there is no commercial incentive for anyone to grow trees. The urban dealers are indifferent to the disappearance of resources. When all the saleable wood in a particular place is depleted, they simply move on to the next area from which they can obtain their supplies. As the commercial market spreads deeper into the rural areas, the rural consumers have to rely on the wood they can scavenge from whatever is left over from commercial sales.

### The user's viewpoint

Many sincerely motivated efforts have been made to deal with rural energy problems. Numerous programmes to encourage farmers and local communities to plant trees for fuelwood have been undertaken. There have also been many campaigns to increase the efficiency of woodfuel use by promoting more efficient woodstoves.

But while there have been some notable successes as a result of these initiatives, a large number have failed to win the actual support of the people they were meant to help. Once the visiting experts have gone, it has far too often been found that the woodfuel plantations are abandoned and the carefully-constructed energy-saving stoves, even if they are used until they are worn out, are not replaced. In the Sahel, for example, some \$160 million were spent on woodfuel plantations between 1975 and 1982, with very little indeed to show for it.

There have been grave technical mistakes in the design of some of these programmes. But it has also been found that the external view of the problem, whatever its overall logic and validity, can also lack persuasive-

ness where it really counts. At times, it seems as though there were, even among the most well-intentioned outsiders, a kind of intellectual imperialism in which they attempt to force their own definition of the woodfuel problem on the people who are actually living through it.

The main lesson to be gained from experience with the programmes carried out to date is that no solution

ly the most important, issue facing people. Food, water, shelter, health, and the need to make provision for the future all jostle for attention and a share of the available family resources. The luxury of specialization in any one particular problem is not one that most families can afford.

Concentrating solely on the energy issue can lead aid agencies into unworkable programmes. People cannot be expected to welcome solutions to their energy problems which make it more difficult to deal with other essential aspects of their lives. It is therefore essential that the context in which people actually live is taken fully into account at the planning stage. Given modern technical resources, it is not very difficult to design an improved cooking stove which will save impressive amounts of fuel in the laboratory. But as explained in the article, "Woodfuel and the Rural Household", if this new stove is not related to the reality of life in the kitchen then it will not be adopted.

Fuelwood plantations may also turn out to be an unworkable option in some of the more arid areas. For most families, the overriding necessity is to use the short rainy season for planting food crops. It may simply be impossible to find the time necessary to plant, water, and weed a tree plantation. But, as discussed in the article, "Wood, Land and People", better management of the existing woodland resources—which have sometimes been dismissed as useless brush—may provide a more feasible means of increasing the supplies of both food and woodfuel.

Above all, it has to be accepted that abstract notions such as energy efficiency or a future energy 'gap' are of little relevance in the daily grind of people's lives. They must see a direct benefit to themselves from what it is suggested they do about the woodfuel problem. There is no point in proposing to a farmer that he invest land and effort in producing woodfuel beyond his own needs if there is no market in which he can sell it. Aid planners must have a sense of reality equal to that of the people they are trying to help. ○

G.F.



*Cooking goat meat on a charcoal stove in Haiti  
(Earthscan)*

which is imposed from outside will succeed if local people do not accept it themselves. The woodfuel problem of the developing world is so massive, and yet so diffused, that the only approach which has a hope of success is one which people are able to assimilate into their lives and make their own. This will often require a complete transformation of the relationship between governments or aid agencies and the people. Officials will have to listen a great deal more to what people have to say, and act upon what they hear.

### Woodfuel is not the only problem

A point which has to be kept continually in mind is that the supply of woodfuel is not the only, or necessari-

# Woodfuel and the rural household

by Yvonne SHANAHAN (\*)



Earthscan

Rural households are the largest users of woodfuel. This article discusses how it is obtained and used, and how the effects of scarcity bear particularly upon women; shortage of woodfuel undermines both the

health and economic well-being of the family.

The article also looks at the factors which influence the success or failure of improved cookstove programmes.

Third World women have countless tasks to perform each day. Their work is not confined simply to looking after their families and homes. They also work in the fields producing the crops on which the family depends for food and its cash income. One of the toughest and most vital of their daily tasks is to provide the fuel for cooking meals.

Decisions about how woodfuel is obtained and used are made by women inside the family and are not necessarily obvious or well understood by people outside the family such as government officials or foreign observers. If measures are to be taken to deal with the problem of woodfuel supply, it is essential that it is seen from the woman's point of view and that her aspirations and capabilities are fully taken into account.

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## How woodfuel is obtained and used

Wherever wood can be collected or bought relatively inexpensively it has remained the main source of fuel for the vast majority of rural households. It is preferred to other biomass fuels such as crop residues and dung because it is so much easier and more convenient to use. But in recent years, the number of people who are able to enjoy the luxury of using as much woodfuel as they wish has been rapidly diminishing.

Cooking is the main use of woodfuel almost everywhere. At least one meal is cooked every day; more often, two or three meals are prepared, with the fire being lit or kept burning between times for fast cooking dishes and hot drinks. The number of meals and snacks and the types of food cooked reflect the social and cultural traditions of the different communities as well as the resources available to the household.

Over the years, the people living in an area acquire a sophisticated level of know-how regarding the use of local tree species for different tasks. As far as cooking is concerned, it involves making the most of the characteristics of the various kinds of wood in different methods of cooking. A host of criteria may be applied; some are to do with tastes and preferences such as providing an aroma to food which is cooked or smoked over the fire; others are functional, such as the need to provide either a very hot, intense flame for frying, or a regular low flame for simmering or steaming. If the right type of wood can be used for each particular cooking task, the cook does not have to spend so much time looking after the fire and can use the time for other work.

Space heating can also be important. A surprising number of homes in the developing world are cold enough at night to need regular heating in the communal and sleeping areas. The heat and light thrown out by the fire



then become important, and family activity is concentrated around the fire in the evening. Sometimes, in the search for fuel economy, designers of improved cookstoves overlook this need for light and heat.

Charcoal is also an important fuel in developing countries. For the most part, it is produced by professional charcoal makers in the countryside and used in the towns. But "home made" charcoal also has much to offer rural families. A certain proportion of the wood burned in an open fire or a traditional stove is converted into charcoal and remains in the hearth after the food has been cooked. These embers may be left glowing to provide heat, but often they are extinguished or raked out and put on one side for the next fire, for making tea, grilling meat or corn cobs, or for filling the clothes iron.

Many families also consume a large amount of woodfuel and crop residues in seasonal or year-round activities such as the preparation of animal feed, brewing beer, smoking fish, or drying and parboiling rice. In parts of Nepal, the regular preparation of cattle feeds over an open fire requires considerable amounts of wood; sometimes poorer quality wood than that used for domestic cooking may be burned for this purpose, but just as much energy is required.

Activities such as these are very often a vital source of income for women who, in addition to everything else, are having to assume full responsibility for the economic welfare of their families in a growing number of areas. But increasingly, the wood needed for these home-based commercial activities is becoming scarce and in many cases it has to be bought. This means that wood shortages and price increases are now threatening the livelihood of thousands of rural families who earn an income from processing agricultural products.

### The impact of scarcity

Before any programme of action for tackling the complex problem of woodfuel scarcity can be devised, it is essential to know exactly how people are affected by it. This means looking into how people go about the task of collecting wood and how they react to the increasing problems of obtaining what they need.

Many questions need to be answered. How much time is spent collecting wood? Do women gather the wood by themselves or do they do it with other women or their children? How often do women carry out this task? Once a day or once a week? Where do they find the wood? Forests, reserves, communal land, their own fields, neighbours' fields, their gardens or in several of these places? Or do women buy part of their wood? What sort of wood is it? What state is it in? Dead, dry, green, wet? Is it in the form of logs or twigs? Does the time of year affect the type of wood and place where it is gathered? What is the wood used for and how is it burned? In a three stone fire, a closed stove, sparingly or wastefully? Do the women sell or exchange some of it? How is it broken? By hand, with a knife, or an axe? These are just some of the questions which have to be answered before a strategy can be drawn up.

The people who are most affected by the scarcity of woodfuel are the poor and landless families and those headed by women. In many areas, wood used to be picked up beside the road on the way home from the fields. Now, as wood becomes scarce, women and children are driven further and further afield in their search for cooking fuel.

There is a growing tendency to cut the branches of living trees. Whole trees are also being cut down to be used after they have dried out. When the preferred species have disappeared, people turn to less popular species of wood such as thorny acacia and cacti or they even begin to sacrifice fruit and spice trees or those used for animal fodder.

The use of crop residues and dung is also on the increase, though these are not always available in quantity the whole year round. For example, in the Maradi area, in Niger, millet stems are used for cooking during several months of the year. The use of other "waste" materials such as rice husks and sawdust is also on the increase. In some areas, fuel is becoming so scarce that even these fuels may have to be paid for nowadays—yet a further expense for the poorest households.

The scarcity of firewood and the increasing use of poor quality fuels has taken a considerable toll on family welfare. First and foremost, fewer

meals are being cooked and this cannot but affect the health of those who eat the meals. It also means that meals which are cooked early in the morning but not eaten until late in the evening are not as fresh. They may even become contaminated or dirtied by domestic animals.

In cooler regions, the effects of going without a hot meal, hot water and heat from the fire are even more serious. Furthermore, the growing use of substitute fuels—crop and animal residue—or green wood in poorly ventilated kitchens increases the amount of smoke which in turn leads to pulmonary disease. And any crop residue used in this way can mean less fertilizer for the fields.

Changes of diet are also being forced on people in some areas. In Sri Lanka, for example, where rice is the staple food, many poor landless families are gradually replacing at least one of their rice meals with bread made from white flour as a means of economizing on fuel. The nutritional quality of the bread is poor compared with that of the traditional rice dish.

There is a popular notion that one of the worst effects of women spending more time collecting fuel is the reduction in the time they spend looking after their families. This seriously understates the magnitude of the problem caused by worsening woodfuel shortages. Its impact is much more pervasive and affects all the productive functions of women in the household.

These include not just the vitally important work of growing and processing food for family consumption, but also those additional cash earning activities on which the household depends.

### Cookstove programmes

People have not sat back and passively watched the wood fuel crisis worsen about them. Under the pressure of scarcity, they economize on wood, switch to other fuels, and change their cooking utensils, their way of cooking, and even their cookstoves. Close observation shows that the families affected are doing all they can to find their own solutions to the problems afflicting them.

Fortunately, in recent years, both governments and international agen-

cies have become aware of the rural energy crisis, its growing seriousness and the devastating effect it is having within families and across states. A range of different initiatives has been taken, one of which is the introduction of new types of cookstoves which are more economical in their use of energy than traditional fires and stoves.

Studies on earlier cookstove projects raised valid doubts as to the technical feasibility of the proposed stoves, how they fitted into the working patterns of the kitchen, and whether it would ever be possible to introduce them on a wide enough scale. Part of the problem was that, initially, the main interest of designers and aid agencies was focussed on the fuel efficiency of the stoves, without taking sufficient account of how exactly they would be used in the kitchen. But people are now becoming aware of the many different functions of the cooking fire and the working contexts into which new stoves have to fit.

Although the exact details of the costs and benefits of improved cookstoves are still the subject of wide debate, there seems to be a general agreement that they constitute one of the most promising short-term measures for tackling the problem of woodfuel

scarcity. The past few years have seen an encouraging trend in the growth of projects supported by national authorities and international organizations. This assistance has made it possible to tackle the problem on a larger scale and develop expertise.

### Learning from past experience

In the past, some projects failed because they were ill-adjusted to the needs, expectations and financial means of the household, community, or nation. Lessons for future campaigns have been drawn from these unfortunate experiences. We now know that women will certainly be more attracted by a new stove if it offers a variety of benefits. Saving wood is not at the top of their list of priorities; they prefer a stove which is easier to use, safer, produces less smoke, and makes for a cleaner kitchen. This does not mean that saving fuel is not an important criterion, but simply that it is but one aspect of a complex problem.

Finally, a stove's acceptability depends on its cost. The purchase price must be within the financial means of those expected to purchase it. These

technical, economic and social factors leave little room for manoeuvre, while the requirements for an acceptable new stove remain stringent. It is easier to produce a stove which meets all these requirements if it is designed to be made by local craftsmen and distributed through conventional commercial channels.

Most of the successful rural stove promotion projects were initially launched by non-governmental organisations as part of their wider community development programmes. Some have also been adopted at national level with modest success. Sri Lanka, Indonesia, India, Kenya, The Gambia and Burkina Faso are examples.

In the late 1970s, for example, the Sarvodaya Shramadana Movement in Sri Lanka launched an improved cookstove programme which was designed both to improve family welfare and save wood. A national programme has now been built on the basis of the Sarvodaya project in which potters are trained to make the stoves and rural artisans to install them in the home. Over the years they have developed and refined stove designs and the distribution network so that the stoves are now affordable and accessible to most rural families.

Recent experience has also shown that in rural areas where there is only a small commercial trade in wood, it is easier to introduce improved cookstoves as part of a wider programme designed, for example, to improve women's social and economic status, raise the standard of hygiene, health and nutrition in the home, and plan a more rational use of energy and forest reserves. This broader approach saves on the amount of effort needed to achieve each target. It also encourages and facilitates the best use of human resources such as rural extension networks, expertise in monitoring and evaluating results, training and data banks.

But in spite of the successes to date, neither the Sarvodaya Movement nor any of the organizations concerned with such programmes are resting on their laurels. People have realised that the introduction of new stoves requires a continual adjustment of their design to meet the means, needs, and aspirations of the people they are designed to help. ○

Y.S.



WFP - J. Van Acker

*Shortage of woodfuel undermines both the health and economic well-being of the family*

## How to evaluate woodfuel consumption.

by Sylvie SIYAM SIWE (\*)

One of the key elements of projects whose aim is to improve people's living conditions is a survey which allows for the assessment of the target group's needs. On the one hand, this survey is the only means for the people to express their opinions. On the other hand, it allows the project planner to learn what the actual needs are and thus to design the project to satisfy them. To a large extent the success of such an action depends on this survey. The terms used in the survey must allow all necessary information to be gathered without offending the people surveyed.

As far as the evaluation of domestic energy requirements is concerned, the survey must allow the assessment of the different end uses of energy, the energy sources and the quantities consumed.

The problems of communication (language, customs, local measurement units) will be solved by hiring local surveyors who are specially trained, whose ethnic diversity is representative of local ethnic diversity. The people surveyed will thus be spoken to in their own dialects.

But what kind of questions should be asked and how should they be asked in order to gather the necessary information? Here are a few examples:



Instead of asking	Which could be interpreted as	Ask rather
1. What is your monthly income?	This could be the tax services who want to know if I've paid. (What inquisitiveness!)	What is your occupation? What does it consist of?
2. Do you have a gas stove?	(This is often ironic if the household is a poor one)	What do you cook with?
3. Do you have a water heater?	(Some people might not even know what a water heater is). Is there a pan or a container for heating water?	Does the family wash with heated water in the cold season and what is the water heated with?
4. Do you heat the house?	(This question might not be understood.)	After cooking, is the fire extinguished or does the family sit around it to warm themselves?
5. Do you have a refrigerator?	(This could seem ironical if it is obvious that the family cannot afford it.)	How do you keep meat or fish when you have a lot of it?
6. What means of transportation do you use?	How do you travel?	Are the market, the place where you work or the field far away? How do you get there? How do you bring back what you have harvested?
7. Do you burn agricultural residues?	(The person surveyed might not even have any land.)	Do you have land? What do you grow? What do you do with stems, etc.?
8. How many kilograms of wood do you use monthly for heating water?	(The kilo is not necessarily known. The housewife does not count the number of pieces of wood she burns for each household chore. And all the pieces are not the same size.)	What amount of wood do you use for cooking? (The unit and the time period understood by the person surveyed will be used.)
9. How many kilograms does a bundle of wood weigh?	(Wood is not sold by weight)	What is roughly the size of a bundle of wood? (The surveyor will estimate himself or weigh later on)
10. Can we have your electricity bills?	(This person may be illegally connected to the network)	(Try rather to ask questions concerning the possible end uses of electricity.)

The amount of energy used and, in particular, the quantity of wood or charcoal burnt for supplying the different energy requirements of the household will be determined by converting the measurement units used during the survey (well known to the surveyors) into reference units, by taking measurements at the local market place: for example the average weight of wood bundles, the volume of canaris, ...

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*A Cairo charcoal seller, Egypt*

The woodfuel crisis is usually pictured as a rural one, with images of women trekking miles to find fuel, or feeding pathetically inadequate bundles of twigs and straw into their mud stoves. The rural poor are obviously close to the problems of deforestation and environmental degradation, but what of the people in Third World cities?

### Who are the urban wood consumers?

Although conventional fuels are more easily found in cities, wood and charcoal are still the fuels used by the majority of urban families. The choice between wood and charcoal seems to be dictated largely by tradition.

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Charcoal is the most popular fuel in Nairobi, Dar es Salaam, and most East African cities, whereas in Niamey, Ouagadougou, and other West African cities, wood is more widely used. In Asia the picture also varies: Bangkok uses almost exclusively charcoal, while wood is much more commonly used in Madras and most Indian cities.

Patterns of fuel use are strongly related to income levels. High-income families almost everywhere have shifted to kerosene, bottled gas, or electricity. It is not difficult to understand why. In comparison with a wood fire, conventional fuels are cleaner and simpler to use; their adoption is widely regarded as an indication of the modernity and higher social status of their users. In the middle-income brackets, woodfuels are more commonly used, though most people use electricity for lighting and kerosene or bottled gas for cooking

## Wood in towns: no money to burn

by Phil O'KEEFE (\*), Calestous JUMA (\*)  
and Jean-Marion AITKEN (\*)

*This article looks at the urban woodfuel question: who are the consumers and how are they supplied? It shows how urban demands spread deforestation over an ever-increasing area. The role of improved stove programmes is examined and the conditions under which woodfuel plantations become an economically viable option are analysed.*

fast-cooking dishes or brewing tea. Among the poor, however, wood or charcoal are usually the only cooking fuels; their only "luxury" being a simple kerosene lamp.

### Cities of the future

At present only 20% of the population of sub-Saharan Africa (excluding Namibia and South Africa) live in towns, but the number is increasing rapidly and seems likely to continue doing so. Driven by the agricultural crisis, migrants from the rural areas are coming to the towns in search of work. The rate of rural to urban migration now exceeds population growth by a factor of three. New migrants generally settle in the sprawling shanty towns, where, even if they could afford electricity, it is not available; woodfuels are the only source of energy for cooking and heating.

As the towns of the Third World

grow—some predict a doubling in Africa's urban population by the year 2000—it will be the low-income sector that grows fastest, and so demand for woodfuel can only increase in the near future.

### Where does the wood come from?

As the woodfuel supplies close to a town become exhausted, suppliers have to search further afield. This can introduce important changes in the way in which the woodfuel market works. The poor or landless peasants who previously earned a living gathering wood (either legally, or more often illegally), are no longer able to walk to the town to sell this directly. Access to motorized transport becomes the critical factor in the provision of urban woodfuel supplies. As a result, truck owners are often able to establish control over the urban wholesale market.

In Kenya, for example, truck drivers buy charcoal on their way back from trips delivering goods to the outlying

areas. In this way, the cost of transport is reduced almost to nil, so a much wider area of collection is opened up. Some of the charcoal comes into Nairobi from as far away as the Sudanese border—600 kilometres (375 miles) to the north, for example.

In a few countries the woodfuel trade is well-controlled by the government and regulations governing the cutting of trees in forest areas are strictly enforced. But this is very much the exception. In The Sudan, forest rangers have accosted armed crews filling trucks with illegally cut wood for the production of charcoal—and shoot-outs have occurred. In other countries there are allegations that the forestry officials are working in collusion with these contractors, forging permits and falsifying records to allow them to take wood from officially protected land.

As the transport distances increase, charcoal is often preferred because it is lighter, easier to package, and can be sold at a higher price than wood (three times more in Nairobi). The use of

charcoal as fuel can also exacerbate the problem of deforestation since turning wood into charcoal is very inefficient in energy terms. This means that, when charcoal is used, the overall consumption of wood tends to be greater than if the wood were burned directly by people to meet their fuel needs.

### The impact of urban demands

The concentrated demands of the urban market, and the incentives to cut trees created by a cash market for woodfuel, can dramatically increase the rate at which deforestation takes place. In years of bad harvests, farmers are often tempted to fell and sell their trees for the sake of some cash in hand, at the cost of their future fuel supply and the preservation of their soil. Charcoal production is particularly destructive because live trees are harvested, instead of the dead twigs and branches which rural people usually collect to supply their own needs.

*Traditional charcoal making in Haïti, in an earth kiln*



The opening up of roads also has the effect of making the urban woodfuel market more accessible to remote areas. This spreads deforestation further. In the Mbere region of Kenya, some tree species have almost disappeared since roads were built, due to the activities of charcoal makers. Roads which, it was claimed, would bring "development", have often served to drain remote and often environmentally precarious regions of one of their most important resources.

## No money to burn

As the distance suppliers have to go for woodfuel supplies becomes greater, there is an upward pressure on prices. The urban poor frequently find themselves caught in a "poverty trap". Despite its rising price, they are forced to continue buying woodfuel even after it has become more expensive than kerosene or other fuels. The reason is that they cannot afford the price of the new stove required to burn bottled gas or kerosene.

In Zambia, for example, a kerosene stove costs six times as much as a traditional charcoal stove, or "Mbabula", made by local artisans. An electric hotplate is 10 times the price. Changing fuels may also require new cooking utensils, such as flat-bottomed metal saucepans to replace the very much cheaper traditional round-bottomed earthenware cooking pots.

As prices rise, therefore, the poor usually have little choice but to buy less fuel and have fewer cooked meals. This is already happening in many Third World cities, where poor people in the shanty towns may go without a hot meal for weeks.

The cheapest foods are often those that require most cooking, such as rice and pulses. They are less easily digested, and so less nutritious, if not thoroughly cooked, and of course, the danger of contamination is much greater with uncooked, or undercooked food. Shortages of fuel may therefore necessitate a change of diet.

The sight of small kiosks selling hot foods is common in many cities. The savings in fuel which the stall-holders achieve by cooking in larger quantities makes it cheaper for the urban poor to buy their meals ready-cooked rather than purchase the fuel and cook for themselves.

## Reducing fuel consumption

The urban poor are therefore caught in a situation where they are surrounded with choices, but have few real alternatives. And their position is getting worse.

Many people now feel that the potential benefits from the use of improved cooking stoves are greatest among these poor urban consumers. This is because people in towns are already paying for their fuel, and can see an immediate benefit from using less.



*Urban demands for charcoal spread deforestation over an ever-increasing area*

The initial investment in the stove is quickly repaid from the savings they make in their fuel purchases. Moreover, since there is already a commercial market system through which people buy their stoves, it is easier to introduce new designs through the existing networks of skilled artisans and small stove workshops.

Provided new stoves can stand the test of the marketplace, in convenience and appearance as well as fuel efficiency, they will catch on among urban woodfuel consumers. This seems to be happening with improved pottery-lined metal stoves in Kenya, with metal stoves in Niger, and in some other countries where local

craftsmen have started making, and sometimes adapting, the new stoves introduced by improved stove promotion programmes.

Because towns present such a large market—both for stoves and for woodfuel—the potential savings in woodfuel are considerable. Improved stoves, therefore, have a role to play in slowing the growth in urban demand for woodfuel; but as long as the cities continue to grow, they will not halt it.

## Subsidising alternative fuels

Another strategy for dealing with the urban woodfuel supply problem is to try to bypass it by encouraging the use of other fuels, such as kerosene and bottled gas.

One initial objection to this has been the cost in foreign exchange of having to import these fuels. But this may not, in fact, be as great as is sometimes feared. The urban users of woodfuel are the poorest sector, so their consumption is usually small.

Even assuming quite a generous total consumption per head, calculations based on 1980 figures have shown that, for example, in Nicaragua, Sri Lanka and Kenya, a shift to the use of conventional fuels for cooking by all woodfuel consumers, both rural and urban, would result in an increase of less than 10% in each country's total import bills.

The fact that a total switch to other fuels might be possible in national terms does not, of course, imply that it is either feasible or desirable. Even if kerosene were much cheaper than woodfuel (and studies of relative fuel efficiencies suggest that it often is already), there is still the problem of the greater cost of the technology associated with the use of kerosene and such fuels.

Providing subsidies to place these fuels within the reach of the poor, apart from being very expensive for governments, can also have unexpected effects. In several countries where subsidising kerosene appeared to succeed—in the sense that it led to a great increase in kerosene consumption—it was eventually realised that the increased consumption was the result, not of a switch in household use, but of the discovery by lorry drivers

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that they could use kerosene in place of (unsubsidised) diesel.

### Growing more trees

Much thought has been given to the possibility of creating woodfuel plantations to supply cities with fuel. The key to the success of this strategy is the price of wood.

Despite current trends, the price of woodfuel in many places is still far below the cost of producing wood in a plantation. This is because it is the natural tree cover that is being used to provide the woodfuel. Prices only reflect the cost of transporting it to towns, and the small price paid by dealers to the poor villagers who gather it. This does not represent in any way the replacement cost of the wood. As long as this is the case, planting trees for the market—whether in government or private plantations—is unlikely to be economically viable.

But there are signs that, in some areas, the prices paid for wood are reaching the level at which it is becoming economically attractive for farmers to consider growing wood for sale. This initial breakthrough may not necessarily be as a result of rising woodfuel prices.

Usually, the price of the wood poles used for building and other purposes is higher than that of firewood because they are scarcer. The price of poles should therefore be the first to reach the threshold at which it is economic to grow them as a cash crop.

This has already happened in Gujarat and in a number of other parts of

India, where the price for poles has justified some very large-scale investment in tree growing. Growing eucalyptus trees to produce building poles, in fact, gives a better rate of return than other cash or food crops, and in Gujarat alone, nearly 200 million seedlings were distributed by the forestry service to local farmers during the 1982/83 planting season.

But growing trees for firewood also makes sense in some places. Around Madras, in southern India, many farmers now cultivate casuarina trees to provide firewood for the urban market. The same is true in parts of Ethiopia. Around Addis Ababa there are an estimated 20 000 hectares of private eucalyptus plantations, and a further 60 000 around other urban centres. Another example is in parts of the Kigezi region of south-west Uganda, where eucalyptus is being grown for the urban woodfuel market.

These examples of growing woodfuel for sale are still rare, however, partly because, in many countries, the wood can still be harvested at no cost (except to the rural population and the environment).

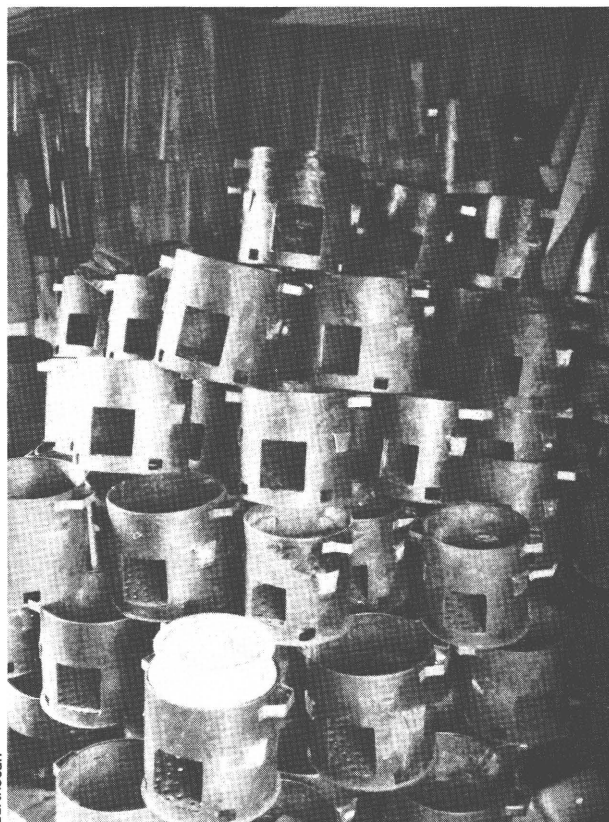
Another problem is that since the market is so often controlled by middlemen, they are able to keep the prices paid to the producers down, even if the price of wood in the towns rises. The sellers of firewood in rural areas tend to be the landless poor with no other source of income, who are not therefore in any position to bargain with the urban dealers and the contractors who supply them.

### The poverty trap

Cities are inextricably bound up with the rural fuel problem and their role in its solution will be a critical one.

Experience suggests that wood will remain the dominant fuel of the poor for a long time to come. Fuel switching, technological development and the emergence of a commercial wood market may improve, but will not, in the short term, substantially change this picture.

But meeting the energy needs of ur-



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*“Maisauki” improved metal stoves in Niamey, Niger; these stoves are built by craftsmen and disseminated through traditional commercial networks*

ban households is not a simple technical issue. It is a complex problem of family maintenance in which a variety of fuels and technologies have to be used to satisfy different end uses.

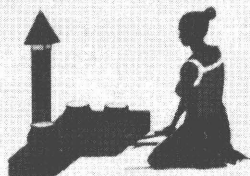
No one solution can be universally applied throughout the cities of the Third World. Rather, a variety of approaches, each one carefully matched to the needs of different groups of consumers is required.

In the final analysis, the urban fuel problem is one of low incomes; poverty is the trap which forces people into dependence upon wood resources which are being depleted far faster than they are being renewed. Until urban consumers can afford to buy woodfuel at what it costs to produce it, the problem will remain.

The only long-term answer is economic development to raise urban and rural incomes so that the rural poor are not forced to strip their land of one of its most precious assets, and the urban poor are able to pay the price of a sustainable fuel supply. ○

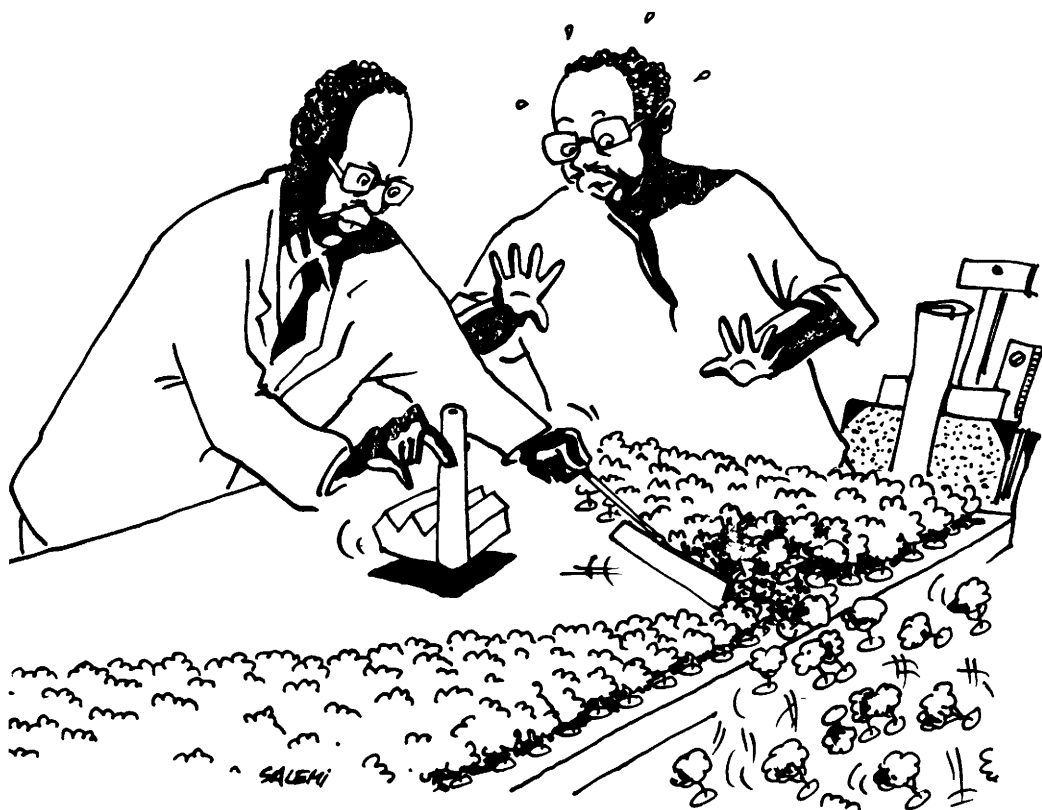
P.O’K, C.J. and J-M.A.

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*The potential benefits from the use of improved cooking stoves are greatest among poor urban consumers*



## Industry: creator or destroyer of forests?

by Geoffrey BARNARD  
and Claudio ZAROR (\*)

*Firewood and charcoal are a vital source of energy for a surprising number of industries and small businesses in the Third World. This article examines this important role, one which is often forgotten in woodfuel studies, and argues that conservation and increased tree planting offer a range of promising opportunities for action.*

Domestic consumers are not the only users of woodfuel. In most developing countries, a large number of industries and small businesses also rely on firewood and charcoal for a major portion of their energy needs.

Baking, brewing, tea and coffee drying, tobacco curing, fish smoking, sugar production, and pottery, brick and lime making, are all activities which depend heavily on woodfuel in some countries. All have to obtain their woodfuel needs from somewhere; and all are affected when woodfuel becomes scarce.

Wood-using industries can also create special problems for domestic consumers. Where concentrated industrial demands are superimposed on domestic demands they can cause major disruptions in the local woodfuel supply system, adding to scarcities and speeding the process of forest depletion.

But industries can also provide important opportunities for saving fuel through conservation. And by promising a guaranteed market to wood producers, they can play a valuable role in stimulating local tree growing.

### Steel from wood

The importance of woodfuels in industry varies enormously between

countries. In some, conventional fuels such as oil, gas, coal and electricity have all but replaced woodfuels. In India, for example, with its well-developed heavy industry sector, coal is by far the largest industrial fuel, and woodfuel provides only 6% of total needs.

But in others, woodfuel remains a key industrial fuel. In Sri Lanka, firewood represents an estimated 57% of industrial energy demand. In Kenya, woodfuels provide 64% of industry's needs; in Mozambique, the figure is 69% and in Tanzania it is as high as 88%. Even in Brazil, with its extensive modern industrial base, woodfuel still supplies 21% of the energy for industry. Ten million tonnes of wood and four million tonnes of charcoal are burnt each year; with charcoal providing more than a third of the energy needed for the country's massive iron and steel industry.

In these and other countries throughout the developing world, woodfuel is the only source of fuel for a large number of rural and urban industries, many of which are a vital part of the local and national economy. Rather than diminishing, in some industries this role is increasing. Many brickworks in Nepal, for example, have switched back to woodfuel

because the cost of imported Indian coal has become too high.

The amount of woodfuel needed by particular industries depends on the process being used and the efficiency of the equipment. Some typical figures are given in Figure 1.

The tobacco industry is a particularly voracious consumer of woodfuel. Many types of tobacco are "flue-cured". This involves slowly drying the tobacco leaf in hot air under controlled humidity and temperature conditions. It takes a minimum of five to six days, and for every kilogram of marketable leaf, approximately 6 kg of water has to be driven off.

In the traditional tobacco barns made from mud and thatch, found in many parts of Africa, the efficiency of the curing process is extremely low.

### One hectare of tobacco, one hectare of forest

In Tanzania, as much as 130 cubic metres of wood are needed for every tonne of tobacco. This means that for each hectare of tobacco grown, a full hectare of the adjacent "miombo" woodland has to cut to provide the wood for curing it. Similar figures are reported for traditional producers in Malawi; though the more modern tobacco curing operations in the country use less than one sixth of the amount.

(\*) Geoffrey Barnard, Earthscan Energy Information Programme, London; Claudio Zaror, Chilean engineer, Department of Chemical Engineering, Imperial College, London.



Large differences in woodfuel consumption can be found in most industries. In sugar processing, for instance, efficient mills get by without any additional fuel. All of their heat and power needs can be generated from the waste bagasse produced when sugar cane is crushed. Some even export power. Inefficient mills, however, with badly-maintained boilers and old-fashioned equipment, often have to use wood as a supplementary fuel. Some of the large sugar mills in Nicaragua consume as much as 10 000 tonnes of additional woodfuel each year.

But it is not just large industries which contribute to industrial woodfuel demands. Added together, the numerous small factories, workshops and commercial operations dotted around towns and rural areas often represent a significant proportion of total woodfuel consumption.

In the small town of Masaya, in Nicaragua, one survey counted 35 bakeries, 721 tortilla makers, and 109 producers of "chicharrón"—a local snack made of fried pork skin. All these enterprises rely heavily on woodfuels. Together they consume an estimated 8000-9000 tonnes of firewood a year; equivalent to the domestic consumption of around 10 000 people.

### The concentrated demand

Though significant in their own right, demands from small and me-

dium-scale industry are rarely the dominant factor in woodfuel consumption at a national level. Normally, they are dwarfed by the much greater demands from the household sector.

In very few countries does industry consume more than a third of the total amount of woodfuel used. In Kenya, for example, industries and small commercial enterprises account for 26% of total national firewood consumption, and 12% of charcoal use. In Nicaragua, they consume an estimated 19% of all woodfuels; in Chile, 29%; and India, only 3%.

But the impact of industrial demands at the local level can be much greater than these figures imply. Unlike domestic demands, which are diffusely spread throughout the rural areas, industrial demands tend to be concentrated in particular locations. They can thus distort the local woodfuel supply system, creating a focus of forest depletion.

This effect is reinforced by the fact that industries normally buy their woodfuel, thereby providing a cash incentive for wood-cutters to exploit local resources. A further factor is that industries often require big pieces of wood—good-sized logs rather than the branches and brushwood which provide the bulk of rural domestic needs. This means that whole trees are cut, instead of relying on trimmings and dead branches.

Industries can therefore have a disproportionate influence on the local supply picture. Unless special provisions are made to supply wood in a renewable way, industries which consume large amounts of woodfuel can have a similar effect to urban centres, creating a ring of forest destruction in their immediate vicinity, and adding greatly to the fuel supply problems of the local population.

### Tree planting for industry

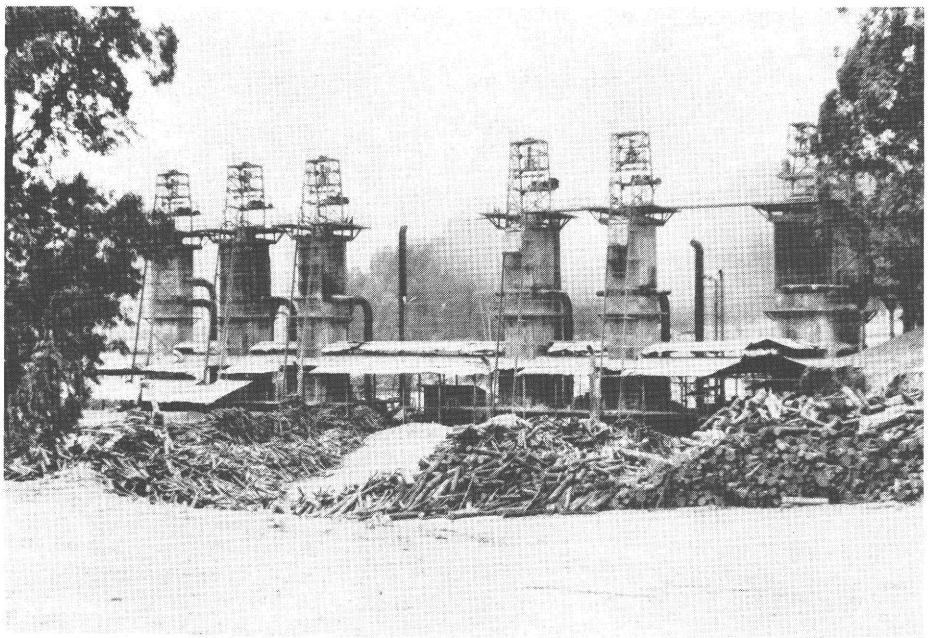
Though they can cause disruptions in the local wood supply system, industries can also create special opportunities for getting trees grown. Because they can provide a guaranteed market for wood, close to the areas where it can be produced, they can play a major role in stimulating local tree growing.

A substantial part of the charcoal for the Brazilian iron and steel industry comes from eucalyptus wood grown in massive industrial-scale plantations. Using modern selection techniques, fast-growing varieties have been selected which yield as much as 25-30 tonnes of air dry wood per hectare per year, on the best sites. Plans are to increase the area of plantations to 700 000 hectares over the next few years.

This kind of large-scale planting obviously requires substantial areas of unused land, and a sophisticated and



Beer-making in Zimbabwe



"Fuelwood and charcoal are a vital source of energy for a surprising number of industries ..."



*A pine seedling nursery in Fiji*

well-organized management infrastructure. An approach which is perhaps more widely applicable has been developed in the Philippines by the Paper Industries Corporation of the Philippines (PICOP). This is based on the production of wood for pulp, but the model is equally valid for wood-fuel production.

Under the scheme, PICOP enters into a contract with local farmers, and provides them with tree seedlings at cost price and technical advice on cultivation and harvesting. Loans are giv-

en to help tide farmers over the first few years, and there is a guaranteed market for the wood at an annually reviewed price. The scheme has proved popular, and by 1982 a total of 12 500 hectares had been planted.

The assured market provided by pulp and paper mills has had a similar effect in dynamizing local tree growing in Chile. Here, government tax incentives have also assisted in encouraging farmers to divert land to tree plantations.

A more informal system operates in



*Drying tobacco requires vast quantities of wood, so farmers are encouraged to plant trees as well*

Costa Rica, where coffee processing factories obtain most of their wood-fuel from nearby farmers. The traditional practice of growing trees in between coffee plants to provide shade, and of planting them around fields as live fences, means that most farmers have a considerable number of trees on their land. Besides the many other benefits these provide, selling fire-wood gives families a useful additional source of income.

In Kenya, tobacco companies are encouraging local small-holders to grow trees as well as tobacco. Some of them provide free seedlings and technical advice. Others virtually force farmers to grow trees by refusing to buy their tobacco unless they also provide enough wood to cure it.

Whether tree growing for industrial woodfuel is feasible in the long run depends to a large extent on the economics. For the industry, it has to be able to obtain wood at a price which is low enough for it to be competitive with alternative fuels. For the farmer or tree grower, the price has to be high enough for there to be an incentive to dedicate land, effort and resources to wood production.

Where there are still accessible forests nearby, it will often be cheaper for industries to obtain their wood by continuing to "mine" these resources, rather than paying farmers an economic price to grow it. Though governments can limit the destruction of forests by applying and enforcing cutting restrictions, it is often difficult to stop altogether because of the strong vested interests involved. Indeed, some industries would be forced out of business if they had to pay the true replacement cost for the wood they use.

But it is clear that the necessary conditions for sustainable tree growing for industry do already exist in some countries, and are probably emerging in others as the price of alternative fuels rise and the accessible forests recede. This is an area where concerted action by governments and outside agencies to support and underwrite tree growing initiatives could have significant impact in solving at least one element of the woodfuel crisis.

**What about conservation?**

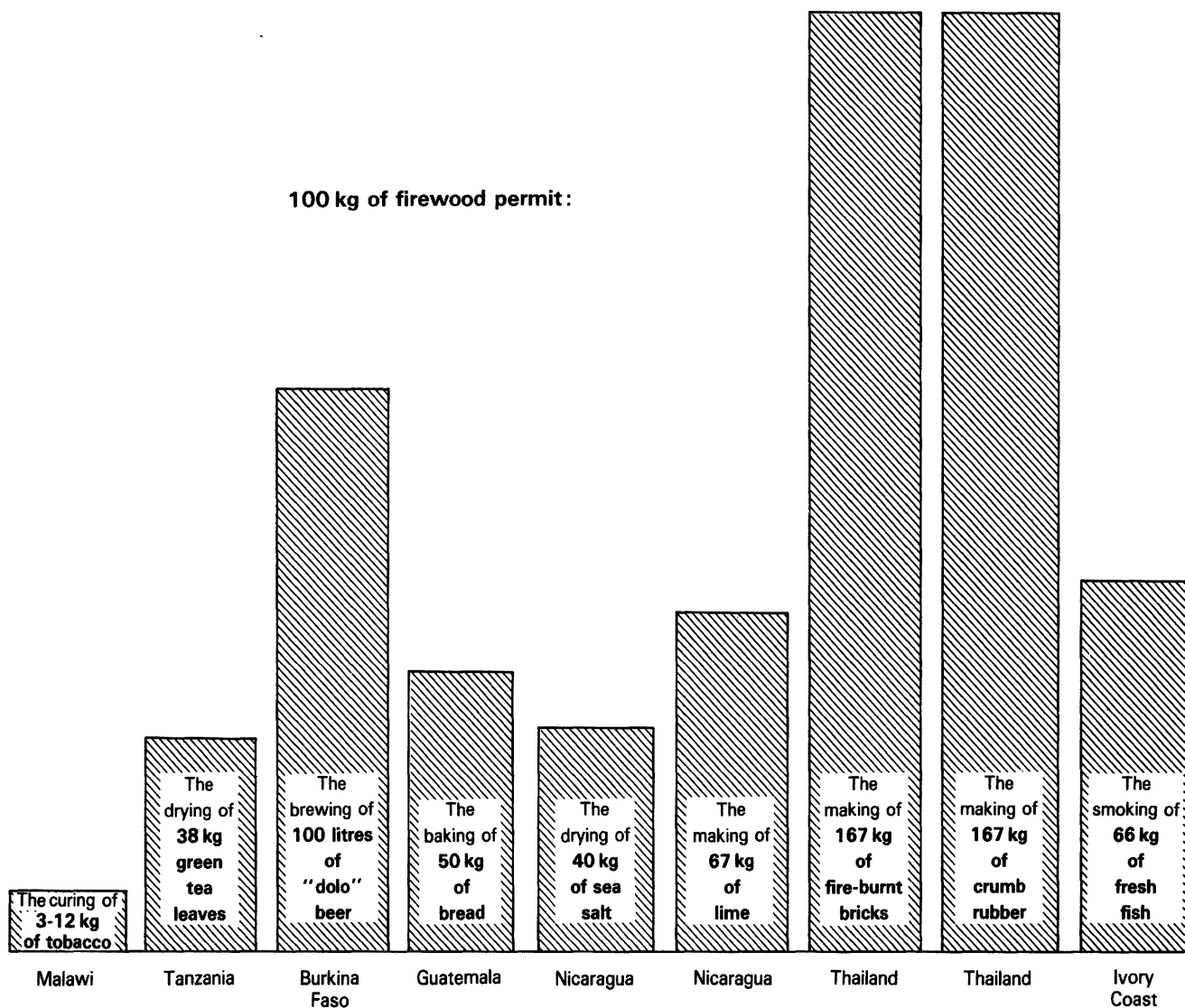
Important opportunities also exist

Fiji Min. of Information

Zimbabwe Min. of Information

## Woodfuel consumption by industry

100 kg of firewood permit:



for promoting increased efficiency in industry. A large proportion of woodfuel-using industries employ outmoded and grossly inefficient equipment. While achieving optimum levels of efficiency would usually require major refits and large capital expenditures, considerable improvements can often be made with relatively cheap and simple measures.

A study of the tobacco industry in Malawi, for example, carried out by the World Bank, concluded that wood consumption could be reduced by half by applying conservation measures. The greatest returns and quickest payback could be obtained by two very straightforward measures—fitting doors and grates on furnaces and installing controllable ventilators. This

would cost an estimated \$ 350 per barn, but would pay for itself in fuel savings in less than two years.

The fact that industries buy their woodfuel means that there is a direct cash incentive to save fuel. How strong this will be, however, depends on the energy-intensity of the industry, and the pricing structure of the final product. Some industries can pass on increased fuel cost directly to their consumers, and so have little motivation to save fuel.

But many others need to keep their costs low in order to compete. For them, the main obstacle to energy conservation is usually finance and technical advice. Programmes which provide subsidies or credit facilities, along with the necessary technical assis-

tance, could therefore have considerable impact in helping these industries become more energy-efficient.

In the majority of woodfuel studies carried out to date, the demands of industry have been almost completely forgotten. As a result, there are still major gaps in our knowledge of how industries obtain and use woodfuel, and what impact they are having on local wood supply systems.

But it is also an area where action to encourage tree growing and conservation measures could bring rapid results. Compared to the various other options for improving woodfuel supply problems, these could well be some of the most cost-effective alternatives open to governments. ○

G.B. and C.Z.

# Wood, land, people

by E. BONKOUNGOU and R. CATINOT (\*)

*This article examines one of the most stressed areas of the world: the drought-prone Sahelian region. It shows how misconceptions about the ecology and traditional farming customs of the area have led to inappropriate responses to the problems of woodfuel supply and deforestation. It indicates, however, that new and more effective approaches may be forthcoming.*

Public opinion has been quick to understand the damage to the natural environment caused by deforestation. But at times there has been a tendency to draw a rather simplistic conclusion from the images of desertification, deforestation, and woodfuel collection with which people have been presented. The apparently logical sequence is that cutting trees for woodfuel leads to deforestation which in turn causes desertification.

This perspective heavily influenced the early decisions of the organizations which set about dealing with the problem of desertification in the Sahel. They concentrated their aid on refor-

estation projects which were designed to meet the most urgent woodfuel needs and thereby, it was hoped, prevent environmental degradation. The problem is no longer seen in these terms by most of those working with it at a practical level. But it remains sufficiently well established in the public mind for us to ask the question: is the woodfuel crisis a cause or an effect of desertification?

At the time when the problem of desertification began to be noticed, there was much less scientific, technical and statistical information available on the arid forests typical of the Sahelian region than on tropical moist forests. The reason for this was that research into the tropical moist forests was encouraged by their recognized commercial value; the arid zones did not receive the same attention because

(\*) E.G. Bonkougou, Chief Director of IR-BET (Institut de Recherche en Biologie et Ecologie Tropicale), Ouagadougou; R. Catinot, Agricultural Engineer, Former Director of CTFT (Centre Technique Forestier Tropical), Paris.

*Near Shereik in the Sudan: wood clearing for agriculture on the banks of the Nile; the cut wood will be sold as firewood or will be turned into charcoal*



their economic potential seemed very marginal. Apart from the minor financial gains to be made out of supplying wood to a few cities, there was no obvious profit to be made out of woodfuel or building poles since these were considered products that people gathered free of charge.

As a result, the scientific study of the arid forest areas was ignored. No consistent studies were made of the natural woodland; no attempt was made to draw up systematic inventories describing and evaluating their potential. Research barely touched on the key problem of regenerating the natural woodlands in African countries such as Cameroon, Nigeria, Burkina Faso, Niger, Mali, and the Central African Republic.

When the Sahelian drought reared its ugly head, only a few well-informed researchers knew that the natural woodlands of the arid zones could be dramatically regenerated provided there was protection from fires and over-grazing. It was this ignorance of their potential for regeneration which caused many international organizations to leave them completely out of their statistics once the original wood cover had been cut to enable the land to be farmed.

It also explains the exaggerated nature of the initial forecasts of the disappearance of the tree cover as a result of people's consumption of woodfuel. Any close observer can tell that the traditional methods of clearing land do not destroy the woodland ecosystem; it regenerates itself when the land is left fallow, as farmers have been doing for centuries. The ecosystem is only destroyed when the land is not allowed to lie fallow.

## Plantations fail to live up to expectations

The failure to take the potential for regeneration of natural woodlands into account is the reason for the urgency people attached to plantations as a means of securing future wood supplies. There was also over-optimism about the ecological potential of the species being planted or, more simply, ignorance of ecology—despite repeated warnings by researchers.

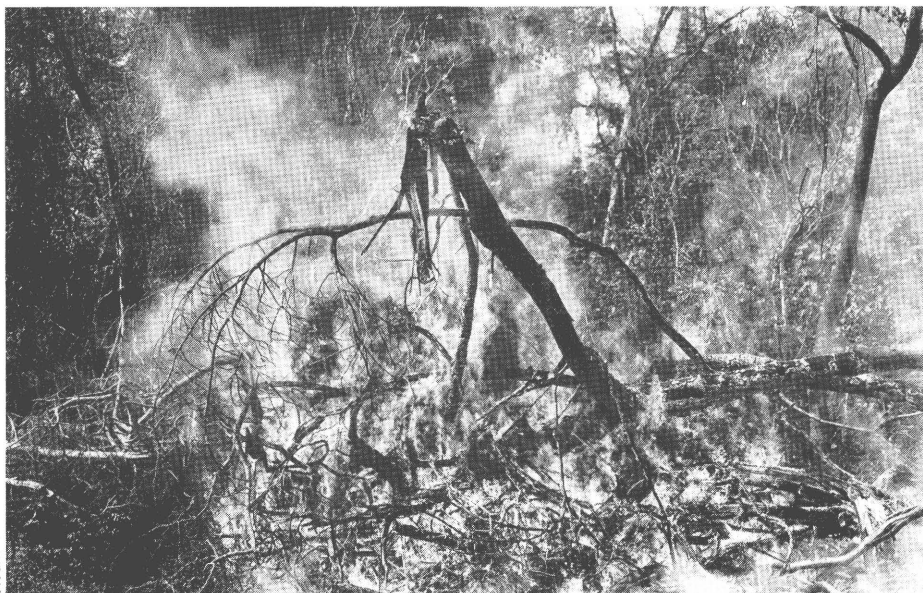
Some decision-makers insisted on establishing plantations in areas which were too dry, while other "experts"

promoted the use of tree species which were completely unsuitable in the Sahelian climate. The results demonstrate the folly of their policies. Unfortunately, but not unexpectedly, none of the different kinds of plantations have lived up to the hopes invested in them.

Some of these plantations were state initiatives using expensive mechanized methods of land preparation, and were designed to produce building wood and woodfuel for the inhabitants of towns—who were the only people who could afford to pay for it. But their high costs detracted considerably from their profitability. Moreover, the amounts of wood produced have not turned out to be as high as had been hoped. The result is that these plantations have only been established on a very modest scale: less than 10 000 hectares per year for the whole of West Africa.

Other plantations were established in collaboration with rural communities. Unfortunately, these “village woodlots” sponsored by the state or voluntary organizations have also met major obstacles. There was a widespread lack of technical knowledge about the maintenance requirements of the plantations on the part of those carrying out the planting. The competing demands of farming and looking after the plantations were often ignored, particularly in the arid areas where the first three years’ work on a plantation needs to be put in at precisely the busiest time in the agricultural calendar. There were misunderstandings about the objectives, with the fact that peasant farmer-herdsmen often prefer to grow a mixture of grass and trees, rather than trees on their own, being ignored. There were also doubts about the ultimate ownership of trees and problems because forest plantations prevent the land being used for other agricultural purposes.

As a result, only a small area of community plantations was established, probably less than 50 000 hectares in the whole Sahelian region and these had a considerably lower productivity than expected. The lack of popular support for community plantations casts doubt on the value of this approach and it is unlikely to play much of a part in solving woodfuel problems.



*A dense forest under attack by fire: afterwards what remains will at best be a thinned-out forest, and at worst, a somewhat overgrown savannah*

### Forests produce more than just wood

The lack of technical understanding about trees in their natural and economic context has distorted research priorities and led to ill-advised decisions. There is, for example, also considerable ignorance about forest products other than wood.

The idea that natural woodlands produce little more than wood for burning is a gross distortion of the truth. Socio-economic studies have shown how important forest and creeper species are to African women as a source of leaves, fruits, buds, and roots for food and medicine. They are also a potentially very lucrative source of income to men who roam the bush collecting honey. Indeed, the question arises as to whether rural inhabitants do not miss these “secondary products” more than the firewood when the natural woodlands disappear.

The failure to take into account social and micro-economic factors has also given a false impression of the impact of the woodfuel crisis on the process of desertification. There was a mistaken belief that people obtained their firewood by cutting down the natural woodlands, whereas in the vast majority of cases they actually collect dead wood from the cleared areas in which the crops are grown. This distorted view of the situation has had the serious consequence of leading decision-makers, and hence the public,

to feel that it is the cutting of woodfuel which is chiefly responsible for the disappearance of the natural woodlands.

Finally, the lack of research into the consumption of forest produce and the absence of any measurement of forest stocks has made it impossible to compare the supply and demand for woodfuel, still less monitor how positions change over time.

All this makes it easier to understand why the cutting of firewood was initially held to be one of the major causes of desertification, and why it was believed that only highly productive woodfuel plantations could deal with the problem. With a more sophisticated understanding of the situation, it is now possible to refute the view put forward at the outset of the desertification crisis that the cutting of firewood would inexorably raze larger and larger areas of natural woodland, leaving behind bare terrain destined sooner or later to be turned into desert when bush fires struck. We now know that these forecasts grossly exaggerated the situation, and that this analysis, while partly true in the areas around towns, was inaccurate in the countryside.

### Peasants, fallow land, and wood

It is interesting to observe what really happens in the countryside. What does a young married peasant do when he settles down as a farmer in an

arid zone if this area is still sufficiently forested?

Either his family or the community give him a plot of natural woodland measuring roughly one hectare which he spends the first year clearing and the next two years cultivating. He then clears a second parcel of land of the same size and lets the first lie fallow. Then, between the fourth and sixth year, depending on local custom, he clears a third hectare of land and lets the second lie fallow, and so on until the tenth or twelfth year. At this point, he turns back to his first plot of land which has now benefitted from 8-9 years of fallow, during which the woodland will have grown again quite naturally, and he starts cultivating it again.

The peasant's wife gathers the firewood in the plots cleared by her husband, and from time to time collects a little dead wood in the surrounding natural woodland. She also collects "vegetables" and fruit from the trees which her husband carefully preserves when he is clearing the land for cultivation.

She has no difficulty in meeting her household's wood requirements. If need be, she can gather some wood from the fallow land which, once it has been left for 4-5 years, begins to grow enough wood once again. Thus, this rural family can survive without cutting a single cubic metre of wood from the natural woodland. After two cycles of 10 or 12 years, the family usually moves to a new area and begins the process of clearing and fallow once again.

### More an agricultural crisis

Because of the severity of the ecological conditions, the system of shifting agriculture practiced in the arid areas needs a long fallow period to restore the fertility of the soil. But demographic growth has meant that, almost everywhere, the fallow period is being shortened, and ecologically fragile marginal lands are being brought into cultivation. This means that one of the major causes of desertification is not the need for energy but the crisis facing agriculture as a result of population growth and the need for additional cultivable land.

Careful calculation shows that once population density exceeds 25 inhabitants per square kilometre, the natural system is under stress, and that once it tops 35 inhabitants per square kilometre, the agricultural system itself is in danger of collapsing into desertification. These figures are very disturbing because the overall population density of some African countries situated in the arid regions is already 25 inhabitants per sq km.

Another rural activity, the tending of animals, also plays a part in desertification. Cattle need large areas of pasture to feed themselves. Obviously, if these pastures are to be kept up there is a limit to the number of cattle they can accommodate per hectare. The first signs of drought in 1968 showed that pastures in the Sudan-Sahel region were being over-burdened with cattle. And the most effective way of destroying the vegetative

layer, whether grass or wood, is by overgrazing, which brings with it heavy trampling or systematic burning in an attempt to regenerate these depleted pastures.

### Towards effective solutions

In the face of such problems, the search for effective solutions is an urgent one and needs to be pursued vigorously. There is a great need for well directed research into arid land ecology, and for field trials both of tree species carefully selected for their suitability in these zones, and of new approaches to farming.

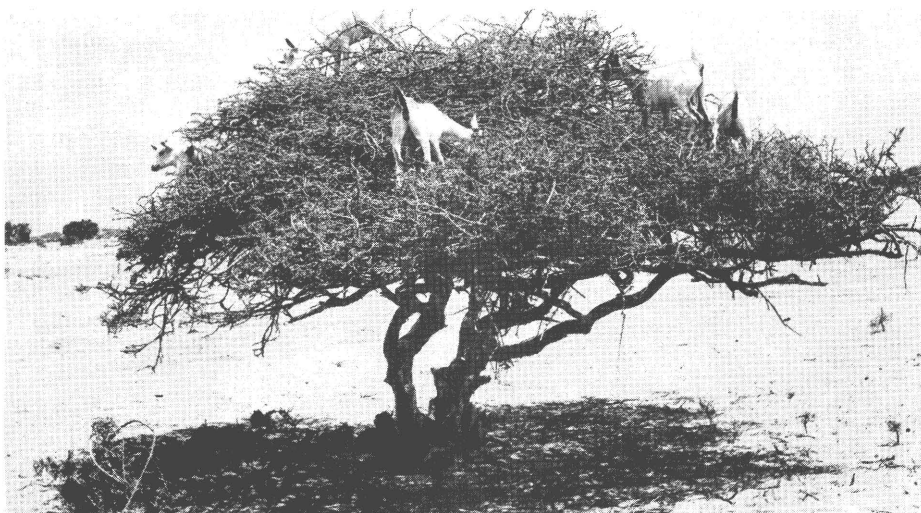
Recent studies in Mali, for example, have shown that a cycle of two years' cultivation followed by three years' fallow would allow the soil to recover its fertility, provided the fallow land is neither burned nor grazed, and that specially chosen crops are grown during the two years of cultivation. If this method of shifting cultivation were to be widely adopted, it would reduce the amount of land needed by farmers to less than half the present area.

A second approach to the problem is also emerging. This is the systematic reforestation of fallow land with specially selected tree species such as some acacias. Not only do these produce a large quantity of wood even on mediocre ground, but they are also particularly effective in regenerating the soil. At the moment, these trees can only be used in the moister areas and are still undergoing trials but they offer a very exciting prospect.

Other solutions are possible. Trees such as the baobab and the huge acacia albida have traditionally been used to carry out many functions and protect the land; it would be extremely beneficial if their more widespread use could be promoted.

But in all cases, there is a need for a detailed knowledge of the local environment. The first step is to conduct field studies and surveys of local people, looking beyond the supply of woodfuel, to devise measures which are ecologically appropriate and socially acceptable in the local context. If this is not done, and the present system is allowed to continue for another couple of decades, desertification will spread through the arid zones at a tremendous and catastrophic pace. ○

E.B. and R.C.



*The goats are legion: everything that grows is nibbled and stripped, even cactuses*

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## Ecological description of some trees in arid tropical Africa

### *ACACIA ALBIDA*

(*Balanzan* in Mali,  
*Cad* in Senegal,  
*Gao* in Niger)

This enormous tree grows in areas where rainfall is between 500 mm/year and 900 mm/year, where the soil is porous, generally sandy, and where the tree is free to develop its gigantic root system (descending as much as 30-40 metres). It is closely associated with crop growing because it constantly enriches the soil through the shade it provides (its leaves appear during the dry season), the considerable amount of leaf matter it sheds, the dung left by animals which seek out its shade and the fixation of nitrogen by its roots. It has been grown in Africa for the last few centuries. The dense stands of these trees, which existed until recently in the regions of Zinder Maradi (Niger), Sine-Saloum (Senegal) and Ségou (Mali) were expanded and jealously protected by the old African chiefs. They realised these trees were central to the prosperity of their region because they could grow cereals indefinitely underneath them.

These should be grown wherever ecological conditions allow.

### *BUTYROSPERMUM PARADOXUM*

or *VITELLARIA PARADOXA*  
(*Karite*)

This is also known as the butter tree. Of medium height, it is also associated with crop growing in areas where rainfall ranges from 550-600 to 1200-1300 mm/year, in clay soils which do not have to be very deep. This is the traditional tree of the Mossi plateaus (Burkina Faso) where they grow in orchards in the fields with the Nere. The thinly spread woods certainly play an important role in protecting the soil by lessening the impact of the harmattan (arid wind of the dry season) and the strong tornados of the rainy season.

But its real popularity lies in its fruit and particularly the kernel whose fatty matter is made into "karite butter" which is widely consumed locally and exported.

Unfortunately, the trees grow very slowly and research has failed to come up with any answers. It is likely that more work will be done on this because of its great economic value.

### *PAKIA BIGLOBOSA*

(*Nere* or *Nete*)

This leguminous species, which is often found above the 600-700 mm isohyet both in forests (Casamance, Sikasso, Central Benin etc.) and in crop fields, is frequently planted with the Karite with which it forms the semi-orchards already described. It seems to prefer clay soils or silica-clay soils.

It has the same ecological benefits as the Karite and the condiment or "sauce" made with its fruit is a basic ingredient of Sudanese and Guinean cooking ("Sokumbala").

It grows well in nurseries and acceptably in plantations. Provided the Karite is given time to grow, the Nere and Karite together could form a good basis for multi-purpose tree plantations in the fields (protection/production) where rainfall exceeds 600 mm/year. Other fruit trees would be grown alongside.

These plantations could be pruned regularly to boost the supply of fuelwood for rural inhabitants. ○

## Marketing units of fuelwood <sup>(1)</sup>

These figures give the averages generally accepted by research organizations, but they reveal a considerable amount of variation particularly for the stacking coefficient which ranges from 2 to 3: in the case of "very careful stacking" two steres take up a cubic metre.

This shows clearly that the stere is not a reliable unit for this purpose. The use of the cubic metre is usually impossible as well in the case of wood from the natural woodlands because this is always irregular in shape. As a result, marking has to be carried out in terms of weight on the basis of the conversion coefficients set out above, bearing in mind that there is very little difference between the calorific potential of commercial wood dried in the open and the very dry wood, which could generally include cleared wood. ○

Units	Cubic metres	Metric tonnes	Steres or stacked cubic metres	Weight of steres
Dryness of wood				
Green wood	1	1	2 to 3	0.33 T
Commercial air dried wood (after one month)	1	0.90	2 to 3	0.30 T
Very dry wood (after 4 months)	1	0.84	2 to 3	0.28 T

(1) Main source of figures is the document "Analysis of the forested sector and proposals - Mali" CILSS/Club du Sahel. May 1982.

## The woodfuel challenge: looking to the future<sup>(\*)</sup>

*This synthesis summarises the main conclusions of the dossier, stresses the need to put people first in designing woodfuel strategies, and highlights the new realism that is now entering the analysis and formulation of woodfuel policies.*

Over the last decade there has been a radical transformation in thinking and awareness about woodfuel issues. Woodfuel is no longer the forgotten fuel.

A large number of woodfuel projects have been initiated in recent years. More and more information is now becoming available, and experience in the design and management of woodfuel projects is steadily accumulating. Though important gaps in our knowledge still exist, the foundation on which to build future programmes is much more solid than even a few years ago.

The challenge now is to learn from past programmes and proceed with renewed commitment, based on the insights and experience that has been gained.

### Strategies for the future

This dossier has approached the woodfuel crisis from a

(\*) By C. Wane: Senegalese Forester, Programme Officer UNSO (United Nations' Sudano-Sahelian Office); Association Bois de Feu: J.F. Belières, R. Cellaire, S. Strasfogel; Earthscan: G. Foley and G. Barnard.

new angle. By focussing on woodfuel through the eyes of the people that use it, it has aimed at providing a new outlook on the problems that exist, and new clues as to the way in which solutions must be found.

A variety of strategies have been discussed: better management of natural forests; increased tree planting on farms, community land and other areas; woodfuel conservation both in the home and in wood-using industries; and increased use of alternative fuels. There is no doubt that each of these has an important role to play.

The key point is that none of the strategies is applicable everywhere, and none of them can be guaranteed to work unless they are accurately and sensitively matched to the realities of local conditions. Coming up with a list of abstract policy options is easy. What is difficult is translating them into viable, workable solutions on the ground.

### The human element

In all woodfuel programmes, the human element is critical. Whatever the apparent logic to the outside observer or policy maker, no woodfuel initiative will work unless local men and women are convinced of its benefits and its relevance to them. Only by understanding the local perspective, and the constraints that people face, can programme designers avoid the all-too-common pitfall of promoting

*Woodfuel: a problem among so many others*





strategies which sound simple and straightforward in theory, but are totally unrealistic in practice.

Since woodfuel problems rarely occur in isolation, often the best solutions are those which integrate woodfuel objectives with other broader goals. Experience has shown that new stoves are accepted most readily when they combine improved energy efficiency with cleanliness, convenience, and other advantages. Likewise, the trees most popular with villagers are usually those which provide multiple benefits, such as fruit, poles, and fodder, as well as simply firewood. Focussing too narrowly on woodfuel can mean, paradoxically, that woodfuel projects will fail.

The people-oriented approach is not necessarily an easy one to follow. It means consulting housewives, farmers, urban wood-users and dealers, and industrial consumers. It means learning from them what they see as their priority problems, rather than imposing preconceived notions from outside. And it means encouraging them to participate in selecting, designing and implementing appropriate solutions.

For governments and development agencies this approach brings many difficulties. It requires new skills and new attitudes. It is often slower than the conventional "top-down" approach, and needs considerable care and patience to make it work.

But it also opens up new opportunities; opportunities, for example, to tap the substantial fund of traditional knowledge that exists in many areas on tree growing and forest management. It allows projects to be designed so that they make use of the skills and capabilities of local schools, women's groups, religious organizations, and other non-governmental bodies. In the long run it provides the only realistic chance of arriving at lasting solutions to the woodfuel problem.

### A crisis of basic human needs

It would be naïve to hope that the woodfuel problem will go away simply by improving the design and execution of tree growing or cookstove programmes. This is because, in essence, the woodfuel crisis is not one of energy; it is a crisis of poverty and of basic human needs.

For people with secure and adequate landholdings or a reasonable level of income, woodfuel is rarely a serious problem. They can grow their own trees or they can afford to pay for alternatives. It is the poor and landless who are the greatest sufferers from woodfuel scarcities, and it is the poor who can do least about it. No simple technical measure can change this basic fact.

Poverty is also the connecting link between wood cutting and environmental degradation. The landless poor stripping the woodlands to supply the urban market do so because they see no alternative way of earning a living. The squatter families clearing the trees from mountain slopes are there because they can find nowhere else to farm; their land is eroded and degraded about them because they cannot afford the investments needed to protect it and make it productive in the long term.

At times, the woodfuel crisis has been expressed in simple demographic terms. Increasing woodfuel consumption and the pressure on land resources is blamed on rising pop-



Earthscan

*"In all woodfuel programmes, the human element is critical"*



Earthscan



Vivant Univers

*“Long-term solutions must be based on a clear identification of the needs and capabilities of the different target groups they are intended for...” — a tree-planting campaign in Lesotho*

ulations, with the implication that stringent birth control measures would make the problem disappear. It is clear, however, that the woodfuel crisis is much more complex than this. Though population growth is undoubtedly one of the driving forces behind the depletion of tree resources, it is poverty, inequality, and lack of opportunities that are as much to blame. Until these fundamental problems are tackled, the woodfuel crisis will never be permanently cured.

### The way forward

It is in this broader social and economic context that future planning in the woodfuel area must be seen. No purely technical solution will work in isolation. Tree growing makes no sense to people who do not have secure land tenure; improved cooking stoves—no matter how efficient they are—will be irrelevant to families who cannot afford

to buy them, or have no way of obtaining the fuel to burn in them.

Long-term solutions must be based on a clear identification of the needs and capabilities of the different target groups they are intended for, together with a realistic assessment of the options that are open to them. Though obvious, this point has frequently been ignored in many of the programmes to date.

But in addition, woodfuel initiatives must point the way forward for the people who adopt them. They must contribute to the realization of what people themselves see as their priorities and aspirations. This can only be achieved by genuinely taking into account the way they view their woodfuel problems. If this can be done, however, it becomes possible to turn the woodfuel crisis into an opportunity for fruitful action and broadly-based development. ○

*This dossier was written upon the request of the Energy, Mines and Industry Division of the Directorate-General for Development of the Commission of the European Communities (DG VIII).*

*It is the result of the collective work of a group of experts in association with the Commission and The ACP-EEC Courier, which was coordinated by the Association BOIS DE FEU, a French NGO involved in technical assistance and information dissemination activities on woodfuel problems in developing countries.*

*Gerald FOLEY and Geoffrey BARNARD of EARTHSCAN, a British-based information service dealing with development and environmental problems, supervised the English version of the dossier. The French version was edited by Christophe NAIGEON of INTER TROPICQUES magazine and by Robert CELAIRE and Jean-François BELIERES of the Association BOIS DE FEU.*

## WOODFUEL: THE FLOOR IS YOURS!

*Dear Reader,*

*Because of your experience as a researcher, as a decision-maker, or as a person working in the field, woodfuel to you is much more than this dossier! As a result, you may not agree with everything we wrote. You may want to add a few things. Some of you may have gone through an experience which you think is worthwhile communicating to others. In short, you feel you have something worthwhile to say about woodfuel.*

*There are probably many like you among the many thousands of readers of this dossier. Why not write us?*

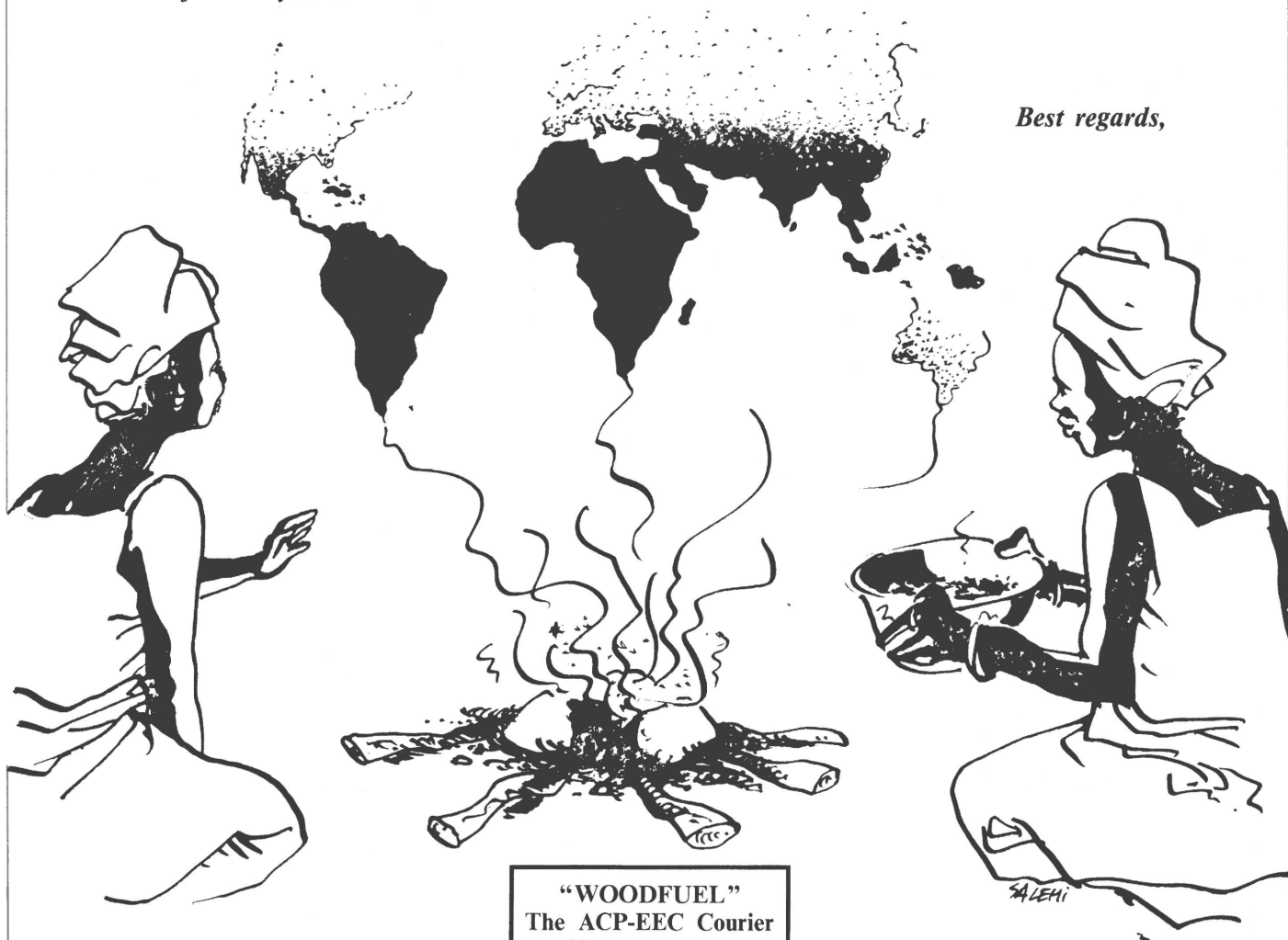
*We would like to make sure that you are heard! How?*

*Make sure that your contribution does not exceed 2 000 words (about 5 typed pages). Photos, graphs or other visual aids are welcome. Send your contribution before 30 JUNE 1986 to the address at the bottom of this page.*

*A Committee will read through all contributions and make a selection. By the end of 1986 a document comprising both the present dossier, revised, as well as a selection of the most interesting articles will be published and distributed on a large scale by the ASSOCIATION BOIS DE FEU. With a free copy for you.*

*The floor is yours!*

*Best regards,*



**"WOODFUEL"**  
The ACP-EEC Courier  
200, rue de la Loi  
1049-Brussels  
Belgium

## Selected background reading

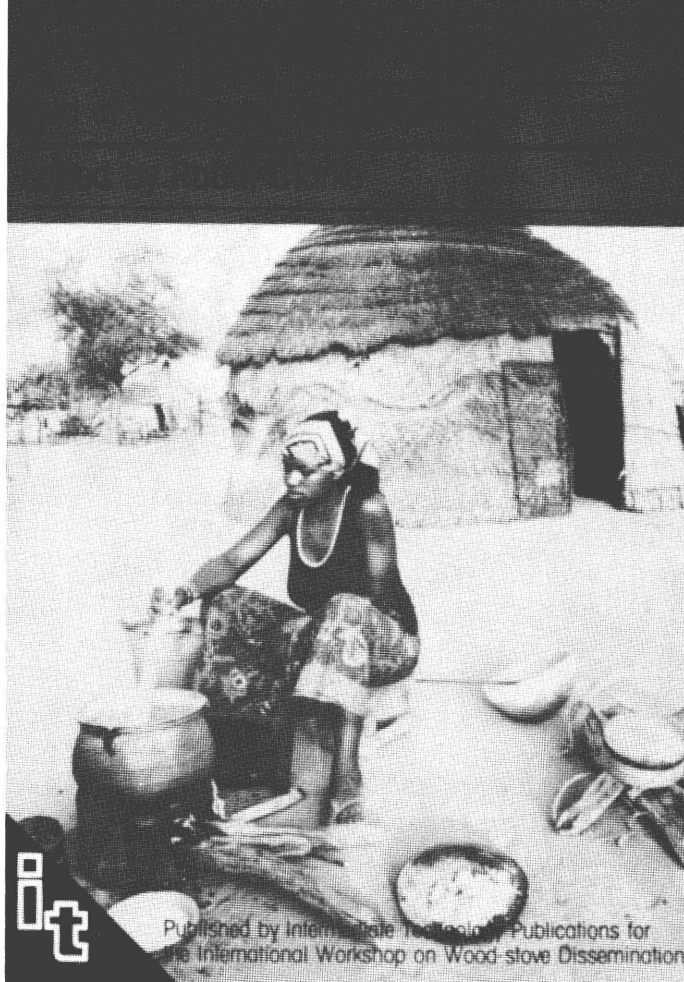
The following publications provide a more detailed background to the various aspects of the woodfuel crisis. They are listed here, together with a brief summary describing their contents.

Limited numbers of these publications are available to readers of this *dossier* free of charge. To obtain any of these documents please write to the following address specifying clearly which of them you would like to receive and the use to which they will be put (\*):

ASSOCIATION BOIS DE FEU  
Fonds Documentaire  
28, boulevard de la République  
13100 AIX-EN-PROVENCE  
FRANCE

(\*) Preference will be given to educational and institutional users, rather than private individuals.

### WOOD-STOVE DISSEMINATION



Published by Intermediate Technology Publications for the International Workshop on Wood-stove Dissemination

### Books and reports

1. **DESERTIFICATION, EARTHSCAN 1983**, by Alan Grainger  
The causes of desertification are examined: overcultivation, overgrazing, deforestation and bad irrigation. The rich and poor nations and the international agencies know what measures need to be taken. Why then is so little being done?
2. **WOODFUEL SURVEYS, FAO 1983**  
Defining the scope of woodfuel surveys — Rural fuelwood: significant relationships — Urban demand: studying the commercial organization of woodfuel supplies — Methods of fact-finding — What sort of information?
3. **FUELWOOD SUPPLIES IN THE DEVELOPING COUNTRIES, FAO 1983**, by M. R. de Montalembert and J. Clément  
Overall picture of the fuelwood situation in the developing countries: Africa South of Sahara, North Africa and the Middle East, Asia and Tropical Far East, Latin America — For each zone: present situation and prospects for the year 2000 — Improving the situation: solutions and strategies.
4. **FUELWOOD: THE ENERGY CRISIS THAT WON'T GO AWAY, EARTHSCAN 1984**, by Erik Eckholm, Gerald Foley, Geoffrey Barnard, Lloyd Timberlake (Revised edition)  
Results of the experience in fuelwood: experience of the past decade in tackling the fuelwood problem: community forestry, local participation and improved cookstoves — Much more must be done to plant trees on farms, to get more wood from existing forests, and to promote energy alternatives — People are short of firewood because they are poor — Without development, they will find no escape.
5. **RURAL ENERGY SURVEYS IN THE THIRD WORLD — A critical review of issues and methods, IDRC 1985**, by Michael Howes
6. **MAN AND TREES, IDRC 1981**, by Gunnar Poulsen  
The role of tree in Tropical Africa: function of production, action of soil conservation and on water table, influence on climate. — Woodfuel supplies: existing situation and perspectives — Shifting agriculture: soil and vegetation, nutritive factors and vegetation cycles.
7. **FIREWOOD CROPS — Shrub and trees species for Energy Production, National Academy of Sciences — N.A. Press, Washington DC, Volume 1 1980, Volume 2 1983**  
Wood as fuel — Fuelwood species for humid tropics — Fuelwood species for tropical highlands — Fuelwood species for arid and semi-arid regions.
8. **TREE PLANTING IN AFRICA SOUTH OF THE SAHARA**, by David Kamweti, The Environment Liaison Centre 1982.
9. **FORESTS AND FORESTRY IN THE WEST AFRICAN SAHEL: A SELECTED BIBLIOGRAPHY**, Sahel Development Planning Team, USAID — RESADOC CILSS/Institut du Sahel, 1984, by George F. Taylor and Beth Ann Taylor

10. FARM AND COMMUNITY FORESTRY, EARTHSCAN 1984, by Gerald Foley and Geoffrey Barnard  
Why people plant trees and the constraints they face. Supply and demand systems for wood and the underlying causes of forest depletion — Traditions of tree cultivation, and constraints on tree growing — Programme approaches to farm and community forestry — Tree growing for family uses and land allocation schemes. Programme design and implementation — Experiences in selected countries, including China, Korea, India, Malawi, Tanzania and Nepal.
11. STOVES AND TREES, EARTHSCAN 1984, by Gerald Foley, Patricia Moss and Lloyd Timberlake  
This book examines the new stoves being investigated by development and relief agencies, but looks at just how people buy, collect and use wood in the Third World. Stoves can make dwellings healthier and safer, and may even save some families some wood, but if cookstove programmes are worth doing at all they are worth doing better.
12. IMPROVED COOKING STOVES IN DEVELOPING COUNTRIES, EARTHSCAN 1983, by Gerald Foley and Patricia Moss  
Context in which stove programmes must work — Open fire, traditional stoves and patterns of fuel use in developing countries — Technical aspects of stove design and use — Analysis of stove programmes in practice — Account of the main programmes to date and the available evidence for fuel savings — Historical appendix: stoves and stove adoption from a long-term historical perspective — The development of cooking methods from the early use of fire through its various transitions to modern times.
13. A WOODSTOVE COMPENDIUM, Wood-burning Stove Group 1981, by G. de Lepeleire, K. Krishna Prasad, P. Verhaart, P. Visser  
The use of heat in cooking — Description factsheet on different models of stoves — Working principle and heat transfer — Description of a few stove models — Design and sizing of stoves — Measuring stove performances — Unit conversions and technical glossary.
14. CHARCOAL MAKING IN DEVELOPING COUNTRIES, EARTHSCAN 1985, by Gerald Foley  
Physics and chemistry of charcoal — Description of the various traditional methods of charcoal making — Patterns of charcoal supply and distribution — Present and past efforts to introduce improved charcoal making techniques — Prospects for the future.
15. GUIDE TECHNIQUE DE LA CARBONISATION, AFME, Association Bois de Feu, CTFT, EDISUD 1985, by Dominique Briane, Jacqueline Doat, Arthur Riedacker  
From wood to charcoal — The different uses of charcoal — Main parameters of charcoal making — Different types of charcoal kilns: traditional and modern — Economic considerations.
16. AGRICULTURAL RESIDUES AS FUEL IN THE THIRD WORLD, EARTHSCAN 1985 by Geoffrey Barnard and Lars Kristoferson  
Using the examples from Asia, Africa and Latin America, the report pieces together a picture of the vital and complex role that agricultural residues play at the village level — Data on agricultural residue production — Properties as fuels and alternative uses — Importance of organic recycling in maintaining soil fertility — Identification of areas likely to be at greatest risk from agricultural residue burning
17. PROCEEDINGS OF THE WOLFHEZE WORKSHOP, OCTOBER 1983 — "WOODSTOVE DISSEMINATION" — International Woodstove Group
18. TESTING THE EFFICIENCY OF WOODBURNING COOKSTOVES — International standards — Revised Edition 1985 — VITA  
Water boiling test — Controlled cooking tests — Kitchen performance tests — Appendices: concepts of efficiency.
19. UNICEF AND THE HOUSEHOLD FUEL CRISIS, UNICEF 1982, by Erik Eckholm  
Human impact of fuelwood scarcity — Current UNICEF energy activities — Activities of other organizations: FAO, World Bank, other international organizations, NGOs — Nairobi Conference follow-up — Lessons of recent experience: fuelwood production, improved cookstoves, etc.

### Articles

- "COMMUNITY FORESTRY DEPENDS ON WOMEN"  
M. W. Hoskins 1981, *Unasyuva* Vol. 32, n° 130
- "WOMEN AND THE ENERGY CRISIS IN THE SAHEL", J. K-Zerbo 1980, *Unasyuva* Vol. 33, n° 133
- "SYLVICULTURE TROPICAL DANS LES ZONES SECHES DE L'AFRIQUE", R. Catinot, *Bois et Forêts des Tropiques*, n°s 111 and 112
- "EQUILIBRE DU MILIEU NATUREL EN AFRIQUE TROPICAL SECHE — Végétation Ligneuse et Désertification", J. P. Goudet, CTFT 1984
- "LES FILIERES D'APPROVISIONNEMENT EN COMBUSTIBLES FORESTIERS DES VILLES DE LA ZONE SAHELO-SOUDANIENNE", Alain Bertrand 1984, *Bois et Forêts des Tropiques* n° 204
- "LES NOUVELLES POLITIQUES DE FORESTERIE EN MILIEU RURAL", Alain Bertrand 1984, CTFT

### Periodicals

- UNASYLVA — International Magazine of Forests and Forestry Industries, Edited by FAO
- SYLVA AFRICANA — Edited by CRDI
- BOIS DE FEU INFORMATIONS — Edited by ASSOCIATION BOIS DE FEU
- FLAMME — Edited by the Comité Interétat de Lutte contre la Sécheresse dans le Sahel (CILSS) ○

# Tropical forests: a call for action

A task force organized by the World Resources Institute presented a three volume report to the UN World Commission on Environment and Development on 28 October last. Their report represents a step forward in that it does not, as so many reports do, concentrate on an outline of the problem. To be sure the problem is fully described and discussed, but an action plan is also included (the third volume of the report is in fact a series of country investment profiles) and, what is more, a series of success stories are included which show what can be and has been done. Both in its tenor and its conclusions it echoes the fears and hopes enshrined in the reports made by M. André Mouélé to the ACP-EEC Joint Committee in Bujumbura in February 1985 and again to the Joint Assembly in Inverness in September in which deforestation and desertification were linked to the need to create biogenetic reserves and both were underscored by the need to get some action. It is, however, interesting to note that, while the Mouélé Reports stress the need for ACPs themselves to launch an information and guidance campaign, the WRI Task Force report stresses in addition that it is investment which is needed and it spells this out in detail — \$US 8 bn over the next five years. This is a very large sum, but it does make economic sense.

The Task force report quotes the World Commission on Environment and Development to underline the point that money spent wisely now will save much more in the future. "Long range programmes that would have helped to tackle the underlying problems have received comparatively little support. The anti-desertification programme adopted by the UN in 1977, for example, was largely ignored by donor and recipient governments alike. That programme, it is interesting to note, was estimated to cost US\$ 4.5 billion per annum to the year 2000 for the entire globe. A breakdown of this figure reveals that the estimated cost for Ethiopia was US\$ 50 million per year to the year 2000. Neither the political will nor the money could be found to implement this programme, however. Yet, eight years later, faced with a human drama beyond precedent, the world community has had to find an estimated US\$ 400 million for crisis-response measures to date for Ethiopia alone, and this figure will undoubtedly exceed US\$ 500 million before the next harvest. It will go well beyond that if the harvest fails again". That must strike development planners as a persuasive argument for investing now.

### **The costs of deforestation: "An area larger than Austria is lost each year"**

Each year 11 million hectares (out of a remaining total of 800 million hectares) of tropical forest are cleared for other uses. This represents an area larger than Austria which is lost each year, and at

the present rate of destruction, 10% to 20% of the world's plant and animal life will have simply disappeared by the year 2000. Tropical forests, according to the report, "have been essential sources of food, shelter, fuel, medicines and many other products. They sustain people and their environments by protecting soil and water resources, and providing habitat for an estimated 50% of the world's plant and animal species".

The root causes of deforestation include the spread of (inefficient) agriculture and inequitable land distribution. The rural poor, who are often blamed for deforestation, are merely the helpless agents of destruction, caught as they are in a system that forces them into destructive patterns of land use to meet their basic needs for food and fuel. In developing countries in 1985, 82% of the wood harvested is used as fuelwood, while the proportion is only 19% in developed countries. In Africa, 76% of total energy was supplied by fuelwood in 1980. With ever-growing populations dependent on agriculture, farmers are forced to develop even unproductive land, such as upland forests. The forests vanish, the soil is impoverished and then further degraded by economic pressures to produce more food and shorten fallow periods. A cycle of deprivation begins and widens. Governments, too, are victims. Desperate for foreign exchange, they sell tropical forest products, usually timber, at prices so low that they no longer reflect growing and replacement costs, with the result that there is no incentive to husband and manage the resource and trees are exploited by the

'cut and run' method. As forests are removed and transferred to agriculture, the farmers lose the fuelwood. They are obliged to search further afield and start further destruction, or start to burn alternatives, such as dung, which can thus no longer act as a fertilizer, instrumental in maintaining fields. It is estimated that 400 m tons of dung are burned annually which decreases food grain harvests by more than 14 m tons. This is nearly double the amount of food aid provided each year. As a consequence of this, fields decline. The cycle begins again.

But the value of forests and trees extends beyond their value as a source of fuelwood or foreign exchange. They are invaluable as building materials; as fodder for livestock; as providers of fruits, nuts, honey, gums, oils, resins, medicines, tannins, fibres and other materials. Trees also play a vital role in sustaining crop yields by reducing erosion and moderating stream flows; restoring soil fertility in shifting agriculture; acting as windbreaks and increasing soil moisture especially in arid and semi-arid zones; increasing soil nitrogen; providing livestock feed.

This range of services is what each widening of the cycle destroys. A recent FAO analysis indicated that 1.5 billion people are cutting firewood faster than it is growing back. 125 million people, in 23 countries, cannot now find enough wood to meet their needs, even by over-cutting the forests. Without major policy changes, the report estimates that by the year 2000, 2.4 billion people will be in this situation.

### **Deforestation can be arrested — "a strong basis for hope"**

The report concludes that although the outlook is grim, and the lessons of the past are not encouraging, there is still a basis for hope. Enough initiatives have been taken in the past to point the way for the future. The report is adamant in its insistence on the need to create a concerted, wide-ranging response to the problem and to devote to it the necessary resources.

Governments must be involved from the outset; in planning more agricultural and rural development, encouraging land reform, agricultural settlement policies, setting up integrated land-use planning, agricultural research and revising fiscal policies to restrain over-exploitation. In particular, government forestry policies must be overhauled, resources committed, training and publicity actions started, fiscal policies revised and research intensified.

Next, local populations must be invol-

ved. There the report echoes in each line the provisions of the Lomé III Convention in its emphasis on local participation in the planning and design of policies, the provision of incentives and the involvement of women not only in planning and design but in extension work. In addition, emphasis is placed on the role of NGOs as an interface between local populations and central government.

Development agencies, says the report, can do more. It states that the World Bank, the Inter-American, Asian and African Development Banks allocate less than 1% of their annual financing to forestry and the UNDP devotes only 2%. "The most successful forestry projects have been those where a combination of national government effort and political commitment, assisted by external aid, has created an investment climate that triggered a spontaneous response from local farmers, communities and the private sector for large-scale self-sustaining programmes".

### "The politics of prevention"

The guiding spirit of the report can be summed up in one sentence from a re-

cent report of the World Commission on Environment and Development. "The arithmetic of prevention is almost always persuasive; somehow we have to invent a politics of prevention that can match the politics of crises".

The strategy set out in detail consists of two broad flanks — to reduce demand for forest products, and to increase their supply. Under the heading of demand reduction comes the conservation of fuelwood by improving woodstove design, improving charcoal conversion techniques and improving facilities for tobacco curing and fish drying, for example. Improved use of the resources will also reduce demand. More logging waste could be recovered. Transportation, distribution and marketing of forest products could be upgraded and an investigation launched into wood prices and cutting fees. Other products could be substituted for fuelwood. Crop waste could be turned into briquettes. Locally available commercial fuels, such as biomass, could be subsidised. Power could be obtained from hydro-sources and rural electrification speeded up.

Under the heading of increasing supply comes a further series of measures.

Existing forests and woodlands must be better protected and managed, principally by promoting local participation in the development of management plans for forest reserves and for the rational exploitation of community resources. Incentives must be created for local participation in an expanded tree planting programme, seedling distribution should be decentralized, the involvement of schools and NGOs supported, and the use of multipurpose trees (like the acacia and leucaena) encouraged. Extension training and research must be strengthened, notably by using mass media to mobilise popular support. The use of audio-visual materials as training and extension aids is also recommended, as is the increasing and improving of the general training of forestry extension agents. Finally, extension and research activities should be better coordinated and given much higher priority.

The plan also envisages reforestation programmes for uplands, arresting soil erosion by planting and terracing, the introduction of simple methods to tether or stall livestock; creation of industrial plantations with all that that entails in improving management and financial incentives, creation of biogenetic reserves and conservation areas.

### The investment needs: "A small down-payment on a brighter future"

The figure of US\$ 8 billion has been mentioned — it is perhaps the moment to de-terrify this figure in its ACP-EEC context. For ACP countries, the figure immediately drops to US\$ 1080 million, and 40% of this figure is devoted to four countries, Ethiopia, Ivory Coast, Nigeria and Kenya. Thus, the sums required, so terrifying at the outset of the report, end by being quite manageable figures, well inside the sort of planning parameters that the countries are accustomed to. Half the amount envisaged would be spent on fuelwood conservation and agro forestry (some US\$ 507 m). \$201 m would be spent on land use improvements in upland watershed areas, \$235 m on industrial forestry, \$140 on ecosystem conservation. All this, over 30 countries over five years.

What may have seemed at the outset as a visionary scheme is set in its context: it is essentially realistic, and in the words of the Task Force members, "by any system of accounting that can encompass true costs and benefits, the investment required is nothing more than a small down-payment on a far brighter future". ○ T.G.



The highest valued species are extracted from uncut forest. A wasteful method of logging that the report aims to discourage

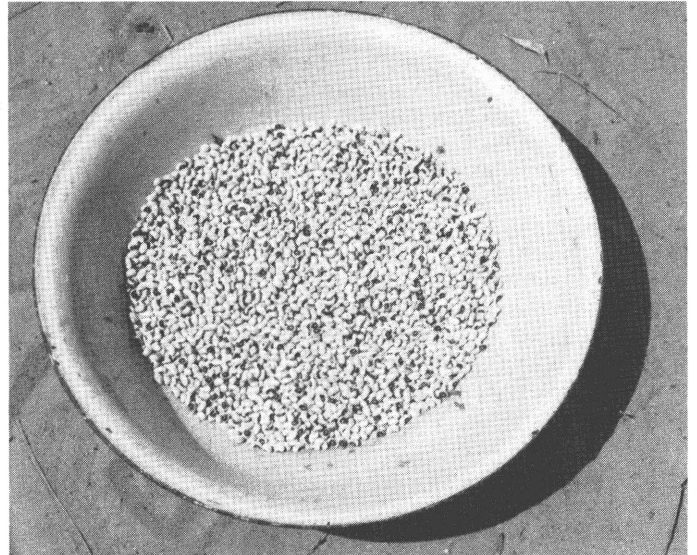
## THE SENEGALESE COWPEA SCHEME

### A new and promising experiment<sup>(\*)</sup>

In August 1985, barely half-way through the winter season, a new product appeared on the stalls of the small traders bordering the St Louis road in Dakar—CB5, a short-cycle (40-day) cowpea from California. The last seeds were planted in Casamance a month later.

It is too early for a complete assessment of the extraordinary 1985 growing season, but the one or two figures we do have speak for themselves—130 000 hectares of land was sown, the output was about 85 000 t and the yield per ha between 0.8 and 1.2 t.

Many a habit and many a rule had to be broken to achieve this surprising and indeed promising result—85 000 t instead of the usual harvest of 11 000 t! The operation was not without its risks at the outset, but the clear-sightedness and, above all, the determination of all the people in charge on both Community and Senegalese sides enabled it to be completed fast in what amounted to almost exemplary conditions. It



is something that is worth looking at—and worth copying—when there is famine in Africa.

#### Tided over by an unexpected extra source of food

The idea was to substitute the cowpea (which is in fact a kind of bean) for groundnuts where groundnuts could no longer be grown because of the drought, with a view to obtaining fairly large quantities of high quality food in a short time. The operation was a three-stage one:

1. Reproduction of available local varieties during the off-season. This took three months (March-May 1985), occupied 50 ha of irrigated land and yielded 51 t.
2. Purchase of 450 t of California Black-Eye Peas (CB5) in California itself with emergency aid and food aid counterpart funds. The American Government made a 200 t donation over and above this.
3. Planting of 850 t of cowpeas (EEC 500 t+USAID 200 t+FAO 150 t), of which 650 t CB5. The latter arrived at Dakar on 14 June. It came in 22 kg bags of treated seed unsuitable for hu-

man consumption packed into 20 t containers. It was transported to northern Senegal by truck at once, the EEC having covered the delivery costs of all input (seed, spray etc.) cif Louga (and not Dakar) in the heart of the region in question.

The first cowpeas were ready for harvesting on 10 August and in many cases there was a second sowing. The average output was 1.2 t per ha, but very violent attacks of thrips brought it down to around 800 kg per ha.

Although, after years of drought, the winter season of 1985 may seem to have had a prodigious amount of rain, the northern part of the country still only had an average of less than half the normal fall. CB5 was the only food crop over most of the Senegal river basin, as the millet never ripened. This is also true of part of the Louga region. In other places, where there was more rain, CB5 will have proved to be an unexpected extra source of food.

#### Cowpeas, living parasites

Cowpeas are said to be living parasites. This meant that the operation

had absolutely to be accompanied by other measures too, so the Commission Delegation opened restricted consultations on five brands of plant-health products available in Senegal. A contract for 35 000 litres of cypermethrine (against caterpillars), 20 000 l of dimethoate (against thrips), 15 t of actellic 2% (seed protection), 25 000 trogocide capsules (seed conservation) and 5 300 back-mounted spraying units was the result.

This pesticide, plus various other measures (logistical support for the Valley Development Company (SOD-EVA) in charge of the back-up, operation of the Cowpea Technical Committee at the Ministry of Rural Development and recruitment of an expatriate expert) costing CFAF 450 million were financed from funds accruing from the resale of EEC food aid to Senegal, with the Government's agreement.

All the input for the cowpea scheme was ready by 1 July, in spite of the time allowed (one month for the plant-health products and two for the seed, including one at sea via Panama and Denmark!). And, as everything

<sup>(\*)</sup> Article based on information provided by the Delegation of the Commission of the European Communities, Senegal.



was delivered right to Louga in the very centre of the area of intervention, particular care was able to be taken with the inventory and with distributing the products.

All these efforts, plus the quality of the seed and the well distributed rainfall, meant that the average production would have been more than 1 t per ha had there not been an invasion of thrips of rare intensity.

SONACOS (the oilseed marketing board of Senegal) began marketing cowpeas on 1 October 1985 and it intends buying 10 000 t, partly for export and partly to build up buffer stocks. Seed stocks have also been built up again to 1000 t of local varieties (58/57 essentially) and 1200 t of CB5. The biggest success, however, is to be seen in the fact cowpeas are now on sale throughout Senegal in record quantities and CB5 has already largely crossed the borders as seed.

### Political leaders plus peasant farmers = amazing synergy

One or two basic facts will help with an understanding of this original scheme and the interest it holds.

### Physical constraints on growing

For some years now, the lack of rain in northern Senegal has made it very difficult to grow groundnuts. The fastest-growing local variety has a 90-day cycle and needs about 400 mm rainfall, so the crop has had to be pushed further and further to the south, as far as Sine Saloum, and a number of regions have lost their income as a result. CB5 can be consumed at around the 40th day, be fully harvested in 55 days and it only needs 200-250 mm rain.

### The political will of the authorities

In March 1985, President Abdou Diouf officially announced that the Government wanted to substitute cowpeas for groundnuts wherever it was no longer agriculturally possible to grow the latter crop. Cowpeas are something for the grower to consume himself, but they can also be sold—the official price paid to the producer has gone from CFAF 60 to CFAF 100 per kg (because the product was rare, prices wavered between CFAF 130-350 at the start of the season and reached CFAF 500 and more just before the following season).



*The peasants have to go on getting training in producing cowpeas*

### The effect on the peasants

This is enormous. Overnight, the peasants are being asked to switch from a secondary crop to a main crop from something they consume themselves to something they can sell, to group their plots together so disease can be controlled and to become modern farmers well versed in parasite control. It is interesting to see that, in the majority of these cases, the aims have been achieved and 5, 10 and even 30 ha plots are common. The method of association varies—there is the 25 ha “women’s field” in Fanaye and the young people’s association (10 ha) in Dialoubé, for example. Disease control has proved more of a problem. It has taken SODEFITEX (the textile fibre development company) three years to get results with cotton and there is no reason why cowpeas should be any different. The two sprays have sometimes been muddled up and the nozzles blocked with muddy water. This is one of the weak points in the operation, but the most important thing is that the peasants have realized that spraying is essential, in spite of the fact that they do not yet do it very well.

### Marketing

The first problem here is finding the money to buy and, above all, the ultimate destination of the product. Export is still on the cards, but the potential markets should be considered as entailing considerable risk.

Neither of the two mills in Dakar can currently process cowpeas into flour and they will not make the necessary investments that will allow them to do so unless they can be guaranteed a minimum input every year—which will take time.

Preserving the produce has been a prime concern of the project. The 200 l container in each village is by far the best solution if actellic 2% can be added. Cowpeas will also keep in sacks for at least six months if 100 gr of this product is added to each.

Although the cowpea has a promising future, things are by no means simple. A revolving fund has to be established for each crop to purchase spray and provide back-up and the peasants have to go on getting training in producing cowpeas as a main crop, which means grouping their plots together, using sprays and introducing protective belts and proper methods of drying and packaging. Then (this is most important), an economically viable production-distribution chain has to be set up, in particular to guarantee a minimum price to the peasant and the establishment of a revolving fund. One of the main aims is to ensure that the peasants get some money coming in and, throughout this year, they have been able to sell their harvests at above the threshold price. This, indeed, is where the real success of the operation, an exemplary one from many points of view, lies. ○

## THE TOULA RICE BASIN – a successful project<sup>(\*)</sup>

Toula, on the Niger 100 km west of Niamey and 2 km south of Tillabery, is one of the many irrigated areas funded with international or bilateral aid. There are dozens like it in Niger, in Mali, in Senegal, in Mauritania and elsewhere. Very few of them function properly, often because of red tape, badly-organized supply and distribution and a plethora of civil servants, but here in Toula, things are working well. Why? These snippets of conversation from a film on the Toula Rice Basin provide an answer.

► *Why does your system work better than the others?*

— Because we look after things ourselves. Spending, collecting money and paying it into our account and getting it out when we need it.

► *Who opened the account for you? Was it you or the State?*

— The State didn't open the account. We did.

► *How do you draw money out? Who signs the cheques?*

— The accountant and I do.

► *Do the people pay their dues?*

— Yes they do. They pay by selling part of their rice with the cooperative and they also have direct sales in the villages.

► *Do they produce enough rice? Is there enough left for their own needs once they have sold some?*

— Yes they do have some left and they are satisfied with this.

► *Is it a paying proposition?*

— Yes it is, although a bit of an increase would be appreciated.

► *What do you do about the work? Do you call on outside labour?*

— No, we do it ourselves unless there are a lot of fields to be planted,

in which case we get workers in to do it. When the irrigation channels need clearing out, we tell all the delegates and do it together...

### Genuine self-management

The irrigation system used in this area is one involving complete control of the water, so two rice crops, each giving a minimum 4 tonnes paddy per hectare, can be grown and the total output is 8 t per ha p.a.

The scheme has brought a full 260 ha, 14 ha for nurseries, under irrigation and 578 families are working them. The whole area has been divided into six 40 ha sectors (each of which is a fully independent Cooperative Production Group), which are in turn divided into plots of 0.20-0.30 ha.

The peasants have been properly trained. They have been introduced to the problems of self-management, learning new techniques, water control, sowing in the right season and using fertilizer. They are fully able to use the modern farming techniques which their system of irrigation, using total water control, involves—i.e. they breed in nurseries, plant in rows, use

fertilizer in the nurseries and the fields etc.

The system of self-management introduced as part of the scheme enables the peasants to say exactly what they need and makes for direct control of all their spending. These are the results that have led ONAHA to make Toula a reference scheme and a model project that 10 years' operation have only consolidated.

The first crop was grown in the winter of 1975. The average yield has always been around 5 t per ha since then, so the 20 crops grown on the average 244 ha p.a. planted over the period July 1975-July 1985 have totalled 24 000 t paddy rice.

### Genuine financial autonomy

Toula is autonomous as far as both the authorities and the banks (CNCA) are concerned, something that has been achieved primarily through the new cooperative spirit of the farmers.

For every crop, they have systematically paid all their dues, both for input and overheads and maintenance and amortization. The cooperative has also managed to obtain income from such things as the cooperative shop and the sale of poles and no longer needs to resort to the usual agricultural credit facilities.

In 1981, the Toula cooperative decided to pay all its funds for the pumping equipment into a blocked account at the BDRN and, a few months ago, its reserves were such that it was able to decide to replace this. After consulting the suppliers, it has ordered more modern equipment that is cheaper to run—four electro-pump units plus the relevant controls. This machinery, costing almost CFAF 28 million, should be installed between 15 November and 31 December when no crops are being grown.

Toula is the first of Niger's schemes to be able to take financial responsibility for replacing its pumping equipment through proper self-management. This is undeniably a fine performance and a success for ACP-EEC cooperation, as the EEC contributed something like CFAF 750 million (1974 rates) to the financing of this project from the 2nd and 3rd EDFs back in 1974. ○



<sup>(\*)</sup> Based on information from the EEC Delegation in Niger.

## Distributing African films in Europe

Only recently have African film-makers been hailed by the rest of the industry—Souleymane Cissé (Mali) was one of the Cannes festival judges two years back and Burkina Faso's Gaston Kaboré won the "César" for the best French-speaking film in France last year. But their films have yet to be a great popular success. Although they sometimes manage to make the television screen in Europe, in terms of the cinema they are rarely seen outside the specialized ciné-club circuit or Third World film festivals.

One of these festivals, held recently (15-23 November) in Amiens in France, looked at the problems of the African film industry and—this is a major innovation—did more than just produce the time-honoured diagnosis. It also tried to come up with some answers, some of which, the promoters hope, can be put into practice under the Lomé III cultural arrangements.

Amiens, of course, is not Venice or Cannes. It is much newer (it started five years ago) and much less well known. But for the past three years it really has been trying to promote non-commercial films, particularly, although not exclusively, from the Third World. This is why it is twinned with FESPACO, Ouagadougou's Pan-African Film Festival. This year, Amiens hosted an international film market for the first time, as the organizers wanted to open the market to quality, but so far undistributed, films so that commercial outlets could be found. Then, with the help of the Community, which financed this part of the programme, African film-makers discussed how to overcome their biggest problem, distribution, with a wide range of distributors—there were professionals from the EEC, Sweden, Switzerland, Canada and America.

Films are currently distributed by powerful companies that control vast cinema chains and tend only to screen certain types of film on their circuits, ignoring anything different. That leaves

the small distributors who are interested in pictures of other cultures but are badly organized or not organized at all and unable to run a cinema circuit.

But things have changed since the end of the conference at Amiens. Distributors have decided to form a group (open to associate members) to speak

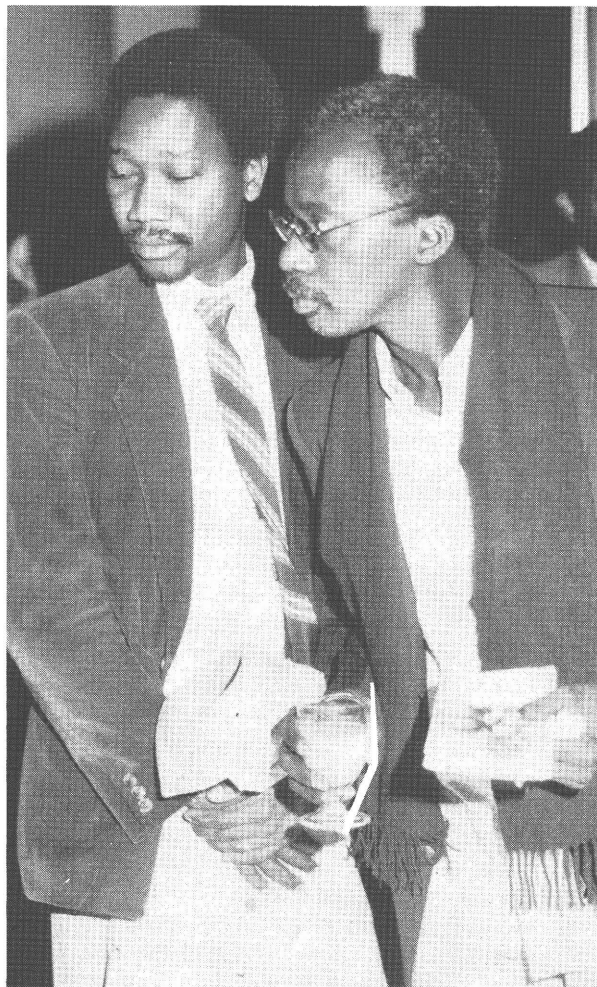
for the African film-makers who have not always known whom to approach to commercialize their films. Now they can contact the Association for the Promotion of African and Third World films in Europe, which has members in a large number of European countries.

Another practical decision is to bring out a directory, a kind of Who's Who of the film industry in Europe, to familiarize Africans with the European circuit by listing the centres where training and assistance with production and distribution can be obtained.

Lastly, Amiens was an opportunity for continuing reflexion on what forms of aid the European Community might provide for the cinema industry once Lomé III, which lays particular emphasis on cultural cooperation, comes into force. One suggestion was for an ad hoc committee to select four or five films from the various African film festivals (Ouagadougou, Carthage etc.) for automatic help with copying or producing foreign language versions and with launching promotion campaigns.

Is this reaching for the sky? Maybe. But the Convention does indeed offer a framework for cultural schemes. The European associations are beginning to realize this and get organized, as Amiens shows, and the Africans are not being idle either. FEPACI, the Pan-African Federation of Film-makers under the leadership of Gaston Kaboré, is shaking itself out of 10 years of lethargy. Cooperatives are being formed, especially in Senegal. The thinking is that ACP-EEC cooperation has found a new field of application in the cinema. But whether the projects being set up here and there actually succeed remains to be seen.

At all events, the force of the visual image is such that the cinema can do the job of bringing people together by fostering dialogue far better than anything else. ○ A.T.



*Gaston Kaboré (Burkina Faso) (left) and Souleymane Cissé (Mali) during the African Cinema Week in Brussels in 1984*



### New technologies for forecasting pest attacks

**Pheromone traps, radar, computers and remote-sensing satellites can all help to improve pest forecasting: all are in use in ACP countries, but there is great scope for further development.**

From time to time the changing winds that blow across Africa bring with them such unwelcome visitors as the desert locust (*Schistocerca gregaria*) and the armyworm (*Spodoptera exempta*). Migrant pests such as these tend to occur sporadically over very large areas — and, wherever they are seen, the unfortunate farmers in that area know that they must face the risk of catastrophic losses. But the factors which determine where these outbreaks will occur have been studied in very considerable detail by scientists. To what extent is it now feasible to think in terms of managing the pest populations and disease-causing organisms which move in this way? Can pest movements be monitored and related to weather conditions in such a way that their sporadic movements can be predicted? Can the necessary resources be mobilized when they are needed so that pest and disease outbreaks can be controlled before the crops suffer serious damage?

#### Locust control offers encouragement

Scientists can point to spectacular successes that have resulted from studies of agrometeorology in relation to pest biology. Everyone knows that, since historical records began, large areas of the tropics and sub-tropics have been periodically threatened by plagues of locusts. But where are these plagues now? To a large extent they are under control: since 1963 there has been a long period of virtually unbroken recession (the last major upsurge was in 1978). This is largely due to the pioneering work of the London-based Anti-Locust Research Centre which began in 1929 and was continued through its successor, the Centre for Overseas Pest Research. The programme was later handed over to



*Desert locusts can confront farmers with catastrophic losses. Their movements can now be predicted*

FAO and the African regional organizations DLCOEA, OCLALAV and IRLCOSA. Locust forecasts have been issued since 1943. Nowadays, Meteosat data, synoptic weather data, satellite pictures of vegetation and national or regional locust reports are the main types of data that are collected and used to recommend means of keeping the situation under control. Without doubt this is the most advanced and effective pest forecasting system in use in the ACP countries; it shows what can be achieved.

Similar work on other pests (armyworms, brown planthoppers) has also enabled a degree of pest management to be achieved over enormous tracts of land. Yet the world's crops continue to be plagued by a multitude of pests and diseases; so one must ask why are we able to control so few of them as effectively as we now control the desert locust? Are we failing to apply scientific advances to effect the control of pest populations? Many populations of potentially devastating migra-

tory pests have small beginnings; at this stage the population is vulnerable. It must therefore seem strange to the non-specialist that so little effort is made to contain outbreaks at this early stage. The problem, of course, is that such outbreaks must first be located — and they often occur in remote areas. Somebody must be made responsible for informing the authorities; and the resources needed to take remedial action must be mobilized immediately. In the vastness of the African continent, that is no easy task. Can advanced technology, such as sophisticated radar equipment, be adopted to make the task easier? (As an example of the level of sophistication that has been achieved, radar technology can now be used to locate a single brown planthopper at a distance of 6 km). The answer is that it can be used in this way in an increasing number of situations; but there are constraints to the utilization of such methodologies, and they are not all technical.

## The complexity is challenging

The complexity of relating pest biology to agrometeorology and biogeographical mapping in such a way that a realistic control strategy can confidently be recommended should not be underestimated. Each pest/crop relationship must be studied separately; the weather affects crop susceptibility, pest development and spatial redistribution of the pest—and it must be monitored, interpreted and forecast with the aid of current synoptic methodology if its effect on the pest is to be predicted. Pest populations may be displaced by external changes, such as occur with shifts in wind systems—or they may be initiated by changes in the insect, such as reaching the winged stage. The way in which weather affects pest development is particularly complex: temperature, rainfall and sunshine all affect such activities as feeding, sheltering, flight, mating and oviposition as well as growth and development. The scientist who tackles this problem must master a vast and rapidly-growing literature on the subject. Furthermore, he must master both the physical and biological sciences because success will only come through the effective integration of meteorological data with biological information.

Advances are often impeded by a discrepancy in standards between the two major types of data. Meteorological data are widely standardized and routinely collected and reported; this is largely because of their relevance to other activities, such as aviation. But

data on the pests are not standardized. Trap designs vary, and they may be positioned differently; insect identification may be unreliable. Habitat classification is not standardized. It is difficult to establish a monitoring protocol which is capable of furnishing adequate data for the purpose of forecasting and yet can be reliably sustained within the technical and logistic resources available for this purpose.

Obtaining relevant meteorological data is relatively easy — a great deal of data that has been collected for other purposes may be suitable. Observations from meteorological satellites can be used to supplement ground observations, especially for remote areas. Satellites of a different kind—earth resources satellites—can provide relevant data concerning vegetation. Such data may be obtained from national or international remote sensing centres.

The integration of all the relevant data and the preparation of a forecast is, of course, the most critical operation. The public does not easily forgive the forecaster who makes an error — and past errors diminish the credibility of subsequent predictions. Forecasts themselves fall into several categories: short-term, medium-term and long-term. Probabilities of each of the events forecast (size, location and likely duration of populations) must be given and they must be based on up-to-date information.

## Cereal pests and armyworm outbreaks can be forecast

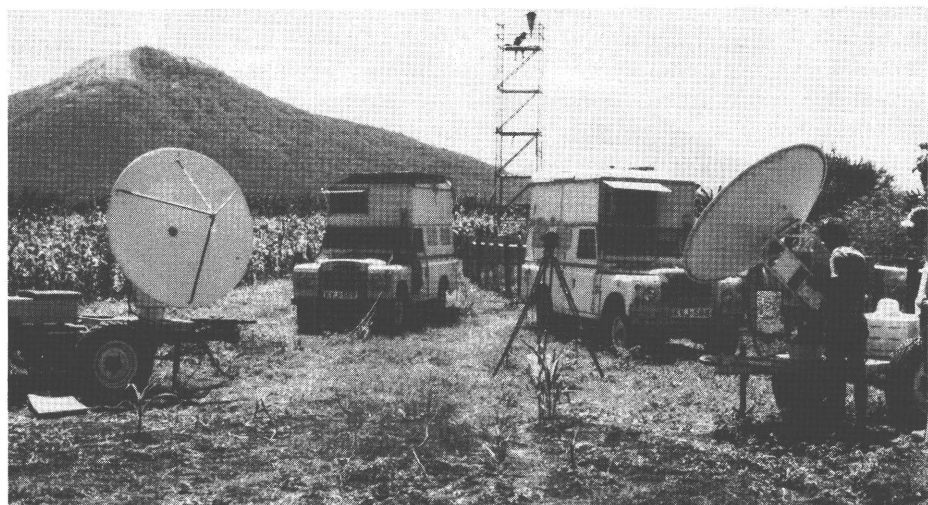
To what extent is advanced technology being used to forecast pest and



The Meteosat satellite can provide useful information on the movements of locusts

disease outbreaks? The locust story has already been mentioned. Another advanced system is the computerized central forecasting system (EPIPRED) used in the Netherlands to forecast outbreaks of yellow rust (*Puccinia striiformis*) and other wheat pathogens, and for cereal aphids. Monitoring is conducted by participating farmers according to an established protocol and the data are fed to a databank and computer programme which interact to generate recommendations. This system represents an excellent example of the use of a computerized model of population dynamics to forecast control needs in the light of economic and environmental concerns; it also utilizes the professional skills of the farmers. Studies fundamental to the development of such systems have been carried out in Kenya, but have not been used in forecasting.

An armyworm forecasting system has been developed in East Africa and is working well. International cooperation is good; long-term forecasts have proved reliable. The methodology relies heavily on the use of an improved design of pheromone traps. Trap design—in this case, suction traps—is an important factor in the UK aphid forecasting network that is centred at Rothamsted. Twenty-two traps con-



A radar unit of the Tropical Development and Research Institute monitoring pest movements in Kenya



*A technician sets a pheromone baited pan trap for armyworm moths*

TDR

tinuously monitor the aerial distribution and abundance of aphids throughout Britain, and 24 similar traps operate in five other European countries. Forecasts of the risks of damaging infestations have been developed for some aphid species. This work is supported by computer-mapping, a technique that has now been in use for 15 years.

### **Practical steps that will lead to progress**

Although several examples have been cited, there are really rather few operational national pest forecasting systems in use in the ACP countries. Much work needs to be done — the potential for decreasing crop losses, and minimizing the requirement for costly and often dangerous insecticides, is enormous. Can pest forecasting systems be developed and adopted more widely in ACP countries? The interest certainly exists in these countries, but the following seven key issues must be satisfactorily resolved:

**Relationship between research and application:** There is often a conflict between research and implementation needs. Research, which underpins the system, often requires more sophisti-

cated instrumentation than that required for implementation. Appropriate techniques must be adopted for routine use and the complex, often delicate, technologies of research must not be carried over for routine use.

**Quality of data collection:** The quality of forecasting depends upon the quality of data collection on which it is based. Biological data are difficult to collect and to standardize; they will always be very variable. Particular attention must be given to the training and continuity of trap operators and to limiting data collection to essential information. The status of those who carry out routine work generally needs to be raised: their duties are as important as those carried out by staff working at the more technologically glamorous levels.

**Use of new methodologies:** Satellite imagery provides the potential for rapid access to meteorological information covering wide geographic areas; remote-sensing of vegetation status, through the NOAA satellite, provides a means of identifying potential breeding sites; computers can be used to model pest bionomics, to process field data and to output forecasts. But the biological realities come first, and it is

important not to be seduced by technology.

**Validation:** It is important to attach a probability to forecasts and there needs to be continuous feedback to modify and improve techniques of data collection and processing.

**Cooperation and continuity:** Studies must be interdisciplinary (entomologists, climatologists, meteorologists), collaboration must be international (pests do not recognize national boundaries). Regional programmes and national programmes must tie in with each other. Biological and meteorological data must be collected continuously.

**Integration of forecasting and control:** Forecasts are of no value without the means to implement effective control procedures, which must be economically sound. When recommending governments to adopt forecasting systems, emphasis should be placed on their value in decreasing the element of risk faced by farmers.

**Information exchange and training:** Regular, perhaps biennial, meetings are desirable to review progress in developing forecasting systems for ACP countries. More effort should be made to train people in the special combination of skills needed to develop forecasting methodology.

These observations are based on the proceedings of a seminar that was held at Fulmer Grange, Slough, England (from 24-28 June 1985). The seminar was entitled "The Role of Agrometeorology and Biogeography in Forecasting Pest and Disease Outbreaks"; it was sponsored by the ACP-EEC Technical Centre for Agricultural and Rural Cooperation (CTA), Ede-Wageningen, The Netherlands, and was organized by the Tropical Development and Research Institute (TDRI) which is a scientific unit of the United Kingdom's Overseas Development Administration (ODA). The 34 seminar participants included representatives from 13 ACP countries. The proceedings of the seminar are to be published in full; a summary report will also be available shortly. Copies of these publications will be available, on request, from CTA. ○

A.C. JACKSON

# THE CONVENTION AT WORK

## Lomé III: Negotiations on the Protocol on Spanish and Portuguese accession begin

The ACP-EEC negotiations on the Protocol on Spanish and Portuguese accession to Lomé III began in ACP House in Brussels on 10 December. The opening session was a plenary sitting, the familiar arrangement the partners had used throughout the previous negotiations in Brussels, with ACP President Ambassador Mongo So'o (Cameroon) speaking for the ACP and Development Director-General Dieter Frisch speaking for the Community. This first meeting was essentially a time for speeches on what the negotiations were all about.

The ACP spokesman said that Spain and Portugal's presence round the negotiating table once more brought the ACP countries alongside nations with which they had historic ties. "We hope to develop relations that are of considerable advantage to both parties with these two Member States of an even bigger Community", he told them.

President Mongo So'o then said that the ACPs were making a detailed study of the voluminous acts of accession of Spain and Portugal to see what the effect on their economies would be. Most ACP States depended on agricultural commodities, fish and one or two semi-industrial products for their export earnings and it was vital to protect ACP interests here if enlargement were not to result in further impoverishment.

So the ACP wanted assurance that, once Spain and Portugal had joined the Community, treatment of ACP exports to the EEC would be guided by the following lights:

- (a) Accession of Spain and Portugal must not lead to a deterioration in the conditions under which ACP products acceded to the market of any Member State of the enlarged Community, including the new ones.
- (b) There must be no discrimination between the ACP States.
- (c) In the matter of products not exported by the Community, the ACP must not be forced to subscribe to a principle whereby they would be deprived of more favourable treatment than that accorded to the Member States of the enlarged Community.

(d) The conditions of access of ACP products to the Community market must not be less favourable than those accorded to third countries.

(e) It is vital for any agreements also to take both the present state of ACP economies and their future development into account. Any measures or policies likely to harm the development of the ACP countries and especially the trade preferences they get on the EEC market should be avoided.

The ACP are ready, the Ambassador went on, to provide a list of ACP export products, for information, that the Community can use in the negotiations on the Protocol on accession and adaptation so that the principles set out above can be properly put into practice.

He then explained the sugar problem, which, "clearly illustrates the serious concern" of the ACP at the present time. "As we all know, right at the start of the accession negotiations, Portugal asked to import 300 000 tonnes p.a. of raw sugar from the ACP States to meet the needs of its refining industry. And four ACP signatories of the Protocol were already delivering something like 140 000 t of raw cane sugar to Portugal under long-term contractual agreements."

This request, which was strongly supported by the ACP Group, has been more or less rejected, the ACP maintained, and the enlargement of the Community has resulted in traffic being diverted to the benefit of the rich countries of the Community and the detriment of the poor ACP countries. A 75 000 t ceiling on ACP sugar imports into Portugal would not take any account of the realities with which they had to cope, they said, repeating their initial request.

But sugar is far from being the only product seriously under threat. ACP exports of fish, shellfish, fruit and vegetables (melons and green peppers, for example) and oilseeds would also be under threat and the Community's system of internal subsidies could well make the situation worse in the long run.

The President reminded the Community that the ACP States had often been

### Also in the yellow pages

#### The Convention at work

- I. Protocol on Spanish and Portuguese accession to Lomé III
- II. Lomé III programming
- VII. ACP-EEC Committee of Ambassadors

#### General information

- XV. World food security pact
- XVI. Emergency aid

#### European Community

- XVIII. European Summit in Luxembourg
- XIX. European Development Council

told that their products and exports were not competitive and they had equally often been encouraged to take steps to promote their trade. But, alas, the obstacles facing the ACP in almost every area of trade in which their products are competitive (sugar, beef and veal, rum, fruit and vegetables, fish, rice, textiles, clothing and oil) are a permanent threat. "We hope, very sincerely, that we will not receive vague promises during these negotiations, but that practical steps will be taken to facilitate rather than impede the pattern of trade from the ACP countries", the Ambassador said.

Lastly, the ACP told the Community that there were other areas of cooperation, over and above trade, that should be given particular attention in the coming negotiations. This meant, particularly, financial and technical cooperation, investments, migrants and job offers, the situation of migrant workers and students and cultural cooperation.

### Transitional measures

Community spokesman Dieter Frisch started by stressing the fact that the EEC had fulfilled its commitment to keep the ACP Group in the picture about enlargement. He then went on to say just what was to be discussed with the ACP. As he saw it: "The negotiations we shall be running hinge on commercial and other matters connected with the Convention. When it comes to financial and technical cooperation, the rules of operation, as set out in Lomé III, will be fully applied by the signatories. Their financial contribution to the EDF has been settled by

Lomé itself (Article 194 and the declarations in Annex XXXVII of the Final Act) and confirmed in the Treaty whereby Spain and Portugal accede to the Community”.

So it is essentially in trade, Mr Frisch went on, that this Accession Treaty raises questions of the two new Member States adapting to the provisions of the Lomé Convention. It is also clear that, “we cannot ask Spain and Portugal to open their customs frontiers overnight without giving them the opportunity to adapt to the new economic realities gradually. In other words, what we need are transitional measures to allow the Spanish and Portuguese economies, which have evolved for years under the protection of their customs, to reorganize so they can survive new competition”.

There are two principles behind these transitional measures.

The first is that the transitional measures must not lead to treatment that is more favourable than that applied to the present Community. This means that tariff dismantling must never lead to the levying of customs duties that are lower than those applied to the present Community. But it also means that all products covered by transitional measures (quantitative restrictions on the present Community) have to be covered by such measures in respect of preferential third countries and thus in respect of the ACP too and for an identical period.

Dieter Frisch placed a great deal of emphasis on this, “because it also sets the bounds of the negotiations. The transitional measures which are set down in the Accession Treaty in relation to the present Community are the most we can offer you. The Community cannot negotiate any advantages over and above this”.

Mr Frisch's second principle is that the transitional measures for preferential countries must not lead Spain and/or Portugal to give these countries treatment that is less favourable than that given to third countries. In particular, transitional measures on quantitative restrictions cannot be envisaged for preferential third countries in respect of products exempt from such restrictions on importation to Spain and Portugal from other third countries.

So, we have the principle of the Community preference applying between Member States of the Community, one the one hand the principle of the preference that the Community accords certain third countries in its trade relations with them (they include the ACP countries) and on the other the limits of these transitional measures being fixed by the

principles, the Community spokesman said.

Frisch then spoke at length on the tariff treatment that Spain and Portugal will be applying to agricultural and maritime industrial products from the ACP countries from 1986 onwards and for the whole of the transitional period. He spent some time explaining the system for gradually dismantling these duties, giving the exact timetabling in each case.

He concluded by underlining the fact that it would be wrong to forget that Spain and Portugal will be applying the Lomé Convention fully once they join the Community and that the preferential system of trade therefore fully applied to all products not covered by transitional arrangements.

When these two speeches were over, it was suggested that a joint technical party be set up to look at the questions in detail. It could meet after the holidays and come up with conclusions fast to

avoid a legal hiatus when Lomé III took effect.

Two declarations, however, suggested that the negotiations might be harder than some people thought. Maurice St John, the Ambassador of Trinidad & Tobago and Chairman of the ACP Subcommittee on Trade, deplored the fact that the Community's discussion had only borne on access of ACP products to the Spanish and Portuguese markets, whereas the Group wanted to discuss the consequences of enlargement on their exports to the Community as well. Secondly, Dieter Frisch said once again that the access of ACP products to the Community market is laid down in the Convention and is not negotiable. The only thing that was able to be discussed, he felt, was the conditions of access to the Spanish and Portuguese markets, as the aim of the negotiations was not to talk about the new situation which enlargement would create.

Will it ever come right? The negotiations are only just beginning, after all... o

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## LOME III PROGRAMMING

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### Over a third of the ACP have an indicative programme

Some months before the entry into force of Lomé III, more than a third of the 66 ACP countries have already established an indicative programme of Community aid. In the September/October issue of *The Courier* (N° 93) the essential elements of the first indicative programmes were published, and the list is added to in this issue.

It should be remembered that the sum indicated for each country does not include additional resources which could be made available to ACP countries during the life of the Convention in the form of non-programmable aid administered by the Commission such as Stabex transfers, emergency aid, food aid etc. On the other hand, the EIB could contribute, from the resources which it manages, to the financing of productive investment projects which meet the criteria and conform to the Statutory rules of the Bank and the provisions of the Convention. If, in the case of certain countries, an indicative amount is shown as regards loans, the sum is nonetheless subject to the funding of projects already presented and accepted before becoming definitive.

#### Zimbabwe

Zimbabwe will be receiving the sum of ECU 73 m (equivalent to 100 m Z\$) as

programmable resources. This sum is composed of ECU 43 m in the form of grants; ECU 30 m in the form of special loans (over 40 years at 1% with 10 years' grace period).

The Community's aid would be focused on the development of agriculture in general and more particularly on communal lands and resettlement. Outside the agricultural sector of concentration the Community would assist Zimbabwe in human resources development and supporting activities to other priorities in development policies of the Government outlined in the Five Year Plan 1986-90.

In addition, the European Investment Bank may contribute from the resources that it manages to the financing of productive investment projects, principally in industry, agro-industry and mining, that comply with the criteria and statutes of the Bank and the provisions of the third Lomé Convention. The Bank has indicated an amount of ECU 50 m as an order of magnitude for the total assistance that it could provide.

The Community delegation stated in this context that a sum of ECU 110 m could be earmarked for regional operations in this sub-region (Z\$ 150 m).

The indicative programme of Community aid was signed jointly on behalf





*Western Samoa's Prime Minister, Tofilau Eti Alesana, signing his country's indicative programme together with Maurice Foley (seated next to him) and Morten Scholer*

of Zimbabwe by Mr Elisha Mushayakara and on behalf of the Commission of the European Communities by Mr Maurice Foley. Mr Martin Curwen signed in respect of matters under the responsibility of the European Investment Bank.

### Lesotho

Lesotho will receive an amount of ECU 41 million, equivalent to 86.5 million Maloti, as project and programme assistance. Of this amount ECU 26.5 m will be in the form of grants, ECU 10 m special loans (40 years' duration, 10 years' grace period and half a percent interest). ECU 4.5 m will be in the form of risk capital managed by the European Investment Bank.

EEC assistance would benefit essentially two sectors of the Lesotho economy; the first is the agricultural and rural development sector, to assist in developing agriculture and livestock farming, diversification of agricultural production and provide improved social infrastructure for the rural population. The second area of aid concentration will be the further development of Lesotho's natural resources — water and energy.

In addition, the European Investment Bank will, from the resources under its management, be able to help finance productive capital projects which meet its criteria and which conform to the Third Lomé Convention.

The indicative programme of Community aid was signed jointly on behalf of Lesotho by the Minister for Planning and Economic Affairs, E.R. Sekhonyana, on behalf of the Commission of the European Communities by Mr M. Foley and by Mr Curwen in respect of matters under the responsibility of the European Investment Bank.

### Swaziland

Swaziland will receive ECU 26 million (about 52 million Emalangeni) as project and programme assistance, of which ECU 18 m are in the form of grants, ECU 5 m as special loans and ECU 3 m as risk capital.

EEC aid will be concentrated on rural development, including technical and vocational training in all sectors relating to improving rural living conditions.

In addition, the EIB, will, from the resources under its management, be able to help finance productive capital projects which meet its criteria and which conform to the Third Lomé Convention.

The EEC stated that an amount of ECU 110 m (220 million Emalangeni) had been earmarked for regional cooperation in Southern Africa.

The indicative programme was signed on 9 November in Mbabane by Derek von Wissel, Minister of Commerce, Industry and Tourism on behalf of Swaziland, by Maurice Foley, Deputy Director-General, on behalf of the Commission, and by Martin Curwen in respect of matters under the responsibility of the European Investment Bank.

### Burkina Faso

Burkina Faso will receive ECU 115 million (39 billion CFA Francs) as project and programme assistance, of which ECU 102.5 m are in the form of grants and ECU 12.5 m are in the form of risk capital managed by the European Investment Bank.

Aid will be concentrated on the development of agricultural production and the upgrading of the rural environment with the object of attaining the strategic

objective of food self-sufficiency and food security. To this end the cooperation will be focussed on a coherent set of measures, projects and investments aimed at an increase in food production and its maintenance by an integrated fight against desertification.

In addition, the European Investment Bank will, from the resources under its management, be able to help finance productive investment projects which meet its criteria and which conform to the Third Lomé Convention.

The EEC stated that an amount of ECU 210 m (71 billion CFA Francs) was available for regional projects in West Africa.

The indicative programme was signed on 9 November in Ouagadougou by Comrade Damo Justin Baro, Minister of Financial Resources, on behalf of Burkina Faso, by Dieter Frisch, Director-General for Development, on behalf of the Commission and by Louis Biancarelli in respect of matters under the responsibility of the European Investment Bank.

### Niger

Niger will have at its disposal ECU 120 m (40.5 billion CFA Francs) as project and programme aid, of which ECU 103 m (34.8 bn CFA Francs) will be in the form of grants, ECU 5 m (1.7 bn CFA Francs) in the form of special loans and ECU 12 m (4 bn CFA Francs) in the form of risk capital managed by the European Investment Bank.

Cooperation between Niger and the European Community will focus on food self-sufficiency policies and, as a corollary, on the fight against desertification by means of a package of coherent measures. They will contribute to food security, principally by the development of irrigated agriculture in all its forms and scope. This development must be sustained and complemented by action in the fields of pricing policy, marketing and the supply of inputs, and by improving the economic and social environment of the rural sector, notably through improving credit facilities, infrastructure, water supply, health and training, by improving food storage and processing and protecting and restoring the natural environment. This sector will attract about 80% of the funds managed by the Commission. The rest will go largely on maintaining the national road network and towards training linked to Commission-financed actions.

In addition, the European Investment Bank will, from the resources under its management be able to help finance productive capital investment which meets its criteria and which conforms to the Third Lomé Convention.

The EEC Delegation indicated that an amount of ECU 210 m (70.9 bn CFA Francs) was available for regional projects in West Africa.

The indicative programme was signed on 14 November 1985 in Niamey by Almoustapha Soumaila, Minister of Planning, on behalf of Niger, by Dieter Frisch, Director-General for Development on behalf of the European Commission and by Louis Biancarelli in respect of matters under the responsibility of the European Investment Bank.

### Cape Verde

Community aid to Cape Verde will be a minimum of ECU 23 m (1.7 bn Cape Verde Escudos) of which ECU 20.5 m will be in the form of grants and ECU 2.5 m will be in the form of risk capital managed by the European Investment Bank.

Community aid will be concentrated on Cape Verde's capital, Praia, and its environs. It will have three main aims, notably:

- achieving a balance between the population of Praia and the resources available;
- improving living conditions for the inhabitants by satisfying their basic needs;
- improving city management and coping with urban growth problems.

To achieve these aims, aid will be directed towards priority sectors such as water supply, sewerage and drainage, public housing, health and training. The EIB loans will be directed, as in the past, to productive activities, by financing projects in the industrial, energy and tourism sectors with particular emphasis on small and medium-sized enterprises.

The EEC stated that an amount of ECU 210 m was available for regional projects in West Africa.

The indicative programme was signed at Praia on 12 November 1985 by José Brito, State Secretary for Planning and Cooperation on behalf of Cape Verde, by Michel Hauswirth, Deputy Director-General for Development on behalf of the Commission and by Tassilo Hendus on behalf of the European Investment Bank.

### Comoros

The Comoros will receive ECU 21 m (about 7.1 bn Comoran Francs) as programmable aid, of which ECU 19 m will be in the form of grants and ECU 2 m in the form of risk capital managed by the European Investment Bank.

Community aid will be concentrated on the rural sector, considered by the

government to be a priority, especially as regards the optimal development of agricultural production to meet both internal needs and export requirements. The concentration will have the objective of achieving a better economic balance between the islands and between the coastal areas and the interior of the islands and should achieve a greater degree of food self-sufficiency (the government's top priority) and better returns on cash crops. Two-thirds of Community aid managed by the Commission will be devoted to this end.

The EEC indicated that ECU 26 m (about 8.8 bn Comoran Francs) could be made available for regional projects (fisheries, handicrafts, tourism, energy and export processing).

The indicative programme was signed at Moroni on 19 November 1985, by Mikidache Abadou' Rahim, Minister of Planning, Equipment, Environment, Housing and Urban Development on behalf of Comoros, by Michel Hauswirth, Deputy Director-General for Development on behalf of the Commission, and by Walter Cernoia in respect of matters under the responsibility of the European Investment Bank.

### Seychelles

The Seychelles will receive ECU 5.2 m (28.8 m Seychelles Rupees) as programmable aid of which ECU 4.7 m will be in the form of grants and ECU 0.5 m will be in the form of risk capital managed by the European Investment Bank.

Community aid will concentrate on the achievement of objectives in the agricultural sector defined in the National Development Plan. To this end, 70% of the indicative programme, as far as grants are concerned, will be devoted to the agricultural sector. Financial aid in this sector will aim at:

- stimulating the development of food-crops and livestock in order to increase the country's self-sufficiency in food;
- contributing to the upgrading of production services (research and extension) and marketing;
- concentrating specifically on assistance to small farmers, especially by participating in work on agricultural infrastructure and rehabilitation.

For its part, the European Investment Bank plans, in agreement with the Government, to continue to finance productive projects, notably in tourism, industry, agro-industry and industrial fisheries which meet its criteria, and which conform to the Third Lomé Convention. These projects could continue to be financed by the Seychelles Development Bank, of which the EIB is a shareholder.

The EEC indicated that a sum of ECU 26 m (144 m Seychelles Rupees) was available for regional projects.

The indicative programme was signed on 31 October 1985 in Victoria by Jacques Hodoul, Minister for National Development, on behalf of the Seychelles, by Giovanni Livi, Director, on behalf of the Commission and by Walter Cernoia in respect of matters under the responsi-



*Jacques Hodoul, Minister of National Development, and Giovanni Livi, after signing the Seychelles' indicative programme*

bility of the European Investment Bank.

### Madagascar

Madagascar will receive ECU 110 m as programmable aid, of which ECU 90 m will be in the form of grants and ECU 20 m in the form of special loans.

Community aid will be concentrated on two closely linked priority sectors. On the one hand this concerns rural development, with the accent firmly on food self-sufficiency, by developing rice, maize and oilseeds through the revival of smallholder cultivation, this being considered the most flexible method of responding to the demands of the local market. On the other hand, it concerns the rehabilitation of the road network by participating in the implementation of the National Plan and by a contribution to the creation and maintenance of rural road networks. Four-fifths of programmable aid managed by the Commission will be developed to these ends.

On the other hand, the European Investment Bank will contribute, from the resources under its management, to the financing of productive investment projects which meet its criteria and which conform to the Third Lomé Convention. The Malagasy delegation outlined the nature of the projects which will be presented to the Bank, these being in the areas of industry, agro-industry, mining and, possibly, fisheries. The Bank indicated that under present circumstances, it could envisage an overall sum equivalent to ECU 20 m.

The EEC stated that an amount of ECU 26 m was available for regional projects (fisheries, handicrafts, tourism, energy, etc.) in the Indian Ocean sub-region and between that region and the rest of the African continent (notably in navigation safety, telecommunications etc.).

The indicative programme was signed in Antananarivo on 22 November 1985 by Pascal Rakotomavo, Minister for Economy and Finance at the President's Office, on behalf of Madagascar, by Michel Hauswirth, Deputy Director-General for Development on behalf of the Commission, and by Thomas Oursin in respect of matters under the responsibility of the European Investment Bank.

### Western Samoa

Western Samoa will be receiving the sum of ECU 9 m (15.5 million Tala) as programmable resources.

This sum is composed of: ECU 8 million (14 million Tala) in the form of

grants; 1 million ECU (1.5 million Tala) in the form of risk capital managed by the European Investment Bank.

The Community's aid would be focussed on the sector of water management. This will include hydro-electric power production which will account for 95% of the resources managed by the Commission and water supply schemes to which 5% of those resources will be devoted.

In addition, the European Investment Bank will be able to help finance, from the resources under its management, productive capital projects which meet its criteria and statutory rules and which conform to the Third Lomé Convention.

The Community delegation stated in this context that a sum of ECU 34 m (50 million Tala) could be earmarked for regional operations in the Pacific.

### Ratification Round-up

As at 20 December 1985, three Member States of the EEC had ratified the Third Lomé Convention; they were Ireland, Denmark and the United Kingdom; 26 ACP countries have done the same. Joining the list, published in N° 93 (p. VII) and N° 94 (P.X) of *The Courier* are Mauritius, Tonga, Malawi, Central African Republic, Somalia, Barbados, Fiji, Dominica, Zimbabwe and Mali. In addition, Congo has completed the ratification procedure but has not yet deposited its instruments of ratification.

It should be recalled that the Convention cannot enter into force until all the EEC Member States and at least two thirds of the ACP States have ratified. ○

Upon completion of the negotiations between the two delegations, the indicative programme of Community aid was signed jointly on behalf of Western Samoa by the Honourable Tofilau Eti Alesana, Prime Minister, on behalf of the Commission of the European Communities by Mr Maurice Foley, and by Mr Morten Scholer in respect of matters under the responsibility of the European Investment Bank, in Apia on 22 November 1985.

### Solomon Islands

Solomon Islands will be receiving the sum of ECU 17.5 m (equivalent to Solomon Islands \$23 million, at current ex-

change rates) as programmable resources.

This sum is composed of: ECU 13.5 million (SI \$17.8) in the form of grants; ECU 2.0 million (SI \$2.6) in the form of special loans; ECU 2.0 million (SI \$2.6) in the form of risk capital managed by the European Investment Bank.

The Community's aid would be focused mainly on the Rural Sector, to improve the development opportunities for the population.

In addition, the European Investment Bank will be able to help finance, from the resources under its management, productive capital projects which meet its criteria and statutory rules and which conform to the Third Lomé Convention.

The Community delegation stated in this context that a sum of ECU 34 m (SI \$45 million) could be earmarked for regional operations in the Pacific.

Upon completion of the negotiations between the two delegations, the indicative programme of Community aid was signed on 2 December 1985 in Honiara, on behalf of Solomon Islands by the Rt. Hon. Sir Peter Kenilorea, KBE, on behalf of the Commission of the European Communities by Mr Maurice Foley, and by Mr M. Scholer in respect of matters under the responsibility of the European Investment Bank.

### Vanuatu

The programmable financial package — ECU 6.5 m (about 592 m Vatu) — comprises ECU 5.5 m of loans and ECU 1 m of risk capital.

Community aid will be concentrated on rural development, in particular on improving production on coconut palm plantations, on continuing the policy of agricultural diversification and on support to the livestock and forestry sectors.

In addition, the EIB may help finance, from the resources under its management, productive capital projects which meet its criteria and statutory rules and conform to the provisions of Lomé III.

As regards Regional Cooperation in the Pacific, ECU 34 m (some 3096 Vatu) would be set aside for regional projects or programmes.

The indicative programme for Community aid was signed at Port Vila on 25 November by Sela Molisa, Vanuatu's Minister of Foreign Affairs, Maurice Foley, Deputy Director-General for Development of the Commission, and by Morten Scholer for the provisions concerning the Bank.

## Tuvalu

Tuvalu will be receiving the sum of ECU 1.5 m (1.8 million A\$) as programmable resources.

This sum is composed of: ECU 1 million (1.2 million A\$) in the form of grants; 0.5 million ECU (0.6 million A\$) in the form of risk capital, managed by the European Investment Bank.

The Community's aid would be focused on the sector of economic infrastructure. This will include coastal protection projects which will account for 70% of the resources managed by the Commission and electric power generation and distribution schemes to which 30% of those resources will be devoted.

In addition, the European Investment Bank will be able to help finance, from the resources under its management, productive investment projects which meet its criteria and statutory rules and which conform to the Third Lomé Convention.

## Chad

Chad will receive ECU 89 m (30 bn CFA Francs) as project and programme assistance, of which ECU 79.5 m will be in the form of grants and ECU 9.5 m will be in the form of risk capital managed by the EIB.

Cooperation between Chad and the Community would concentrate on the former's food self-sufficiency policy with, as its corollary, the fight against desertification by means of a coherent series of measures.

In addition, the European Investment Bank will, from the resources under its management, be able to help finance productive investment projects which meet its criteria and which conform to the Third Lomé Convention.

The EEC stated that an amount of ECU 210 m (about 71 bn CFA Francs) was available for regional projects in West Africa.

Community aid will be directed, as a priority, to food strategy and rural development, a sector which will take about 80% of the resources managed by the Commission.

In addition, the European Investment Bank will, from the resources under its management, be able to help finance productive investment projects which meet its criteria and which conform to the Third Lomé Convention.

The EEC stated that an amount of ECU 185 m was available for regional projects in East Africa.

The indicative programme was signed on 12 December 1985 in Kigali by Ambrose Mulindangado, Minister of Planning, on behalf of Rwanda, Michel Hauswirth, Deputy Director-General for Development on behalf of the Commission and Guy Berman in respect of matters under the responsibility of the European Investment Bank.

## Botswana

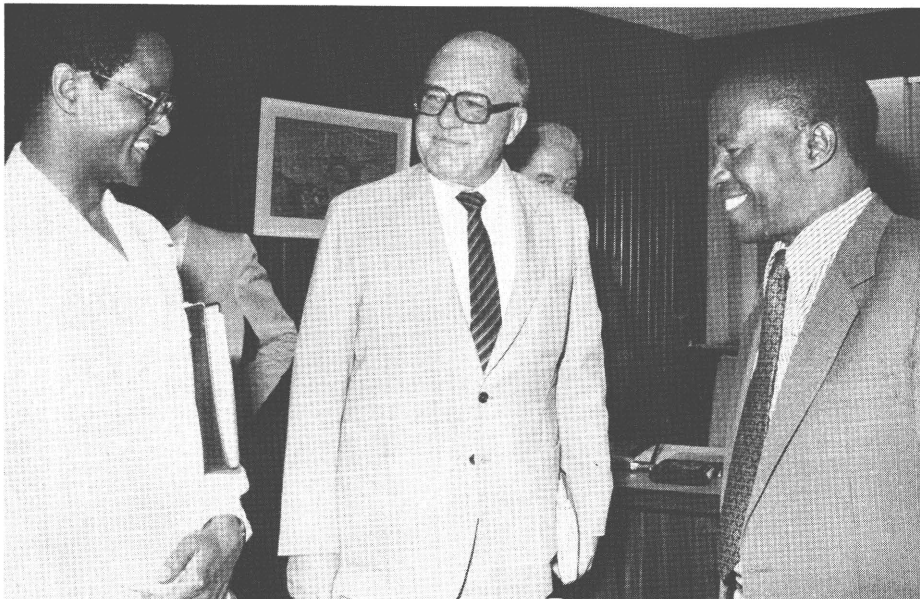
Under the National Indicative Programme for Lomé III, Botswana will receive the sum of ECU 32 m (approximately 56 million Pula at present exchange rates) as programmable resources, which is almost 40% more than under Lomé II.

This is composed of: ECU 22 million in the form of grants; ECU 6 million in the form of special loans; ECU 4 million in the form of risk capital.

The Community's support would be focused on development and conservation of natural resources.

The objectives to be pursued by means of an integrated approach in order to support Botswana's development priorities are as follows:

- sustainable use of natural resources, including soil, livestock, wildlife and water;
- strengthening and diversification of the agricultural sector in order to improve the level of food self-sufficiency and to increase small and medium farmer production and income;
- balanced development of livestock farming in order to:
  - a) improve economic use of livestock,
  - b) enhance benefits for the small cattle holders,
  - c) obtain an improved balance between livestock rearing and the protection of the range,
  - d) avoid overgrazing and overstocking;
- conservation and economic utilization of wildlife in order to arrive at a balanced development between livestock and wildlife;
- development of the country's water resources with a view to their use in



*Dieter Frisch together with President Quett Masire of Botswana (right) and M.J. Melamu, Botswana's Ambassador in Brussels*

The Community delegation stated in this context that a sum of ECU 34 m (41 million A\$) could be earmarked for regional operations in the Pacific.

Upon completion of the negotiations between the two delegations, the indicative programme of Community aid was signed jointly on 5 December 1985 in Funafuti on behalf of Tuvalu by Henry F. Naisali, Deputy Prime Minister and Minister of Finance, on behalf of the Commission of the European Communities by Mr Maurice Foley, and by Mr Morten Scholer in respect of matters under the responsibility of the European Investment Bank.

The indicative programme was signed on 28 November 1985 in N'Djamena by M. Yodoymann, Minister of Planning and National Reconstruction on behalf of Chad, by Erich Wirsing, Director, on behalf of the European Commission and Mr Ainsworth in respect of matters under the responsibility of the European Investment Bank.

## Rwanda

Rwanda will receive ECU 111 m as programmable aid, consisting of ECU 89 m of grants, ECU 10 m of special loans and ECU 12 m of risk capital.

human settlements, agriculture, livestock farming, wildlife and fisheries;

— provision of complementary basic social infrastructure and services in order to improve the well-being of the rural population, taking into account the role of women in the process of development.

In addition, the European Investment Bank will be able to help finance, from the resources under its management, productive capital projects which meet its criteria and statutory rules and which conform to the Third Lomé Convention.

The Community delegation stated that a sum of some ECU 110 m would be earmarked for regional operations mainly in the framework of the Southern African Development Co-ordination Conference (SADCC). Focal sectors in this context are:

— development and conservation of agricultural and natural resources within the region;  
— rehabilitation of the transport and communications sector.

The indicative programme was signed on 2 December 1985 in Gaborone by M.P.K. Nwako, Minister of Commerce and Industry on behalf of Botswana, Dieter Frisch, Director-General for Development on behalf of the Commission and M. Genazzini in respect of matters under the responsibility of the European Investment Bank. ○

## ACP-EEC COMMITTEE OF AMBASSADORS

The Committee, chaired by Ambassador J. Weyland (Luxembourg) and co-chaired by Ambassador Z. Mongo So'o (Cameroon) welcomed Spanish and Portuguese representatives to its ranks for the first time. Two items on the crowded agenda, those concerning Stabex and sugar, are of particular note at this time.

### Stabex: ECU 127 m left over!

The Commission announced its final decisions for the operating year 1984. It confirmed — and who would have believed this possible two years ago? — the existence of a little more than ECU 127 m uncommitted. Director-General Dieter Frisch explained that the Commission would submit proposals to the EC Council and then to the joint bodies for the disbursement of this sum (to the Stabex sub-committee in January, he hoped).

The sum would be devoted to supplementary payments to the 1980 and 1981 annual exercises which had had to be curtailed because demand outstripped financial resources available at the time. Mr Frisch stressed that particular attention would be paid to the cases of least-developed ACP countries. He also made it clear that this operation would be linked to the requirement, in certain cases, to replenish the fund's resources, which provoked some astonishment among ACP representatives.

The ACP chairman stated that, on the contrary, the sum of ECU 127 m was well below what the ACPs felt that they were entitled to, which was in fact ECU 400 m, to compensate for the shortfalls of the 1980 and 1981 exercises. This was an old argument, which, Mr Frisch said, he had considered over and done with, and which there was no point in reviving, since the machinery of Lomé II had been applied in a correct manner.

### Sugar: ACP request a special ACP-EEC Ministerial Council

Among problems concerning sugar, that involving the fixing of the 1985/6 guaranteed price (with effect from 1 July 1985) is certainly the most acute.

It should be recalled that the ACPs did not accept the Community offer made to them, chiefly on the grounds that the price increase for raw sugar (1.15%) was lower than that applicable to white sugar (1.3%). A compromise proposal put forward by the Commission, which took account of the ACP States' positions, and aimed at fixing the same price increase of 1.3% for both categories, was thrown out by the EEC Agriculture Ministers in October.

Immediately afterwards, the ACP Council, meeting in Harare, confirmed its dissatisfaction with the Community price offer and requested the latter to "reconsider its position as a matter of urgency and accept the Commission's modified proposals..." At the level of the ACP-EEC Committee of Ambassadors the ACP Chairman once more reiterated the Group's alarm, setting out explicitly that the delay was considered as extremely injurious to all those producer countries for whom sugar was an important part of the economy.

Ambassador Harris (Barbados), ACP Chairman of the Sugar Committee, summed up, in the course of a long, impassioned speech, all the arguments in favour of real negotiations and a price higher than that fixed by the Community, which he reproached for failing to

take into account a variety of vital economic factors, such as inflation and shipping costs. He stated that the ACP found it hard to accept that negotiations were at a dead end and that it was incumbent upon them to make their position clearly understood "at the very highest level of ACP-EEC relations." He put forward the idea of a special ACP-EEC Council at the end of 1985.

On the Community side, Chairman Weyland attempted to fend off this last proposal. Whilst reassuring the ACP that he would convey their position to the appropriate quarters of the EEC Council, he declared that he could not hold out much hope for a change in the Community's basic position. Matters have been left there and, following the meeting, the ACP Group confirmed its request for a special ACP-EEC Council. ○

## EDF

Following a favourable opinion delivered by the EDF Committee (205th, 206th and 207th meetings) the Commission has approved financing in respect of the following projects:

### Madagascar

**Renovation of the slaughterhouses in Antananarivo, Mahajanga and Morondava**  
Fifth EDF

Grant: ECU 6 400 000

Special loan: ECU 1 170 000

The aim of this project is to help make the population of Madagascar self-sufficient in beef and to promote exports of beef both to other countries in the region and to Europe, thus earning Madagascar the foreign currency which it urgently needs for its economic development.

This project involves the renovation of three slaughterhouses located in Antananarivo (capital), Mahajanga and Morondava (west coast). These particular slaughterhouses are those considered most capable of complying quickly (condition and location) with EEC health requirements and therefore of supplying quality meat for the local population and for export, particularly to the EEC.

Operations will relate to the physical renovation of the installations, the replacement of equipment and technical cooperation measures (supervision, training, health control and management) and will cover a period of two years.

**Rehabilitation of the Société Malgache du Palmier à huile**  
Fifth EDF  
Special loan: ECU 1 600 000

The aim of this project is to further improve Madagascar's self-sufficiency in edible oil products by implementing Phase II of the project to rehabilitate the Société Malgache du Palmier à Huile (SOMAPALM), Phase I having been financed by European Development Fund resources.

This project concerns Somapalm's two sites (Toamasina and Manakara) and will involve the financing of imported agricultural inputs (tools, etc) for the plantations, equipment for the oil mills, vehicles and plant, plus technical assistance (extension services and back-up).

**Rehabilitation of rice-growing areas in the Province of Toliara**  
Fifth EDF  
Grant: ECU 7 200 000

The objective of the project is to enable the province of Toliara (on the south-western coast of the country), an underprivileged region where there is a great shortage of paddy rice, to participate in the national programme for the rehabilitation of rice-growing areas.

Four priority areas have been selected, two of which are being completely rehabilitated (Behara-Belamoty) and two partially (Manombo-Taheza). In this areas:

- efficient maintenance structures will be set up in partnership with the users;
- assistance will be given to rice-growers in the form of agricultural inputs (improved seed etc) and by carrying out an extension operation.

**Ambositra water supply**  
Fifth EDF  
Grant: ECU 1 860 000

This project aims to provide the town of Ambositra, in the southern central part of Madagascar, with drinking water throughout the year.

The project will initially involve rehabilitating the existing installations (water off-takes, storage tanks and delivery pipes) and subsequently installing a new town supply network (additional off-takes, treatment plant and additional storage capacity).

**Kenya — Northern Corridor**

**Turbo-Webuye road**  
Fifth EDF  
Grant: ECU 8 500 000  
Special loan: ECU 2 000 000

The project provides for the overlay and partial reconstruction of an existing

bitumen road between Turbo and Webuye (38 km) the condition of which has been severely deteriorated due to heavy local and international traffic. This section forms part of the East African Northern Transport Corridor which stretches from Mombasa on the coast via Nairobi to Kampala, Kigali and Bujumbura. The road is equally important for regional and local traffic.

**Malawi**

**Ntchisi Rural Development Project — Phase II**  
Fifth EDF  
Grant: ECU 3 927 000

The Ntchisi Phase II Project is a 5-year integrated rural development project aimed at increasing agricultural production, raising living standards and family incomes of large parts of the rural population in the Ntchisi district situation in Kasungu Agricultural Development Division which is part of the Central Region, on the edge of the Rift Valley escarpment.

The project will start in late 1985. It will build on the foundations laid during the EDF-supported first phase which ran from 1979-84. Major crops to be developed include maize, groundnuts, tobacco, beans, wheat and horticultural crops. Dairy and livestock production (including animal draught power) will be promoted, and small-scale forestry encouraged. Further development of rural infrastructure will also be undertaken.

**Improvements to Mpemba Staff College**  
Fifth EDF  
Grant: ECU Fourth EDF  
Grant: ECU 900 000

The project, a second phase of a previous EDF project for Mpemba Staff College, provides for improvements in the accommodation and dining facilities for students at the Mpemba Staff Training College, the principal training establishment for the Malawi Civil Service. It also provides for an adequate water supply to the college.

The aim of the project is to replace existing buildings and facilities constructed before independence which have reached the end of their useful life, and thereby increase the effectiveness of the college and to ensure its continued existence in the future.

**Antigua and Barbuda**

**Road Rehabilitation Programme**  
Fourth and Fifth EDF  
Grant: ECU 1 558 000  
Special loan: ECU 2 313 000

The Government of Antigua and Barbuda has started with the implementation of a comprehensive programme of road rehabilitation. This project is part of the study undertaken in 1984. The project comprises the reconstruction and rehabilitation of seven stretches of road with a total length of 27.2 km, which radiate outwards from the capital of Antigua, St John's. The road's present condition is extremely poor, and the works envisaged are urgently required to prevent further deterioration of the country's road network.

**Niger**

**Development of the cultivation of irrigated crops on the bank of the river Niger**  
Fifth EDF  
Grant: ECU 340 000

The aim of the project is to provide to Tillakaina market gardening cooperative with a new cultivation area of some 20 hectares.

This area is to be laid out near the terrace built in 1983 with financing from the fourth and fifth EDF. When all the available water is harnessed, 40 more families, i.e. some 360 people, will be able to grow irrigated crops in the rainy season and vegetables in the dry cold season.

**Developing self-management for cooperatives in irrigated areas**  
Fifth EDF  
Grant: ECU 2 800 000

The aim of this project is to achieve full financial self-management for the cooperatives in the seven irrigated areas along the Niger river which have been developed with EDF financing. This is in line with the Niger Government's decentralization policy of giving greater responsibility to cooperatives and improving the way the irrigated areas operate. This will increase the incomes of the cooperatives concerned. There are 2 800 families in the area covered by the project, with a total of over 20 000 people.

The main components of the project are as follows:

- Motivation and literacy campaigns in cooperatives, with refresher courses for managers and leaders responsible for running them.
- Providing for crop loans to cover operating costs for a crop year, and of a revolving fund to cover expenditure on bringing farms into production.
- Setting up a financially autonomous maintenance team, to maintain pumping stations, electricity generating units,

farm machinery, village water pumps, etc.

## Mali

**Village water-engineering**  
Fifth EDF  
Grant: ECU 5 800 000

The purpose of this project is to create 300 watering points in villages within the Sahelian area of regions 1 and 2 (Nara, Nioro and Diema districts) where the EDF is already engaged in a primary health care project.

It is accordingly planned to make the rural population aware of what the village water-engineering policy actually involves, in terms of maintaining the watering point, making best use of water resources within a community context, carrying out the necessary drilling and providing borehole pumping equipment. Technical assistance personnel will be provided in order to determine which villages are to be given priority and ensure that the works are carried out satisfactorily.

## Ghana

**Twifo smallholder oil palm project**  
Fifth EDF  
Grant: ECU 3 715 500

The project aims to increase domestic production of palm oil through the establishment of 1 200 ha of smallholder oil palm for 300 smallholders and their families.

The palm fruit produced by the project will be processed at the oil mill which is being constructed on the 4 800 ha Twifo Oil Palm Plantation (TOPP) nearby.

The project involves the provision of agricultural supplies for planting vehicles and heavy equipment for land clearance and estate road construction. Housing for management, together with an office and workshop, will be constructed. Technical assistance will also be provided.

## Guyana – Suriname

**Guyana-Suriname Ferry**  
Fourth and Fifth EDF  
Grant: ECU 12 100 000

The purpose of the project is to provide a ferry service between Guyana and Suriname across the Corentyne River.

The project includes the following items:  
— provision of one roll on-roll off ferry vessel;

- construction of approach roads to the new ferry terminal sites;
- construction of two new terminals.

## St Christopher and Nevis

**Upgrading of electricity supply to Basseterre**  
Fourth and Fifth EDF  
Grant: ECU 253 000  
Special loan: ECU 1 069 000

The project aims at the upgrading of the primary electricity circuit in Basseterre, the capital of St Christopher and Nevis, thereby increasing the load handling capacity and enhancing the reliability of electricity supply to Basseterre and the surrounding areas.

The project comprises the supply of electrical materials — cables, sub-stations, transformers, poles, insulation and the costs of installation.

## Barbados

**Speightstown Fisheries complex**  
Fourth and Fifth EDF  
Grant: ECU 852 000  
Special Loan: ECU 648 000

The purpose of this project is to construct a comprehensive fisheries landing and marketing facility at Speightstown, in north-west Barbados. This facility would consist of the following components:

- 175 m jetty
- a terminal building for processing and sale of fish
- fish and vegetable market stalls, and
- ancillary facilities and infrastructure.

The proposed complex is similar in concept and design to the already completed, and successfully operated, integrated Oistins Fisheries Project, which was cofinanced by the EDF. The Speightstown project forms an integral part of a comprehensive fisheries development programme for Barbados.

**National Fruit Orchard**  
Fifth EDF  
Grant: ECU 550 000

One component of the project will be a 10 ha commercial fruit orchard to be established on Government land. A second component will be a line of credit to be administered by the Agricultural Division of the Barbados National Bank and to be released to selected farmers to establish or rehabilitate private fruit orchards. Fruits such as mango, grapefruit, avocado and paw-paw that have clear local commercial potential will be developed.

Special attention will be given to marketing and to processing.

## Guinea

**Multiannual training programme**  
Fifth EDF  
Grant: ECU 150 000

Under the revised fifth EDF indicative programme for Guinea, ECU 450 000 was earmarked to finance a multiannual training programme out of an education package totalling ECU 5 million.

In order to ensure continuity of operations undertaken under the fourth EDF, an advance of ECU 300 000 from this appropriation was approved in April 1981, pending the drawing up of the multiannual programme.

This financing decision concerns the remaining ECU 150 000 of that appropriation.

**Assistance for the National Technical College**  
Fifth EDF  
Grant: ECU 2 265 000

The purpose of this project is:  
— to renovate certain buildings of the Ecole Nationale des Arts et des Métiers (ENAM);  
— to supply equipment and consumables needed for teaching activities;  
— to provide technical instructors;  
— to provide study grants for Guinean instructors.

The project forms part of the new government's technical education reform programme and its aim is to train middle-grade technicians in electrical engineering and automotive diesel engineering, and also to provide advanced training for Guinean instructors.

## Nigeria

**Mambilla Tea Irrigation**  
Fifth EDF  
Grant: ECU 260 000

The project is intended to provide dry-season irrigation to a recently established tea estate on the Mambilla Plateau in Nigeria's Gongola State.

The project involves the supply, installation, and commissioning of nine units of sprinkler irrigation equipment including pumps, pipes and sprinklers on 363 ha. The water will be drawn from perennial rivers bounding the Estate. The project will be managed by the tea estate, with support from technical assistance to cover the period of both installation and initial operation.

## Tanzania

### Rehabilitation of Zanzibar hospitals

Fifth EDF

Grant: ECU 1 100 000

The project proposed here is the first phase of a two-phase project under which a total of ECU 3.78 million will be provided to assist the Government of Zanzibar to improve the physical and operational facilities in two of Zanzibar's general hospitals, the V.I. Lenin Hospital in Zanzibar Town and the Chake Chake Hospital on Pemba Island. It is set in the context of a balanced framework for the provision of health care services in Zanzibar.

Under this first phase of the project, up to ECU 1.1 million will be provided for the urgently needed rehabilitation of certain essential service units in the V.I. Lenin Hospital (including the kitchen and the laundry), and for renovation of the pediatric ward. The project will also provide for the repair and subsequent maintenance of the hospital's lifts and stand-by generators which have not been functioning for several years. Limited technical assistance will be provided to supervise the project.

## Tanzania-Burundi-Rwanda

### Kigoma Port

Fifth EDF

Grant: ECU 950 000

The purpose of the project is to provide an additional 28 m length of up-graded quay wall, some other facilities and to ensure the adequate supervision of all works underway at Kigoma Port up to the date of their final completion.

The need for the 28 m extension arises from the evident and continuing trend in containerization of the transport of goods in the region. It will allow two vessels to berth on the container area part of the Kigoma Port.

## Botswana

### Wildlife, Tourism and Environment

Fifth EDF

Grant: ECU 2 100 000

The main objective set by the Government of Botswana for the "Wildlife and Tourism" sector is generating employment and income in rural areas, thus substantially contributing to rural development. The mobilization of wildlife — more adapted than beef to conditions prevailing in two-thirds of the country, as a renewable economic resource should offer a viable alternative to cattle rearing in the marginal areas and give a positive

support towards a more active conservation policy in favour of wildlife. To this end, an integrated package has been devised which aims at the root problems of the "wildlife and tourism policy":

- provision of policy, legal and regulatory fundamental instruments;
- management and control capacities on the part of government departments concerned;
- consolidation of research.

The proposed package will include wildlife monitoring and protection, technical assistance, reinforcement and extension of Maun Wildlife Training Centre, and conservation education.

## All ACP and OCT States

### International Trade events

Fifth EDF

Grant: ECU 2 065 500

The purpose of this financing proposal is to provide the ACP States and OCT, within the regional cooperation framework, with effective technical and financial assistance for the organization of their participation in international trade events. At the same time, the aim is to ensure continuity of the promotional activities successfully undertaken by many ACP States in connection with international fairs.

## Fiji

### Multiannual Training Programme

Fifth EDF

Grant: ECU 100 000

During the course of the Lomé II Convention a total of ECU 500 000 was approved for a Multiannual Training Programme. By 1 August 1985 some ECU 496 000 had been committed for training and study awards. The need for training and study awards has nevertheless been shown to be higher than expected in 1983 and the Government of Fiji has requested an additional ECU 100 000, allocated from the National Indicative Programme (from the reserve), for these purposes. The proposal only includes training abroad as in-country training is presently catered for from Government's own resources and through other aid donors.

## Côte d'Ivoire

### Experimental shrimp-farming project

Fifth EDF

Grant: ECU 850 000

The purpose of the project is to set up an experimental farm for seawater and freshwater shrimp culture, capable of assessing the technical and economic scope

in Côte d'Ivoire for the subsequent rearing of these shellfish on a commercial scale.

The project, situated on the coast to the east of Abidjan, will comprise a hatchery, two hectares of ponds into which seawater will be pumped and various associated buildings.

The principal costs incurred will be for civil engineering and construction work, equipment and technical assistance.

## Benin

### Improvement and asphaltting of the Dassa-Savé road

Fifth EDF

Grant: ECU ECU 11 020 000

Special Loan: ECU 6 400 000

The Government of the People's Republic of Benin has decided to continue the modernization of the international route linking its capital Cotonou with that of Niger, Niamey, by improving and asphaltting the Dassa-Parakou section. In February 1985 a group of financial backers undertook to finance the entire project, the cost of which is put ECU 46 million.

Community aid has been applied for by the government for the following purposes:

- improvement and asphaltting of the 55 km Dassa-Savé section;
- building of a bridge over the Ouémé,
- improvement and asphaltting of the link road to the Savé sugar complex,
- technical assistance with supervision of the aforesaid work and geotechnical inspection of materials.

## Zaire

### Technical assistance to OFIDA

Fifth EDF

Grant: ECU 10 000 000

The project involves the provision of structured technical assistance for the Office des Douanes et Accises (OFIDA — Customs and Excise Office) of Zaire, which, in the long term, should be able OFIDA fully to play its role as the source of the country's customs and excise revenue and an instrument of economic policy.

The project is intended mainly to provide professional training for middle management and junior and executive staff of the office, the establishment of legislation and regulations suited to the country's needs and the restoration of the authority and coercive powers which the OFIDA as a strong public institution should have.



Twenty one technical assistants will be made available for a period not exceeding three years. Their task will be to plan and organize professional training and prepare and draw up the appropriate legislation and regulations.

## Burundi

### Socio-economic development of Kirundo Province

Fifth EDF

Grant: ECU 15 500 000

This project involves a programme to improve the social and economic infrastructure and enhance agricultural production in Kirundo Province in order to improve the living conditions of the population.

The project involves:

- a programme to improve the social and economic infrastructure (buildings, increased drinking water, rural tracks, telecommunications),
- promotion of agricultural and livestock production (measures to combat erosion, cultivation of low-lying areas, propagation and dissemination of plant stock and livestock);
- assistance for cooperatives;
- measures to improve public health.

## Swaziland

### Vocational Training centre Matsapha-Manzini

Fifth EDF

Grant: ECU 700 000

Special Loan: ECU 3 200 000

The aim of the present project is to establish the country's first Vocational Training Centre (V.T.C.) to be situated at Matsapha, adjacent to the country's main industrial complex and the University of Swaziland.

The project's object is two-fold, namely:

- to provide Swaziland's private and public sector with skilled craftsmen and trained clerical workers from the local labour market;
- to provide Swazi Junior/Secondary School leavers with the possibility of finding training to qualify them for employment in industry, in small enterprises, for self-employment or co-operative employment in urban, semi-urban and rural areas.

## Several ACP States

### Assistance to ACP/EEC business organizations set up to improve production and export marketing of commodities

Fifth EDF

Grant: ECU 1 416 000

The aim of the project is to help APROMA (Association des Produits à Marché) respond to the requests for assistance it received from ACP companies or organizations involved in developing export sales of "soft" commodities (agricultural and forestry products) including coffee, cocoa, oils and fats, timber, hides and skins.

Recognizing that success in this field does not depend only on international agreements (e.g. the International Coffee and Cocoa Agreements), but also on commercial facilities and skills, APROMA is keen to develop a support programme over three years to provide:

- training for ACP managers and administrators from marketing organizations and companies;
- selective up-to-date information to serve as a basis for commercial strategy and trade negotiations;
- specialist coordination in areas relating to the activities of ACP marketing organizations and companies and their dealings with European professionals and colleagues;
- technical assistance to ACP marketing and export bodies to help them improve their organization and operational resources. ○

Burkina Faso, the EIB has granted a ECU 7 million (approximately 2.4 billion CFA Francs) conditional loan to the Government of that country to enable it to cover a shareholder's advance to SOREMIB—Société de Recherches et d'Exploitation Minière du Burkina, which operates the mine.

Granted over a 20-year term at 2%, the financing has been drawn against the amount specified for risk capital operations under the Lomé II Convention, the administration of which is entrusted to the EIB. SOREMIB is a semi-public company run by the State (60% of the shares), in partnership with the Islamic Development Bank and COFRAMINES—Compagnie Française des Mines, a subsidiary of Bureau de Recherches Géologiques et Minières. The technical side of running the mine is also handled by Coframines.

The Poura workings, 180 km southwest of Ouagadougou, had been operated on an industrial scale up to 1966 and were re-opened in 1984. The mine is expected to yield 1.7 million tonnes of ore for processing over a 10-year period, from which more than 17 tonnes of gold should be refined.

## Congo: ECU 18 million for an oil palm plantation and mill

Within the context of its development programme for the agricultural sector and related industries, the aim of which is to increase the country's self-sufficiency in foodstuffs, shift the slant of development policy onto a more balanced footing to assist inland areas and diversify the economy, currently heavily biased towards oil, Congo is planning to expand oil palm cultivation in the northern region of Ouessou. The EIB is providing support for this scheme in the form of an ECU 18 million loan (CFAF 6.1 billion) advanced under the terms of the Lomé II Convention.

The funds have been made available to the Congolese Government for 15 years at 5.85%, after deduction of a 3% interest subsidy financed from the EDF. The proceeds of the loan will be onlent to the Société nationale d'exploitation des palmeraies de la Sangha (Sangha-palm), responsible for project implementation and operation of the plantation and mill.

The project being financed comprises the second phase of a commercial-scale oil palm plantation scheme, to expand the area under cultivation from 2 500 to 5 000 hectares and construct a processing plant on the site equipped to deal with 20 tonnes of fresh fruit bunches per

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## EIB

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### Botswana: ECU 10 million for extension of coal-fired power station

The EIB has signed a loan of ECU 10 million with the Botswana Power Corporation (BPC), the public corporation responsible for electricity generation, transmission and distribution in Botswana, to help finance the installation of a fourth 33-MW generating unit burning local coal at the Morupule power station.

The loan, which forms part of financing provided for under the Second Lomé Convention, has been granted from the EIB's own resources (essentially the proceeds of its borrowings on the capital markets); the term is 14 years and the effective rate of interest 5.7% after allowing for a 3% interest subsidy from the EDF.

### ECU 7 million to develop the Poura gold mine

To part-finance supplementary investment needed to improve and extend the working life of a gold mine at Poura in

hour. The project is to be backed up with long-term foreign technical assistance. The total cost of this phase is estimated at CFAF 26.4 billion.

### **Côte d'Ivoire: ECU 22 million for two agricultural projects**

Under the provisions of the Second Lomé Convention, the EIB has granted two loans totalling ECU 22 million in Côte d'Ivoire. One is going towards development of a commercial-scale oil palm complex in the south-west comprising a 70 000 hectare plantation and construction of two oil mills and the other will help to finance modernization plans for a cocoa processing plant in the industrial area of Abidjan.

### **Palm oil production**

A loan of ECU 19 million has been advanced to the State for 18 years at a rate of 5.8%, after deduction of a 3% interest subsidy financed from European Development Fund resources. The proceeds will be passed on to the publicly-owned company, Palminindustrie, which manages both the commercial plantations and, indirectly, local smallholder plantations, covering in all 110 000 hectares of oil palm and cocoa trees. Palminindustrie also runs 13 oil mills.

The project attracting EIB support is costed at some CFAF 17.5 billion. It forms part of a broader programme covering 70 000 ha of plantations, some new and some replanted, and includes construction of two new oil mills and associated installations.

### **Cocoa processing**

ECU 3 million (CFAF 1.025 billion) have been made available for 12 years at 8%, again after allowing for a 3% EDF interest subsidy, to the company SACO S.A., which is a subsidiary of Barry S.A., a world leader in cocoa processing and trading.

Due for completion by 1990, the project provides for modernization of the installations and cocoa processing equipment in the company's plant on Abidjan's industrial estate. The aim is to enhance the plant's competitive standing by enabling it to keep in step with improving international standards.

With a processing capacity of 40 000 tonnes of cocoa beans per annum, the plant will be equipped with the latest technology, reducing the production cycle from three days to eight hours. The project will help Côte d'Ivoire to make the most of a very important national resource and boost its exports of cocoa

butter, powder and mass. The total cost of the scheme is put at CFAF 2.15 billion.

### **Guinea: Loan for re-establishing the banking sector**

The establishment of an efficient banking system is a precondition for restructuring the economic and financial mechanisms of the Republic of Guinea. To this end, in accordance with the wishes of the Government and the recommendations of the experts of the International Monetary Fund and the World Bank, the authorities intend to set up a banking institution to play both a national role—as a commercial and development institution—and an international one. Its name will be Banque Internationale pour le Commerce et l'Industrie de Guinée (BICIGUI) and the EIB is providing ECU 2.8 million as a contribution towards its creation.

This financing is coming from risk capital resources provided for under the Lomé II and managed by the EIB and will comprise:

- a conditional loan for ECU 2.1 million to the Republic of Guinea, for 25 years and at a rate of 2%, to enable the State to subscribe to the capital of the future bank, and
- an equity participation, for an amount of ECU 0.7 million, on behalf of the European Community.

This will help provide BICIGUI with a satisfactory financial structure for the commencement of its activities which it will conduct from head offices in Conakry and through seven branches throughout the country.

### **Kenya: ECU 22 million for telecommunications**

The Kenya Posts & Telecommunications Corporation—KPTC—has embarked upon a programme of investment in the improvement and extension of telecommunications throughout the country. EIB is giving its support to the scheme in the form of a loan for the equivalent of ECU 22 million to help fund the third phase of investment, which will go towards local and trunk telephone networks, international links and the telex system.

The credit is being advanced under the Lomé II Convention for 15 years at a 5.6% rate of interest, after deduction of a 3% interest subsidy drawn from EDF resources.

KPTC is an autonomous State undertaking created in 1977, responsible for operating Kenya's local and national

telecommunications services: telephones, telegraphy and telex.

### **Mali: Loan for improvements to a rice mill**

As part of its support for concerted international action aimed at enhancing security of food supplies in a number of less developed countries, the European Community has in recent years helped to finance measures to assist Mali to cover its rice requirements from domestic production. After funding construction of a rice mill at Dioro in 1978 to process paddy (unpolished rice), the EIB is now advancing a further ECU 3.4 million (approximately CFAF 1.15 billion) for additional investment intended to improve the efficiency of operations at the mill.

This latest loan for the mill, drawn from risk capital resources provided for under the Second Lomé Convention and managed by the Bank, has been made available to the Mali State, in the form of a conditional loan, for 20 years at 2%. The funds will go towards financing additional equipment (new storage facilities, energy-saving installations) and technical assistance to be provided up until the end of the 1987/88 season. The project is costed at a total of CFAF 1.15 bn. ○

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## **FOOD AID**

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### **Substitute schemes**

**The Commission has just decided on two food aid substitute schemes in Chad and Niger. The idea is to stimulate food production and boost self-sufficiency in food in these countries at a time when the harvests are adequate.**

**Chad:** ECU 2.13 million for the National Cereal Board (the value of 15 000 t cereal)

There was a 290 000 t cereal shortfall during the 1984/85 agricultural year. This was a record deficit, representing 45% of total national consumption, and it was covered by food aid from the international community. Estimates for 1985/86 are much more optimistic. The cereal harvest has been put at somewhere between 600 000 t and 650 000 t, which should cover the country's requirements until the next harvest in 1986. News of this good harvest has led the Chad Government to get its food policy, aimed at promoting national food output by stabilizing the price paid to the pro-

ducer and encouraging trade between regions with deficits and surpluses, off the ground again.

Local cereal prices have already stabilized at the normal level of CFAF 80-100 per kg (as against CFAF 200 per kg when things were difficult).

The 600-650 000 t cereal yield in 1985/86 is mainly due to production in the Sudan zone, which traditionally has a surplus. The Sahel area of Chad, however, is usually short, so intervention on the local cereal market is called for to balance out the two areas.

The funds given to the National Cereal Board will mean it can run purchase and redistribution operations and set up decentralized buffer stocks in the districts most affected by the recent drought.

So local farm production will be stimulated by stable prices and there will be better food security throughout the country.

**Niger:** ECU 2.13 million for the Niger Food Products Board (the value of 15 000 t cereal)

After the 1984 drought, which hit Niger particularly badly and left it with a food shortfall of an estimated 477 000 t, the rain has returned, mercifully, and the latest reckoning is that Niger is once again self sufficient (although in a precarious position nonetheless), with an output of 1.5-1.7 million t cereal.

The effects are already clearly visible. The market price of cereals, which was CFAF 200 per kg earlier in the year, has dropped down to below the CFAF 80 which the Government fixed as the minimum price the producer should be paid. The farmers hit by drought last year are once more in a situation in which any attempt at self-sufficiency penalizes them.

At the same time, the extraordinary attempts the State has made to protect the stricken population from famine, particularly through the distribution of free food aid (food for work), has emptied the coffers and clipped its wings when it comes to stabilizing prices on the market and profiting from the abundance of cereals and re-establishing and increasing reserve stocks, all of which will be necessary if another drought, which could happen as early as next year, is to be contended with.

The value of 15 000 t cereals will enable the Niger Food Products Board to finance the purchase of cereals locally with a view to stabilizing prices on the market and reconstituting and increasing reserve stocks. ○

## STABEX

### Transfers to Grenada, Tanzania and the Gambia

The Commission received 47 applications from 16 countries for transfers from the Lomé Stabilization of Export Earning system (Stabex) in 1984. But 32 of them had to be rejected and 12 of the rest have so far been the subject of transfers (totalling ECU 27 703 354).

Two applications—from Tanzania and Grenada—have just been processed and the Commission has decided to make the following transfers.

Recipient state	Product	Amount
Grenada	mace	161 730
Tanzania	rough sisal	4 134 388

The Commission has also received an early request for a Stabex transfer for 1985 from the Gambia in connection with losses in its groundnut product trade. Investigation suggests that these will probably amount to something like ECU 1.6 million.

The Commission has therefore decided to pay an ECU 1 million advance to the Gambia. ○

## SYSMIN

### Zaire applies for special financing for its copper and cobalt industry

As the copper-cobalt industry brings in half Zaire's export earnings, the country meets the criteria of Articles 50 and 53 of Lomé II. It has already had a Sysmin payment of ECU 40 million for 1980-81.

In 1982-84, the copper and cobalt markets did not pick up as it was hoped, but in spite of that, external support, including Sysmin payments, stopped the production capacity from deteriorating any further and Zaire gradually brought about its well-known rationalization of its mining capacity. A rehabilitation plan was presented to the potential funders at a meeting the World Bank called in September 1985 with a view to consolidating this recovery.

The total cost of the programme, US \$ 865 million, is more than rationalization of the sector can reasonably hope to bring in and so external funders (including Sysmin) are being asked for US \$ 265 million. The potential funders have responded positively to the pro-

gramme and the bases on which it has been built. Even on a difficult market, Zaire can be one of the most competitive producers if it can use stringent management to capitalize on its good points—high-grade ore, useful co-products and so on. These then are products which can be made profitable once more.

The Commission has therefore just decided that Zaire's second application for Sysmin assistance is eligible, providing the financial rationalization and organization drive is pursued so Gécamines can cover its part of the financing of the rehabilitation programme.

The Sysmin payment will be in line with any constraints of the co-financiers and will be centred on the most crucial jobs in the maintenance of production or export capacity. It will also be arranged to ensure a positive effect on the economic and social environment. ○

## VISITS

### Lorenzo Natali in Chad...

EEC Commission Vice-President Lorenzo Natali undertook an official visit to Chad from 16-18 November 1985. This was an opportunity to meet the main ministers working on development and be received by Hissène Habré, the President of the Republic, who expressed his country's gratitude at the speed and ef-



*Mr Natali, accompanied by Joseph Yodeman, the Minister of Planning, being shown samples of the Chadian Textile Company's products*



(Left to right) Robert Mugabe, Lorenzo Natali, D. Mutumbuka, Zimbabwe's Minister of Planning, and G. Dünkelsbühler, Commission Delegate in Zimbabwe

fectiveness of Community aid and said he hoped the EEC would go on giving support to the cotton industry, currently Chad's only source of export earnings.

During the talks, Lorenzo Natali stressed the very broad convergence of views on the schemes that needed to be run and said that the Community's aim was to continue and to boost cooperation with Chad, which had the results of drought and famine to contend with.

Chad will be helped by the rehabilitation and revival plan for the countries of Africa worst hit by drought. This will mean it can improve the extent to which it can itself cope with disaster, bring speedy relief to the worst-affected populations and get production off the ground again. The plan will run until implementation of Lomé III actually starts.

Mr Natali also went to Sarh where he visited a sugar works and a textile plant, which, in spite of recent difficulties, are now back on the road to recovery.

### ... and Zimbabwe

From 20-23 November, Lorenzo Natali visited Zimbabwe where he attended the opening ceremony of the Faculty of Veterinary Science, for which the Community had provided ECU 12.5 million-worth of financing. Prime Minister Robert Mugabe was also at the ceremony. This was an opportunity for the Development Commissioner to mention the Community's position on the situation in Southern Africa and to talk about the aid Europe was giving to the SADCC countries, particularly in the livestock sector.

Mr Natali also had talks with a number of ministers, in particular the Minister for Finance, Economic Affairs and Planning, whose ideas on rural development problems proved to be very similar to his own.

In a talk with Robert Mugabe, the Prime Minister expressed his country's gratitude for EEC aid and confirmed that he wanted to take cooperation links with Europe even further. Mr Mugabe said he hoped for stronger South-South cooperation in the ACP Group. He spent some time on the situation in South Africa, whose apartheid system he condemns, and then pleaded for Europe to put strong pressure on the Pretoria Government.

Mr Mugabe also told the Development Commissioner of the economic difficulties that had been created in the region by the way the South African situation was developing. ◊

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## ACP EMBASSIES

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The new Ambassadors of Angola, Fiji and Lesotho have just presented their credentials to the Presidents of the EEC Council and the Commission of the European Communities.

### Angola

Noemia Gabriela de Almeida Tavira, Angola's new Ambassador to the EEC, is a law graduate from the University of Lisbon and holds a diploma in social



science. From 1962-75 she took part, within the MPLA, in the national liberation movement. She was then put in charge of the International Organizations sector at the Directorate for Cooperation and Economic Relations, before becoming Legal Counsellor there and, in 1982, being appointed Counsellor at the Angolan Embassy in Brussels.

### Fiji



Poseci Waqalevu Bune, Fiji's new Ambassador, returns to Brussels where he was Counsellor at his country's mission to the EEC from 1976-80 and attended the various Lomé II negotiating sessions.

The first Brussels appointment came between a New York posting—he was Second and then First Secretary at the Fijian Representation at the UN—and a spell back in Fiji, where, in 1980, he became Director of Union Relations in the Civil Service and then District Commissioner.

### Lesotho

Lesotho's new Ambassador, P.K. Moonyane, graduated in administration and international relations. Formerly Director of International Relations within the Ministry of Foreign Affairs, he later was posted as Counsellor to Lesotho's mission to the United States, and subsequently to Canada and, finally, to the United Nations. ○



On 10 November, Pope John-Paul II gave unexpected support to the project when he said that it should be designed and recognized as having legal force. The Head of the Catholic Church had criticized the "persistent mistrust and frequent lack of willingness to make and stick to precise, serious commitments" among the 158 members of the FAO.

The conference also approved the international code of conduct on the distribution and use of pesticides. This is the first step towards international regulations on the safe handling, trading and use of pesticides and is especially useful in the developing countries which have not so far introduced any controls. ○

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## GENERAL INFORMATION

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### FAO adopts world food security pact and code of conduct on pesticides

The 23rd conference of the UN's Food and Agriculture Organization (FAO), held in Rome, wound up after adopting measures that will improve world food security, especially in Africa, and approving a programme of work and the budget for 1986-87.

The conference, a three-week "food summit" attended by more than 100 ministers, looked at the world food situation in general and called for international action to help the developing countries, particularly in Africa, to boost food production and promote international cooperation in farming, forestry, fishing and rural development.

In his closing speech, FAO head Edouard Saouma said the session, at which 158 nations were represented, had been a memorable event that crowned the Organization's 40th year. Four Heads of State—President Francesco Cossiga (Italy), President Alan Garcia Perez (Peru), President Suharto (Indonesia) and President François Mitterrand (France) went to the FAO on this anniversary and for the conference itself, thus lending their prestige and support to the FAO, Saouma said.

"The conference's look at the world food and agriculture situations has, of course, been focused on African problems. Hark back to the desperate state of the continent two years ago and the short-term prospects now seem much brighter. But the basic problem, the

structural crisis in African agriculture, has still to be solved", he went on.

The conference approved the world food security pact by a huge majority. This document calls on all Governments, NGOs and individual to commit themselves to making a direct contribution to improving the world food situation and especially to allow all those in need to have access to available food supplies.

The pact, which is not legally binding, lays down moral standards and guidelines for action to help the Governments achieve the common aim of improving world food security and doing away with hunger and malnutrition, said the conference.

It was adopted by a consensus, although three of the world's main cereal producers (the USA, Canada and Australia) refused to agree to it and declared, at a plenary sitting, that they were against one article, in particular, that stated that the developed countries should take the interests of mankind in general to heart when deciding on their food production, storage and import policies.

They also refused to be bound by a document which forced the developed countries (even if only morally, as the pact has no legal force) the "take account of the Third World's ability to export agricultural and other products" in trade negotiations.

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## NON-ASSOCIATED DEVELOPING COUNTRIES

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The Commission has just decided, in the framework of its programme of technical and financial assistance for Non-Associated Developing Countries, to make the following grants:

**Costa Rica:** ECU 950 000

**Integrated rural development of the Osa/Golfito area**

The projects aims to improve the socio-economic situation of a large proportion of peasants in the Brunca area, particularly in the districts of Golfito and Osa. It is accordingly intended to assist 1 500 families (approximately 10 000 persons) in these two districts, this being done in close conjunction with the current agrarian reform process. A suitable agricultural extension service will be provided, which will benefit not only those families newly installed on agrarian reform land, but also small individual land-owners and peasant farmers who have recently moved on to various other plots. The project will introduce an agricultural credit service, financed principally through local savings, which will permit a shift in production towards more diversified agriculture, in turn enabling peasant families to build up some capital.

**Cadesca<sup>(1)</sup> (Comite de Accion para el desarrollo Economico y Social de Centro America):** ECU ECU 4 820 000

(1) Panama, Costa Rica, Nicaragua, Honduras, Salvador.

**Regional Technical Cooperation Programme in the field of food security**

This regional programme consists of a coherent package of training schemes, exchanges of experience (regional and national levels) and pre-investment operations (expert's reports, studies, surveys, drawing up of recommendations) in the field of regional food security.

Central America's economic integration in the 1960s boosted member countries' economic growth substantially, if unequally, above all in industry and commerce. This process was halted by the recessions of 1974 and 1980. What is more, food security is tending to deteriorate to dangerous levels owing to dwindling supplies, lowered purchasing power and the difficulty of 'reducing external dependence.

The programme for this Central American sub-region will focus over a three-year period (1986-88) on five priority themes: diagnosis of food and nutritional requirements, production systems, marketing and credit for small-scale cereals and bean producers, agricultural research and extension networks. Small-scale family producers are responsible for the bulk of cereal (plus beans) production in Central America (except rice). These producers are also those hardest hit by malnutrition and poverty. On the basis of collective, in-depth study, the programme will recommend practical measures and improvements that can be carried out by the authorities concerned to boost rural production and increase food security in Central America. ○

**Mozambique: ECU 7 400 000****Rehabilitation and Development of fisheries**

Mozambique, which has signed the Third Convention of Lomé, will be eligible from 1986 for aid provided by the Sixth European Development Fund. However in 1985, it continues to receive grants from the programme of financial and technical assistance for non-associated developing countries.

The project's aim is to rehabilitate the artisanal fisheries sector of the Inhambane province as well as certain water supply and electricity facilities at Beira in order to increase fishermen's income as well as food supplies in the country.

The project will supply fishing gear and equipment, shore based facilities, engines for fishing and transportation vessels as well as means of transportation together with the essential technical assistance.

**Bangladesh: ECU 4 900 000****Cotton Development Phase II**

The project complements the previous EEC-financed project by assisting the Bangladesch Cotton Development Board (CDB) to increase the cotton production in Bangladesh to a projected 60 000 hectares by the provision of:

- additional investment in Seed Multiplication farms;
- technical assistance and training;
- improved ginning;
- improved marketing practices;
- improved co-ordination between the institutions involved in cotton production.

The aim of the project is to increase the production of medium staple cotton in Bangladesh, so providing a cash crop for small and medium-scale farmers and allowing a higher proportion of the country's needs to be met from indigenous production.

The project strategy will be to build on the achievements of the previous Community project, concentrating on the development of the three seed farms and associated training centres, and the training of existing staff and farmers.

**Angola: ECU 4 250 000****Grant****Improvement of fish marketing in the Province of Namibe**

The chief aim of this project is to remedy the major shortcomings in the present system for the conveyance of fishery products to inland parts of Angola. More specifically, the renovation of several fish-processing and canning plants in the province of Namibe in recent years has gradually given rise to an overloading of the existing rudimentary distribution facilities.

In order to meet immediate priority requirements in this field, the project will place at the disposal of the Angolan authorities:

- refrigerated trucks and containers to transport the frozen fish from processing plants which have already been modernized;
- a refrigerated warehouse to be built in Lubango;
- the necessary raw materials to ensure the operation of the N'Gola Kiluanje canning plant.

Apart from these measures, the project will make a coordinated contribution in other fields, particularly the supply of water to fish-processing plants in Tombwa, the extension of technical assistance to the Dak Doy shipyard and the training of Angolan technicians and manage-

ment staff. An important section is reserved for the execution of a series of surveys intended to improve future planning of fisheries development.

**Thailand: ECU 35 000 000****Grant****Agricultural credit and rubber planting project**

The project involves the procurement of fertilizer and other crop inputs for a programme of seasonal credit to farmers growing alternative crops to cassava throughout Thailand. The seasonal lending programme will place particular emphasis on improved alternative crops. In so doing, it will contribute to the national objectives of reduced cassava production, intensified agriculture and higher farm incomes.

The EEC grant used to procure farm inputs for seasonal lending during the years 1986-1988 will subsequently be used to establish a revolving fund for permanent replacement of cassava by rubber in the two Eastern provinces of Rayong and Chantaburi.

The underlying principles of the project are essentially those applied in the on-going EEC-funded Agricultural Credit Project but with greater emphasis on seasonal and permanent crop diversification. ○

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**EMERGENCY AID**

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**Lebanon**

Fighting which had completely destroyed certain parts of the town of Tripoli in Lebanon, left some 300 000 people in need of immediate aid. President Amin Gemayel appealed for aid at the UN General Assembly on 21 October. The Lebanese Health and Social Affairs Minister and chairman of the relief committee (Comité Supérieur de Secours — CSS) also made a specific request to the Community for food and other necessities for survival.

In response to these appeals, the Commission has approved emergency aid of ECU 2 million.

The aid will be sent to homeless families in the form of family parcels, blankets, stoves and cash. The welfare centres will be supplied with medicines.

The aid will be channelled through the Middle East Council of Churches, the Lebanese Red Cross and possibly other organizations operating on the spot.

**Thailand**

The Commission has just taken a decision to send ECU 300 000-worth of emergency aid to displaced persons—and there are an estimated 230 000 of them—along the Thai frontier.

This assistance, which follows a similar amount decided in May 1985, will be channelled through UNBRO (the UN Border Relief Operation) and WFP (World Food Programme), with the help of European NGOs that are operational locally.

It is intended to finance medical, nutritional and health schemes and the transport of relief.

**Colombia**

The eruption of Nevada del Ruiz, the Colombian volcano, making dozens of people homeless, has generated a vast amount of support worldwide. Community assistance initially comprised:

- the provision of a plane, a five-man medical team, tents, blankets, generators and vehicles (cost ECU 300 000), via Médecins sans Frontières (Netherlands);
- the local purchase of relief and the provision of tents from Europe, via the Red Cross (ECU 200 000).

The Commission monitored events closely and decided to send more emergency aid a few days later, this time worth ECU 1.5 million. This is its contribution to the Red Cross programme to provide relief for 50 000 people who have lost everything and it brings the Community's contribution to the Colombian volcano victims up to a total of ECU 2 million.

**El Salvador**

The Commission has just decided to send ECU 1.41 million towards the financing of a self-sufficiency programme for displaced populations in El Salvador.

The political situation there is still difficult and the rural population is particularly badly affected by the instability.

Something like 250 000 people have already sought refuge in other countries in Central America, 500 000 are said to be living illegally in the USA and Mexico and around 500 000 displaced persons (70 000 families) are still living in El Salvador itself. The majority of them come from country areas and have neither resources nor training.

Community aid will provide the necessary money and logistical assistance for schemes to get 2 500 families (17 500

people) self-sufficient. These schemes, which will be spread over two or three years, involve:

- vocational training, run by the Ministry of Labour, in urban jobs. The programme is aimed at 1 260 displaced persons and marginals and will be run in Ilopango, 12 km outside the capital, and in various departments;
- rebuilding the Tenancingo township and getting economic activity off the ground there again. This should help 300 families and will be run by Fundasai, the local NGO, and Cebemo, the Dutch NGO;
- settling 295 families on three farms. This is to be coordinated by three local NGOs, which are grouped together in Diaconia with Christian Aid and Cafod (both British NGOs). The three sites are:

- Aldeita, 53 km north of the capital (50 families);
- La Florida, 78 km north west of the capital (170 families);
- San Jorge, 26 km from Santa Ana (75 families).

This scheme will build housing and start up farming and herding again and there is an additional programme for education and public health, local technical assistance, equipment, tools, fertilizer and pesticide.

**Aid for Angola and Mozambique**

The Commission has just decided on emergency aid for Angola and Mozambique. It is worth ECU 8 million.

Both these countries have had substantial help from the Dublin Plan, but are in a critical situation nonetheless. They will not be helped by the rehabilitation-revival plan for the African countries worst hit by drought because this is to be financed from the 5th EDF of Lomé II, to which they do not belong.

The aid is to be divided as follows:

**Angola: ECU 2.5 million**

With a harvest of 300 000 tonnes, 17% short of the average of the past five years and 35 000 t down on last year, Angola's situation is still extremely critical. Things are especially dramatic for 500 000 people, 400 000 of them displaced because of internal fighting and military operations along the frontier and the latest information suggests that a further large wave of displaced persons will be arriving in the camps in Huila province and in Cunene as well. These people need medical treatment and food and agricultural input (seed, tools etc.) as

well if their self-sufficiency in food is to be encouraged. Angola still needs something like ECU 34 million to cover emergencies and rehabilitation here—a figure which, the Office for Emergency Operations in Africa (OEOA) suggests, does not include food aid.

In view of this situation and the work it is doing in Angola, the ICRC has asked the Community to help finance its assistance programme and the following schemes in particular:

medical schemes:	485 000
seed and tools:	1 590 000
staff:	490 000
domestic transport,	
storage, handling etc.:	1 800 000
	4 365 000

**Mozambique: ECU 4.5 million**

In spite of generally better weather this year, less cereal has been produced for the market because of serious shortages of agricultural input and, in some places, because of the results of domestic unrest. About 2.2 million people are thought to be affected. Needs as regards public health, transport agricultural input and water engineering are considerable, so the OEOA and UNDR0 have recently launched a joint appeal for emergency aid for Mozambique. A number of NGOs (Médecins sans Frontières (Belgium), Volontaires Français du Progrès and Care France) have applied for Community financing so the worst hit can be given vital treatment and got back to farming.

The emergency-recovery assistance programme, which is coordinated by the Commission Delegation, is as follows:

- drugs and minor medical supplies, local purchase of food, rehabilitation & health infrastructure
- water engineering
- seed
- equipment & other agricultural input
- vehicles
- logistical operation
- staff
- specific Delegation scheme for people in the Vilanculos area

	700 000
	780 000
	680 000
	890 000
	340 000
	941 000
	677 000
	288 000
	5 296 000

**Reserve: ECU 1 million**

This is to give both emergency programmes the flexibility needed to ensure proper completion. o

# EUROPEAN COMMUNITY

## The European Summit in Luxembourg: European integration off the ground again

For the very first time in the history of the Community, the Heads of State and Government have reached agreement, subject to the final approval of Italy and Denmark, on the principle of making a substantial change to the Treaty of Rome which set up the Community in 1957. It happened at the Luxembourg summit on 2-3 December 1986.

A new era should now begin. After the Six, after the enlargements and the family bickering, it was high time for Europe to leave its somewhat turbulent adolescence behind it and address itself more resolutely to the task of boosting its internal strength and taking up the challenge of today's fantastic technological revolution to a firmer basis for its part on the world stage and make ready for the next century, which is approaching fast.

### New horizons

But the enthusiasm, the outcome of the summit alas suggests, is not all it might be and those who are anxious to see European Union become a reality at last are going to have to wait a little longer. Those, like the European Parliament, who were hoping for a big step towards more democratic European institutions, immediately expressed their disappointment. When they got home, some Heads of State and Government did their best to enhance their results and others to minimize them, in both cases to see that public opinion got what it had been led to expect. A progressive compromise, as French President Fran-

çois Mitterrand called it, which Commission President Jacques Delors was quick to say should now be transformed into a dynamic one.

So there are new horizons. The means of progress have been provided. But the compromise will be what people want to make it and, above all, what the Governments of the Member States want to make it. That is what the question hinges on and that, for many Europeans, is where the pitfalls are too! However, the fact that the leaders managed to agree, even on a minimum, this time, only six months after their Milan summit, is no doubt a sign of a potential change in their attitude to the Europe that orally and individually they have all been strongly defending for so long.

Optimism is a virtue in battle and, although Jacques Delors made no secret of the fact that the Commission hoped for something better, he told a press conference that: "This agreement gives the EEC new frontiers for the next 20 years. As time goes by, we shall realize that the Community went through its most desperate years in the '80s, but that it got off on the right foot afterwards. We shall realize that what has happened is very positive;"

### A basis for internal relaunch

In the matter of substance, the agreement of principle that was obtained outlines a basis on which European integration can be relaunched. It means creating a single market in the Community by

1992, extending the Community's scope in monetary, technological and environmental matters, increasing the financial solidarity of the Member States and ensuring greater convergence of the economic and social policies.

On the institutional and operational side, the European Parliament's powers have been boosted, although not as much as it would have liked, the Commission has been given greater powers of execution and the majority vote in the Council will be extended to certain other fields and the rules of procedure reviewed.

### A European foreign policy

Lastly, there is political cooperation, where the principle of a separate draft treaty has already been approved. This states that the High Contracting Parties, Members of the European Communities, shall do their best to devise and implement a common European foreign policy. In this way the present political cooperation is given a legal basis and is also extended to include the political and economic sides of security. This should constitute an essential contribution to the development of Europe's foreign policy identity.

All the changes are new proposals were finalized by the Community's Ministers of Foreign Affairs when they met at an Intergovernmental Conference in Brussels on 16 and 17 December. A "Special European Act" was adopted, to be put before the national Parliaments for ratification. It includes a preamble and sections on the European Community and on political cooperation.

Denmark continued to have general reservations, believing that the conclusions of the Summit went too far. Italy's reservations — that they did not go far enough — continued also, the government making its appreciation subject to the final judgment of the Italian Parliament and if the European Parliament. As for the latter, it rejected the Summit's conclusions as they stood in Luxembourg, giving governments the chance to come back on their decisions, however. It will return to the question in January 1986 and — if the results of the 16-17 December meeting are anything to go by, its agreement is far from being guaranteed! Below is more detailed information of the various items of the "Special European Act."

**Internal market** — The internal market, which has to have been created by 31 December 1992, is an area, with no internal frontiers, within which the free circulation of goods, individuals, services and capital is assured. Measures



A "progressive compromise" which should now be transformed into a dynamic one





*While the summit was being held, federalists demonstrated in favour of European Union*

aimed at harmonizing legislation will have to be taken by a qualified majority (weighted in the light of the size of the Member States), except where they deal with indirect taxation, the free movement of individuals and the rights and interests of employees, in which case unanimity is the rule.

The legislation harmonization proposals should be based on the highest standards existing in the EEC. A Member State will be allowed to keep its national standards on the environment, the working environment or plant health control provided they are not protectionist.

**Monetary powers** — In the preamble to the draft treaty, the Council approves the aims of gradually achieving economic and monetary union. In the body of the treaty, the Member States say they will take account of experience gained from cooperation in the European Monetary System and through the development of the ECU, respecting existing powers. Unanimity is required in decisions on institutional changes in this field and the monetary Committee and the Governments and Central Banks will be consulted.

**Cohesion** — The idea of greater economic and social cohesion is, in particular, to bridge the gap between the various regions and help the least favoured regions catch up. The social fund, the European Development Fund and the structural agricultural funds have to be properly financed. Greece and Italy have reservations about this.

**European Parliament** — The few new elements brought in foresee that decisions taken on the internal market and on technology are to be the subject of a consultation procedure with the Euro-

pean Parliament. This means that, when Parliament adopts a position on the second reading, the Council of Ministers adopts, by a qualified majority the Commission's revised proposal has to be unanimous if it wants to change it or throw it out.

The Commission is also to pass on to the Council those of the Parliament's changes which were not included in its revised proposal. The Council may adopt these changes unanimously.

**Social policy** — The Member States are keen to promote a better working environment (workers' safety and health). They aim to harmonize progressively better conditions in this field. Decisions here are taken by a qualified majority.

**The environment** — The Community's new powers are to be used when the environment can be better protected by the EEC than the individual nations. Decisions must be unanimous.

**Technology** — The text gives the Community clear powers in technological research and development. Multiannual outline programmes are to be decided on by a unanimous vote and implemented via specific programmes that are decided on by a qualified majority.

F.Th.

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## EUROPEAN COUNCIL

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### EEC Development Cooperation Council

EEC Development Ministers met in Brussels on 4 November 85 with Mr

Goebbels, Luxembourg's Secretary of State for Foreign Affairs and Cooperation, in the chair.

Once again famine in Africa was the focus of attention. Vice-President Natali presented the Commission's paper on its rehabilitation and revival plan for the countries of Africa worst hit by drought and the Council then debated the subject at length, ultimately marking its agreement with the guidelines of the plan (see page 8).

A second major item for discussion was the setting up of a special food aid reserve to handle sudden famine. This was further to guidelines laid down by the Heads of State and Government in Milan last June. Lorenzo Natali said that the situation in most of the countries with a bad food problem had improved, but he was nonetheless fervent in his defence of the proposal for 500 000 t of cereal equivalent over and above the normal food aid programme.

Perseverance by the President in seeking a satisfactory compromise ended with the Ministers agreeing that: "It is necessary, without prejudice to the ultimate outcome of the budgetary procedure, to create an additional food aid reserve for 1986. This reserve should be used if the means of the normal food aid programme are inadequate to handle any crisis situations that occur in Africa".

There was brief discussion of the other items on the agenda. Conclusions were adopted as follows.

**Development assistance and women's status in the developing countries.** The Council noted the Commission's report on this subject and the practical efforts that had already begun. It hoped, among other things, that there could be an increase in the number of women on the technical assistance staff, an intensification of contact between the women's organizations and a breakdown by sex of the statistical data on projects presented for Community financing.

**Policy coordination.** The Council welcomed the results so far, but noted that there was still room for improvement. It suggested boosting and extending to all Member States the regular system of information that already existed between most of them and the Commission, as information needs to be systematic and two-way. It agreed to return to this important matter of coordination once the Lomé programming had been completed in 1986, with a view to benefiting from experience when it came to the Community and the Member States running schemes for all the developing countries.

**Promotion of the developing countries' trade and services.** The Council insisted

that all practical ways of helping the effective implementation of the policies outlined so far be used within the framework of the various Community instruments of cooperation that were there to promote the developing countries' trade. In particular, it invited the Commission to give it examples of practical cases of schemes to promote developing country trade as quickly as possible and, preferably before the next session. ○

## EEC — SOUTH AFRICA

### New code of conduct

In line with the EEC decision to impose measures on the South African Government in an attempt to bring an end to apartheid, EEC Foreign Ministers have agreed a new EEC Code of Conduct for companies operating in South Africa to ensure that more is done to promote black equality. Although not legally binding, the Code, which will replace the original 1977 version, gives strict instructions to EEC firms to recognize black trade unions and to improve wages and conditions for black employees. The Code will also aid with black integration by promoting more blacks to positions of responsibility and encouraging black business. ○

## GATT

### New trade negotiations

The new round of Multilateral Trade Negotiations will be officially launched in September 1986. A preparatory committee will be set up at once with the task of defining key themes and terms of reference. Will these negotiations deal with trade in services as the US would like them to? The question remains open.

This is the compromise reached in Geneva at the end of November by the "contracting parties" to GATT (General Agreement on Tariffs and Trade). The North-South confrontation, which had been gloomily forecast, did not take place. The USA on the one hand, and Brazil and India, team leaders of the developing countries on the other, contented themselves by letting off some steam.

The compromise was arrived at away from the plenary session by a group of six, comprising the EEC, the USA, Brazil, India, Switzerland and South Korea. ○

## DAC

### Ireland joins the OECD's DAC

Ireland has become the nineteenth member of the OECD's Development Aid Committee. The Irish government confirmed its support for the principal objectives of the DAC and declared its readiness to subscribe to the recommendations and Guiding Principles adopted by the DAC on its foundation in 1960.

Starting in 1974, Ireland has established a programme of grant-based bilateral aid, directed principally at a selected group of low-income countries in Africa. Official development assistance (including participation in multilateral development programmes) reached US \$34.6 in 1984, 0.22% of GNP.

For the period 1985-87, the national economic plan projects budgetary allocations which will permit this to rise to an ODA/GNP ratio of 0.28% in 1987, which implies net transfers of ODA increasing by 25% in real terms. Over the longer term, the government has the intention of reaching the target of 0.7% GNP for assistance set by the United Nations.

A large number of NGOs in the overseas development field receive firm support in Ireland, and more than 10% of the bilateral aid budget is disbursed through these organizations. ○

## EIB (continued)

### EIB puts ECU 22 million into construction of a reservoir in Cameroon

The European Investment Bank is providing a loan of ECU 22 m (CFAF 7.5 billion) towards a project being undertaken in Cameroon to construct a storage dam on the river Mapé, a tributary of the river Sanaga on which the Edea and Song-Loulou hydroelectric power plants are sited. The project, costed at CFAF 29.3 billion, will serve to increase the flow of the river during the dry season and thereby maintain a regular supply of water to the power generating facilities.

The funds have been made available, under the terms of the Second Lomé Convention, for 18 years at 5.65%, after deduction of a 3% interest subsidy drawn from the European Development Fund. The borrower is the Société Nationale d'Electricité du Cameroun (SONEL), the company responsible for electricity generation, transmission and dis-

tribution in Cameroon in which the State has the majority shareholding.

### Sudan: ECU 19 million for extending a hydroelectric power station and developing a gold mine

As part of financing provided for under the Second Lomé Convention, the European Investment Bank has made two conditional loans totalling ECU 19 m to the Republic of Sudan from the risk capital resources which the Bank manages: ECU 15 m will help finance the installation by the National Electricity Corporation (NEC) of a 40-MW generating unit at its Roseires hydroelectric complex as part of measures to restore the country's generating capacity while ECU 4 m will go towards developing the Gebeit gold mine.

### The Roseires power station

ECU 15 million (for 20 years at 2%) are to be granted to the Sudanese Government to bolster the NEC's capital enabling the corporation to reinforce and operate the two national electricity grids. A contract for a first instalment of ECU 6 m (drawn on resources provided for under Lomé II) was signed on 12 December 1985.

The financing will go specifically towards installation of a seventh (40-MW) generating unit at the Roseires dam and power station on the blue Nile 500 km upstream of Khartoum, increasing generating capacity there to 250 MW. This new unit is expected to come into service in late 1988. It will replace thermally generated electricity burning imported oil and will thus make a valuable contribution to the country's balance of payments.

### The Gebeit gold mine

A loan for ECU 4 million has also been granted to Sudan (15 years at 2%) to help finance its participation (51%) in the capital of the Sudan Minex Gold Mining Venture the remaining 49% being held by Minex Minerals (Sudan) Ltd of the British-based Greenwich Resources group.

This loan will go towards financing prospecting and the installation of an ore-processing plant at the Gebeit gold mine which is one of the oldest in the world. The mine, located in the Red Sea Hills province 250 km north-west of Port Sudan, had been closed in 1975 but was reopened in 1982. Ore reserves there are estimated at 310 000 tonnes with an estimated average gold content of 19.1 grams per tonne. ○



# INDUSTRIAL OPPORTUNITIES

PUBLISHED EVERY TWO MONTHS

No. 47 : JANUARY-FEBRUARY 1986

## REHABILITATION ASSISTANCE ETHIOPIAN TYRE PRODUCER MOVES INTO PROFIT

Thanks to an extensive diagnostic study, cofinanced by CDI, 80% of the tyres and tubes on Ethiopian roads are now produced locally at a profit.

The Addis Tyre Company, a 96% state-owned company located on the outskirts of Addis Ababa, is Ethiopia's only producer of tyres and tubes for cars, trucks and other vehicles. Established in the early 1970s, the plant was producing 110,000 tyres a year but was experiencing increasing difficulties in meeting a steadily expanding market in terms of output and quality. For some years the company had been operating at a loss.

Under CDI's technical assistance programme, the Rubber and Plastics

Research Association of the United Kingdom (RAPRA Technology) undertook a major rehabilitation and expansion study of Addis Tyre which lasted through 1982 and 1983.

The findings of the study have led to an agreed long-term rehabilitation and expansion programme.

During an inspection of the plant by CDI at the end of 1985, some results of the rehabilitation were already evident.

*Continued on page 2*

## NEW LOGO TO BETTER REFLECT CDI'S ROLE

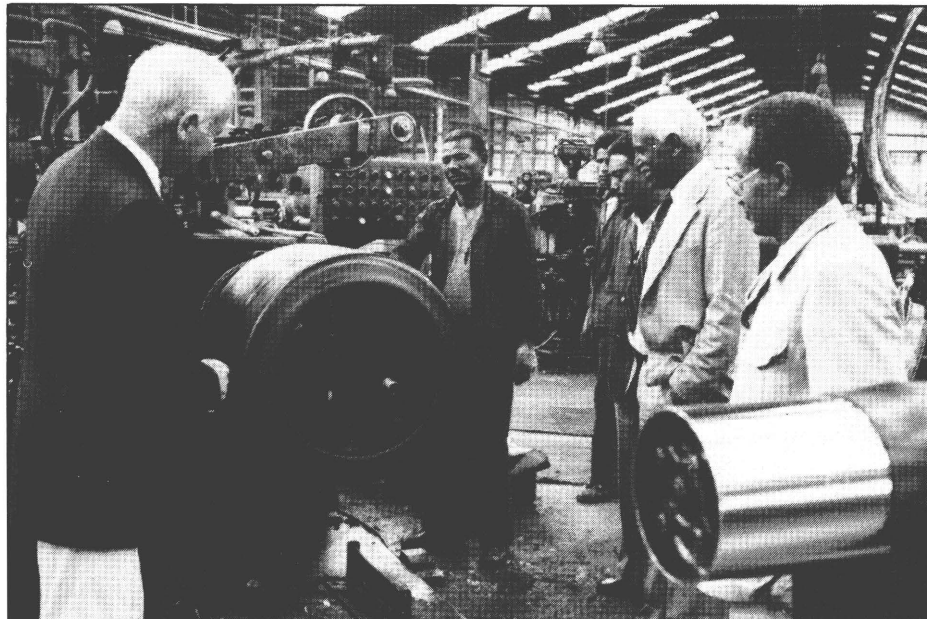
CDI is marking the onset of Lomé III by the adoption of a new symbol or Logo which better reflects the organization's role and the recent harmonisation of its initials in its working languages, English and French. (CDI was formerly called, in English, the Centre for Industrial Development, or CID).

The new symbol (seen in the heading at the top of this page) was selected from twelve entries received in a competition held among design firms from Belgium, Denmark, Germany, Ireland and the Netherlands.

The winning entry, submitted by the Irish firm "The Art Department", was selected for its aesthetic appeal and because it suggests the following ideas:

- Cooperation — two forms holding and supporting a central figure, evoking perhaps the image of human hands nurturing a flame, or a seed within a husk.
- Manufacturing — a two-part industrial mould producing a diamond shape, which in turn recalls the use of the diamond in manufacturing processes.
- CDI's initials — "C and D" shapes and a diamond representing an "I".
- ACP-EEC linkage — the new corporate colours chosen for the logo, blue (suggesting the EEC) and tan (suggesting ACP countries), intimate CDI's geographic orientation and joint nature.

The new logo is being incorporated gradually into CDI's notepaper, documentation and visual presentations, since 1 January 1986. ■



*Inspecting a tyre-building machine. Mr. Heileselassie Ayalew, General Manager of the Addis Tyre Company is on the extreme right. Beside him is Mr. Berhanu Kidane, CDI's antenna in Ethiopia. Mr. David Ogilvie, Head of CDI's Technical Operations Division, is on the extreme left.*

Continued from page 1

The existing equipment had been extensively overhauled and some major new items had been installed, to eliminate previous production bottlenecks.

Maintenance procedures were improved and higher levels of production and quality were being achieved.

The company is now operating profitably and the added value created, against an equivalent of imported tyres, is providing foreign currency savings of some \$4 million annually.

In accordance with the recommendations of the study, quality control has been introduced at each of the principal stages in the manufacture of tyres and the reject rate has now been halved to what is regarded as a commercially acceptable level.

Quality control today plays a major part in the company's operations. A well-equipped laboratory ensures consistency in the formulation of the natural rubber and synthetic ingredients which go into the making of a modern vehicle tyre.

Small rubber items for industrial use, such as hoses, oil seals and solid tyres for invalid chairs, are produced as an ancillary to the operations of the laboratory.

A machine shop gives the Addis Tyre Company a facility for die- and tool-making and for carrying out repairs and maintenance to the presses and other production machines.

Further expansion of the Addis Tyre Company is planned in the light of the study's recommendations. The factory will shortly be extended and new production lines will be introduced, to double the present output of tyres. ■



*The wood specialist, Mr. Bill Vernon (left), with Gary Aylmer, senior CDI expert responsible for training assistance.*

## THE CARIBBEAN TRAINING IN MAINTENANCE FOR WOOD INDUSTRIES

Experienced woodworkers from several Caribbean countries will travel to Dominica for two weeks in February, to improve maintenance and cost control skills at a practical workshop. The workshop, to be held from 10 to 21 February, is being sponsored by CDI in association with the Caribbean Association of Industry and Commerce (CAIC).

Dominica was chosen as the venue for the workshop because it has many enterprises based on its substantial wood resources. The expert chosen by CDI to run the workshop is Mr. Bill Vernon, a wood industry specialist from Ireland.

He visited Dominica on a fact-finding mission last December, to assess the workshop facilities and to identify factories for diagnostic visits and practical work. He also visited CAIC, in Barbados, to help with the selection of participants and to plan the workshop content to suit levels of skill and any special needs.

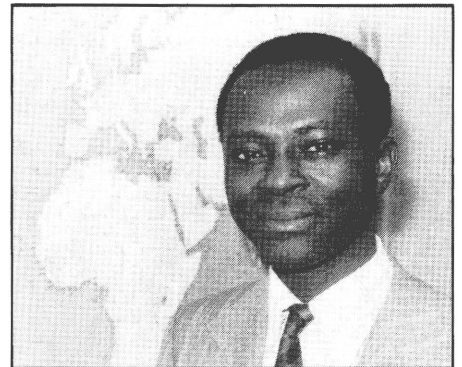
Mr. Vernon will be partnered for the Caribbean workshop by Mr. John Ryan, a cost accountant and production engineer who has successfully reorganized over 25 furniture factories.

The workshop will include some lectures and discussion on basic principles. However, a substantial amount of practical work will be carried out by forming the participants into small groups, each with its own particular problem to solve.

It is expected that 24 people from various branches of the Caribbean furniture and wood industries will participate in the workshop. Their travel expenses will be subsidized by CDI.

CDI has co-sponsored similar workshops for the garment industry in Uganda and for industrial maintenance managers in Nigeria. It regards such workshops as a cost-effective way of using its training budget, as they allow many key people to benefit simultaneously from the presence of experts. Interaction between the participants themselves, is an important dimension of the workshops. ■

## PROJECTS FROM NIGER PROMOTED IN EUROPE



*Mr Amadou Garba Maiga of "OPEN" (Niger).*

Every year CDI welcomes to its Brussels office industrial promotion attachés from its antenna organizations in ACP countries. Its aim in doing this is to familiarize ACP industrial promotion professionals with CDI's working methods and to give them the necessary support for the promotion of their projects.

From 2 October to 15 November 1985, the "Office de Promotion de l'Entreprise Nigérienne" (OPEN)—CDI's antenna organization in Niger—seconded to CDI its Director of Information and Documentation in charge of promotion, Mr. Amadou Garba Maiga.

While staying in Brussels, Mr. Maiga promoted three agro-food projects. He also promoted a wire-drawing plant. He made numerous contacts with European companies, a dozen of which proved to be very positive.

Mr. Maiga was able to establish direct contacts with the European companies who had set up plants currently in need of rehabilitation (brickworks and ceramics). They presented him with two proposals for restarting the plants.

He also took back in his briefcase a concrete proposal concerning the rehabilitation of a canning operation and the addresses of suppliers of relevant know-how and equipment.

"It is premature to draw up a balance sheet for my work at CDI" said Mr. Maiga when leaving Brussels. "However, I am convinced that I have established useful contacts". ■

## INDUSTRIAL FORUM OF CENTRAL AFRICA

# ATTRACTING INVESTMENT TO AFRICA BY EXPANDING REGIONAL TRADE

As described in the last issue of "Industrial Opportunities", CDI lent its assistance to the first Industrial Forum of Central Africa which took place in Libreville, Gabon, on the 5th to the 8th of December. The Forum provided a meeting ground for industrialists and entrepreneurs from the EEC and ten Central African states. In this article, based on a speech prepared for delivery at the Forum, CDI Director Dr. I. A. Akinrele outlines measures which would attract more private investment to African countries, laying particular emphasis on the value of expanding regional trade.

One of the most currently discussed themes in the sphere of international cooperation, is the vast disequilibrium which exists between the industrialized countries and the developing ones, as regards the sharing of world trade and production.

Recent statistics show that Africa has the lowest share among the main regions of the world: 1% of the added value in world manufacturing in 1980 as against 0.8% in 1960. (The figure for South-East Asia rose from 2% to 3.8% and that for Latin America from 5% to 6.1% over the same period).

There are clear indications that this growth trend can be related to the flow of private foreign investment. In spite of what the Lomé Conventions has offered to the ACP States—liberal access to EEC markets for manufactured products from ACP countries—the African member States of the Lomé Convention have not improved their share of world manufactured exports.

### INVESTMENT CLIMATE

The flow of foreign capital to Africa and particularly to the Central African States is into the extractive sectors, ore bodies and oil deposits.

There is need to attract direct investment to other sectors, notably those that can bring grassroots development and participation in the modern economy.

First, a start must be made on improving the general climate for all private investment, foreign and domestic.

There can be no doubt about the contribution which private capital can render to economic development.

Indeed, dollar for dollar, it may be more effective than official aid both because it is more closely linked to the management and technology which industrial ventures require, and



*Symbol of  
the Industrial  
Forum of Central  
Africa*

because those who risk their own money may be expected to be particularly interested in its efficient use.

In order to create an appropriate climate for investment in the productive sectors, it will be necessary for African countries to take a number of specific actions to remove obstacles to the flow of foreign investment to their regions. Some of these are:

(i) Measures to widen the domestic market such as the creation of regional free trade protocols or customs unions.

(ii) Measures to strengthen African financial institutions and to encourage entrepreneurship, through the removal of disincentives to domestic private investment—such as unwieldy administrative procedures and cumbersome decision-making processes.

(iii) Stabilization of the laws and regulations affecting domestic and foreign private investment.

(iv) Special incentives to encourage joint equity investment by local and foreign partners in the SME sector, making it easier to achieve effective management control and technology transfer.

### REGIONAL TRADE

Invariably tied to the promotion of investment in industrial production, is the need to expand trade among African countries. The barriers to the rapid growth of intra-regional trade are, however, well known.

Transport and communication facilities are often inferior to those linking Africa with Europe. Financial institutions, payment arrangements and marketing channels are all

geared to facilitating trade with the industrialized countries and often do not take account of the potential of trade with neighbouring countries. (Yet the first stages of import substitution in a country usually produce the sort of goods in which other low-income countries have actual or potential comparative advantage).

The great diversity of natural resources and differing stages of development among the countries of any African region should ensure mutually profitable trade in a wide range of products.

Furthermore, as incomes in an African country rise, consumer demand for products which are manufactured locally, may be expected to rise proportionately faster than in industrialized countries; this applies to products ranging from a variety of foodstuffs to simple manufactured goods such as textiles, bicycles, radios, sewing machines, etc.

However, if this potential for increased trade is to be realised, the countries of all African regions must devote the same effort to facilitating mutual trade as they have put into securing improved access to the EEC for their products under the Lomé Convention, and into obtaining preferential trade regimes under GATT.

### INSTITUTIONAL EFFORTS

The customs union of Central Africa (UDEAC) has been one of the front runners and perhaps the most operational, in fostering customs unions in black Africa.

It is our hope that the Investment Forum of Central Africa will have further revealed the potential of expanding trade and industrial cooperation to the Economic Community of the Great Lake Countries (CEPGL), which was strongly represented at the Forum.

*Continued on page 4*

Within the framework of the ACP group of States, an effort is already being made to develop an Association of ACP Chambers of Commerce and Industry, whose long-term objective is to promote inter-regional trade and multi-national investment in manufacturing industries.

The idea has also been firmly implanted at the level of the Council of Ministers, that the ACP group should set up a Trade and Investment Bank to finance export credits and possibly undertake payment arrangements.

The signatories of the third Lomé Convention are also committed to studying measures which will facilitate an increased flow of private capital and will outline the scope and appropriate mechanisms of a joint ACP-EEC insurance guarantee system.

## ROLE OF CDI

CDI has for six years or so been associated with investment fora, notably in Dakar for the West African region and in Europe for other ACP regions; and our principal focus has been on the promotion of private foreign investment for ACP industrial development.

We try to mobilize the participation in these fora of the private sectors of ACP and EEC countries and take on the responsibility for following up any resultant project contacts.

This role fits well with the mainstream mandate given to use under the third Lomé Convention. This is, in short, to identify opportunities for industrial cooperation between the economic operators of the Community and the ACP States and to assist in their development and implementation.

We are giving the highest priority to the SMIs, the creation of ACP-EEC joint investments, and assistance with the marketing of ACP manufacturers in domestic as well as external markets.

Our services are free and take the form of neutral but positive mediation in searching for industrial inputs from the EEC for particular ACP projects.

This role has now an established niche in ACP-EEC industrial cooperation milieu. ■

## INDUSTRIAL FRANCHISING

# A NEW FORM OF INDUSTRIAL COOPERATION FOR ACP AND EEC ENTERPRISES

In previous CDI publications, we have concentrated on the value of joint venture operations as a means of industrial development. Joint ventures in which the EEC partner takes part of the equity are generally recommended by CDI. Clearly, however, they are not the only avenue of cooperation available to industrialists.

Some forms of industrial cooperations, such as industrial franchising, do not require a financial investment by the EEC partner.

Industrial franchising can be very attractive in certain cases, but particular care will always be required when preparing the franchising agreement.

This article provides a brief outline of the possibilities that industrial franchising opens up to industrialists in both ACP and EEC countries.

Some industrial franchising proposals may be seen, by way of practical example, on pages 6 and 7.

ACP requests for franchising arrangements have already been carried in "Industrial Opportunities" (issue no. 46).

## THE FOUR TYPES OF FRANCHISE

The European Code of Franchising Ethics defines franchising as a contractually-agreed means of cooperation between two legally independent and equal parties i.e. the franchisor (the one granting the franchise) and the franchisee.

Without going too deeply into details, franchise operations fall broadly within four categories:

### — Production franchise

The franchisor is a producer who markets his products through a franchisee who is not necessarily an industrialist.

### — Distribution franchise

The franchisor acts as a central buying office, re-selling products (not necessarily of his own make) to franchisees, together with a transfer of his marketing know-how.

### — Service franchise

The franchisee operates services developed by the franchisor in such commercial areas as the hotel and catering trade, car hire, etc.

### — Industrial franchise

The partners are both manufacturers; the franchisee contracts to manufacture and market a range of products developed by the franchisor under the franchisor's trade name or trademark and with his technical advice and assistance.

Only ACP-EEC franchising operations falling into this category are qualified to receive assistance from CDI, provided that, in the manufacturing process, sufficient value is added to local raw materials.

## ESSENTIAL ELEMENTS OF THE INDUSTRIAL FRANCHISE

### 1. Legal independence of the parties

Legal independence is essentially what distinguishes franchising from the joint venture; it is also what makes it particularly interesting to some manufacturers and producers.

The governments of certain ACP States also appreciate the fact that it is a formula which does not seek to put control of local industry into the hands of foreign producers.

### 2. Producing under an established trade name

Many manufacturers in ACP States are particularly interested in producing consumer non-durables. The use of a well-known trade name and a brand image of equal quality with imported goods, will help them achieve

## ADVANTAGES AND DRAWBACKS OF FRANCHISING

	FOR THE ACP FRANCHISEE	FOR THE EEC FRANCHISOR	FOR BOTH FRANCHISOR AND FRANCHISEE
<b>ADVANTAGES</b>	<ul style="list-style-type: none"> <li>- He is assured from the outset of guaranteed product quality, international brand awareness and therefore access to a wider potential market.</li> <li>- The use of tried and tested techniques lessens the risks inherent in bringing new production on-stream.</li> <li>- He does not have to concern himself with finding sources of raw materials.</li> <li>- He will receive on-going technical, marketing and management support.</li> <li>- The international reputation of his franchisor will give him easier access to bank loans.</li> <li>- The franchisor has a vested interest in helping to increase the franchisee's turnover.</li> <li>- He remains legally and financially independent.</li> </ul>	<ul style="list-style-type: none"> <li>- He very rapidly increases his penetration of a range of ACP markets.</li> <li>- He achieves an improved rate of return on his know-how.</li> <li>- His capital investment is minimal.</li> <li>- Improved use of manpower resources for marketing, new process development, etc.</li> <li>- The consolidation of franchisee orders enables him to negotiate better terms when purchasing raw materials.</li> </ul>	<ul style="list-style-type: none"> <li>- The arrangement can normally be analysed in less time than it takes to set up a joint venture.</li> </ul>
<b>DRAWBACKS</b>	<ul style="list-style-type: none"> <li>- He must accept the manufacturing standard imposed on him.</li> <li>- He is frequently obliged to use raw materials supplied by the franchisor.</li> <li>- The franchise agreement is always for a fixed period.</li> <li>- He receives no financial support from the franchisor, with the exception of facilities for building up a stock, and possibly the supply of plant essential to the manufacturing process.</li> </ul>	<ul style="list-style-type: none"> <li>- Evaluation of the local market can be problematic.</li> <li>- Quality control of the product is difficult due to the legal and financial independence of the franchisee.</li> <li>- Selection of the franchisee is to a large extent critical to the success of the operation, and the only real control available to the franchisor is psychological pressure.</li> </ul>	<ul style="list-style-type: none"> <li>- Disagreements normally have to be resolved by amicable settlement.</li> </ul>

more rapid penetration of their own markets.

### 3. Transfer of know-how and guarantee of training

The provision of know-how is the fundamental element of an industrial franchising contract. The know-how developed by the franchisor is transferred to the franchisee and continuously supervised.

Technical improvements developed by the franchisor are also passed on to the franchisee.

The franchisor is responsible for training.

The continuity of technical support is what really marks out industrial franchising from licensing agreements or the sale of know-how.

### 4. Marketing and management support

The franchisee may not only benefit from technical support but may also receive marketing and management advice and assistance from the franchisor.

The success of the franchisee's business essentially depends on the interlocking factors of the selection and quality of raw materials, the standard of production, and the display and marketing of the product.

### 5. Control of production

The franchisee is contractually bound to follow the manufacturing process stipulated by the franchisor.

He may not adapt or modify it without the franchisor's permission.

This limitation protects both the franchisor and the brand image that his product must maintain, in the countries in which he is represented.

### 6. Payment

In the great majority of cases, the franchisor is paid an initial lump sum (a sort of access fee) followed by regular percentage royalties, often based on turnover.

### HOW CAN CDI HELP?

Manufacturers and producers considering the idea of franchising, or who are actively looking for a franchising partner, are invited to contact CDI.

CDI will ensure that the appropriate details are circulated, and will search for and set up contact between prospective franchisors and franchisees. If you wish, CDI experts can also help by acting as neutral

mediators in negotiating and drawing up franchise agreements.

CDI will examine all proposals in the light of its usual criteria which are, in brief, that the production will generate enough employment and create a sufficient degree of added value. ■

### CDI ASSISTANCE TO ACP-EEC INDUSTRIAL VENTURES

CDI can help ACP and EEC partners to set up their joint industrial projects by providing the following assistance:

- financing in-depth evaluations of industrial proposals;
- co-financing feasibility studies and market studies;
- acting as an honest broker during negotiations;
- obtaining independent evaluations of the value and suitability of second-hand plant;
- locating sources of finance;
- contributing to the cost of business trips to allow prospective partners to meet;
- helping to draft legal agreements using standard models;
- providing funds for training and short-term expertise during commissioning and start-up.



## INDUSTRIAL PROPOSALS FROM EEC FIRMS ACP ENTREPRENEURS, PLEASE REPLY

### INFORMATION REQUIRED OF ACP ENTREPRENEURS WHEN REPLYING

The proposals outlined below have been put forward by EEC firms interested in setting up production in ACP countries, under joint venture or franchise arrangements with local businessmen.

ACP entrepreneurs interested in any proposal are invited to write to CDI quoting the reference number.

CDI will not be in a position to act upon letters received unless ACP entrepreneurs provide all the information requested in the box opposite. It would also be useful if they enclosed complementary information, including the latest balance sheet.

*Please ALWAYS mention the CDI reference numbers when reproducing these proposals.*

*All equipment costs are quoted in Ecus (European currency units). The value of the Ecu may easily be ascertained from its relationship to other European currencies. On 5 December 1985:*

1 Ecu = £ 0.591018  
FF 6.72590  
DM 2.20522

- Show why it would be worth-while to manufacture the products in question in your country, e.g. give market data, indicate that raw materials or components are available locally, etc.
- Describe your present activities plus your industrial and/or commercial experience.
- State how much capital you yourself could contribute.
- State the maximum portion of the equity your country legally allows to an EEC partner.
- Can you obtain finance and if so from where?
- If you need a foreign loan or supplier's credit, can you obtain a local guarantee?
- Is your project a national priority?
- Outline the incentives your country offers to foreign investors.

### Franchise for paint products BELGIAN PROPOSAL – 86/1

A firm which manufactures and/or markets its paints in 60 countries, seeks ACP partners interested in producing these paints under an industrial franchise.

**Range of paints manufactured:** House; floor; industrial; marine; offshore; protective coatings; coil coatings; and special products (e.g. mastic, powder).

**What the ACP franchisee must provide:** an investment of about Ecu 105,000 for plant and equipment; a building of 1200 m<sup>2</sup> minimum; the capacity to market the products and a market demand for a minimum of 700 tons a year.

**Services offered by the EEC franchisor:** Use of a world-famous brand name; know-how; financial study; implementation study; permanent technical and marketing assistance; technical and advertising literature; exclusive rights for one country.

### Franchise for animal feed and feeding systems BELGIAN PROPOSAL – 86/2

A firm with long experience in manufacturing feed and livestock

feeding systems in Europe and Africa, seeks ACP entrepreneurs with a view to manufacturing its products to meet local demand.

**Main raw materials used:** Yellow maize; manioc; sweet potatoes; soymeal; fishmeal; wheatbran and ricebran; wheat and rice by-products; limestone; oyster shells; premixes (imported) and polypropylene bags.

**What the ACP franchisee must provide:** An equity investment of around Ecu 1.2 million as part of the overall funding of about Ecu 3 million (the balance to be raised through bank facilities); local sales of at least 15,000 tons a year (to reach break-even point within the first two years); a building on three to five hectares of land, with good access (for a mill with an initial hourly capacity of 5-6 tons with provision for expansion to 10-12 tons).

**Services offered by the EEC franchisor:** Use of its trade name and its premixes and concentrates; the complete feed-mill (erected under its supervision); training, laboratory analyses of raw materials and finished products; feed formulations based on nutritional value and the availability and price of local raw materials; access to a documentation and information centre; assistance with purchasing raw materials and marketing; help with animal produc-

tion (breeds, buildings, health, administration, processing, etc.).

### Franchise for anti- rodent products BELGIAN PROPOSAL – 86/3

A company specialized for over a quarter of a century in the manufacture of adapted anti-rodent products, seeks an ACP partner to manufacture these products for the local market.

The products are used for the protection of crops and harvests, for public health protection and the avoidance of damage to basic infrastructural facilities (roads, bridges, railroads, ports, airports, hospitals, etc.).

#### Types of product:

- Conventional: based on local cereals (rice, maize, sorghum, etc.)
- Damp-proof: long-lasting blocks of bait, resistant to humidity.

The products have to be adapted, case by case, to the habitats to be treated (agricultural, residential, industrial). For this, it is necessary that ACP franchisees collaborate closely with the franchisor in carrying out research.

In addition to field tests, appetency tests must be elaborated to make it possible to prepare, country by country and region by region, a veritable *à la carte* menu, which will guarantee that the product is well suited to the particular needs.



**What the ACP franchisee must provide:** An investment of Ecu 2.2 million, to cover a containerized plant; a building/shelter covering 600 m<sup>2</sup>, plus facilities for storing 10 to 20 tons of cereals; the capacity to market the products locally; and a market able to absorb a minimum of 400 tons a year (i.e. the output of a unit producing 2 tons a day/working one 8 hour shift).

**Services offered by the franchisor:** Use of a reputable 25-year old brand name; know-how; training; laboratory for appetency tests and preparation of mixes; animal house for scientific experiments; access to scientific and technical documentation; provision of containerized turn-key plant; market studies; techno-commercial assistance and support with publicity (videos, comic strips, etc.).

Exclusivity is granted only if minimum production quotas can be met.

### **Manufacture of knives, forks and spoons** **ITALIAN PROPOSAL – 86/4**

An old Italian firm with long-standing business relationships with developing countries, wishes to set up production in ACP States of cutlery (domestic and professional) and plastic-handled flatware (forks and spoons).

This firm is prepared to enter into joint venture or franchising arrangements with ACP partners. It has already set up joint ventures with partners in African and Asian countries.

Minimum capacities of production:

- Professional knives – 200,000 pieces a year
- Domestic knives – 5,000,000 pieces a year
- Flatware – 500,000 pieces a year

These capacities are viable for local or regional markets with populations of 2 million people or more.

The Italian firm suggests that production could commence with the simplest and cheapest knives, bearing in mind that in developing countries one single type of knife is often put to a wide variety of uses.

The cost of new equipment (FOB) would be between Ecu 3,355,525 and Ecu 5,033,286, depending on production capacities. This would cover milling, cutting, erasing and

polishing machines, a tempering oven and polypropylene injection equipment.

The raw materials used are semi-processed, cold laminated stainless steel and polypropylene. Added value, depending on import duties, can be as high as 100%.

### **Shock absorbers (automotive)** **BRITISH PROPOSAL – 86/5**

A large British manufacturer of engineering products wishes to set up production of shock absorbers in ACP countries, under joint venture or franchise agreements.

The minimum production capacity would be 200 000 shock absorbers a year, for an investment in equipment (FOB) of Ecu 764 234.

The basic raw materials used are tubes, bars, sintered metal and seals.

### **Animal feed, fishmeal, bonemeal, fertilizer, silos, poultry, crop-drying** **BELGIAN PROPOSAL – 86/6**

A Belgian company with experience of ACP markets is interested in joint ventures (or franchising agreements) with ACP entrepreneurs, to produce a wide variety of products:

- animal-feed from organic materials (mill), 1 ton per hour, minimum investment Ecu 15 000
- Milling (for animal feed) of maize, rice, etc., 3 tons per hour, minimum investment Ecu 80 000
- Protein concentrates, 1 ton per hour, minimum investment Ecu 20 000
- Fishmeal, 250 kg per hour, minimum investment Ecu 120 000
- Meatmeal/bonemeal, 250 kg per hour, minimum investment Ecu 120 000
- Toasting of soya beans (for human and animal consumption), 2 tons per hour, minimum investment Ecu 120 000
- Crop-Drying (maize, etc.), 500 kg per hour, minimum investment Ecu 120 000
- Organic fertilizer, 250 kg per hour, minimum investment Ecu 120 000
- Polyester silos (80 ton flexible units), 50 per year, minimum investment Ecu 500 000
- Poultry, (10 000 chickens), livestock, (500 pigs, etc.), minimum investment Ecu 66 667.

The Belgian company can supply knowhow, new and in some cases secondhand equipment, vitamin premixes and minerals. ■

### **CALL TO EEC INDUSTRIALISTS**

**Use your production know-how to expand via an ACP country.**

**Let CDI promote your production proposals.**

CDI encourages EEC firms to come forward with proposals for setting up production in any of 64 African, Caribbean and Pacific (ACP) countries. A proposal should be based on appropriate technology and may involve the relocation of part of a company's existing plant to an ACP country.

CDI can promote suitable proposals from EEC companies, free of charge, through its many lines of communication to the ACP business world. This can have the following advantage for EEC companies:

- Entry to new markets, which may otherwise be closed to them.
- Access to local sources of raw materials.
- Relocation of labour-intensive operations and/or existing plant to an ACP country.
- Access to additional finance plus fiscal and other incentives, through an ACP partner.

The investment required of EEC firms in such joint ventures can be low in relation to the overall financial input. An EEC firm may also include good second hand equipment as a contribution to the overall investment.

EEC companies who want CDI to promote their proposals Should, ideally, be small or medium-sized. They should be in good financial standing And/or have good existing plant for relocation, as an investment, to an ACP country. They should be willing to take a minor share of the equity in a joint venture with an ACP partner, or to enter into franchising arrangements.

**REQUEST A PRODUCTION PROPOSAL FORM FROM CDI NOW**

# SUDAN MILK PLANT GOING WELL FOLLOWING START-UP ASSISTANCE

In February 1985 a rather pleasant sort of letter from Sudan arrived at CDI. It said: "On behalf of the Managing Director of the reconstituted milk plant (Khartoum Dairy Production Company — KDPC) we convey their deep appreciation for the technical assistance which CDI twice provided. We must also say that the company was so happy with the reports submitted by the CDI-commissioned technical expert that the recommendations he made after both of his visits were adhered to. The project is now producing satisfactorily". Thus wrote Dr. Hassan El Bakri Kailani, on behalf of the Sudan Development Corporation, one of the shareholders in KDPC and CDI's antenna in Sudan.

A CDI inspection of the KDPC plant at the end of 1985 confirmed that the operation was running well. Reconstituted milk, pasteurised and packed in half-litre polyethylene sachets, is delivered daily throughout the greater Khartoum area by a fleet of refrigerated trucks; and the company is able to sell the full output of the factory (60 000 litres per day).

KDPC was established in 1983 as a joint venture between the Sudan Development Corporation and Alfa Laval and Swedfund of Sweden. The plant produces recombined milk made from skimmed milk powder, butter oil from EEC sources and a small proportion of fresh milk collected locally.

CDI provided technical assistance for the start-up phase and, one year later, financed a follow-up visit to

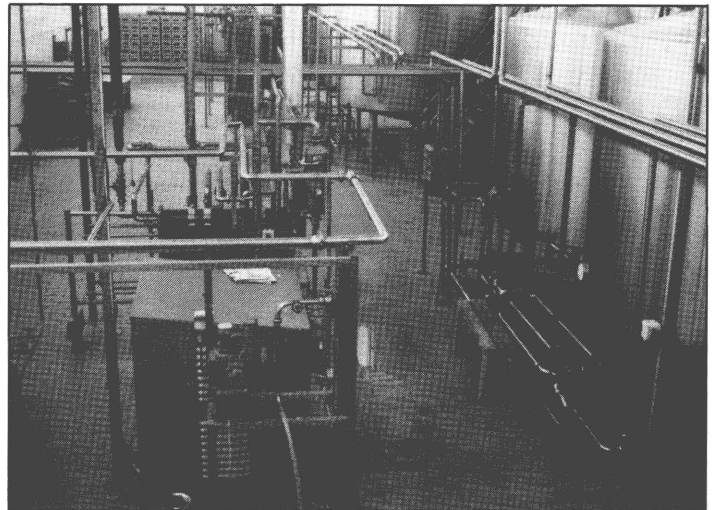
check results and where necessary improve the production.

Photographs taken during CDI's recent visit show the excellent condi-

tion of the factory and the attractive presentation of the milk. The plant, which CDI has been glad to assist in bringing into operation, provides a welcome addition to the availability of

dairy products in Khartoum, of particular benefit to the large population of children and young people. ■

*A general view of the Khartoum Dairy Production Company's spotless plant.*



## INTRAVENOUS SOLUTIONS FOR CITIES OR REGIONS

A European company has developed a plant for the production of intravenous solutions which may present an interesting investment possibility for countries where this kind of product is still imported. CDI can provide implementation assistance for such "adapted" technologies.

The technology involved is relatively simple and does not require a highly qualified workforce.

Nevertheless, the quality of the product conforms to official European pharmaco-

poetical specifications.

The equipment can be used for the most common solutions as well as for special mixes.

The basic plant has a production capacity of 500 L a

day. This would be enough to cater for the needs of a city or region and would cost Ecu 110 000 FOB Europe (\*). The price includes technical assistance for assembly and start-up.

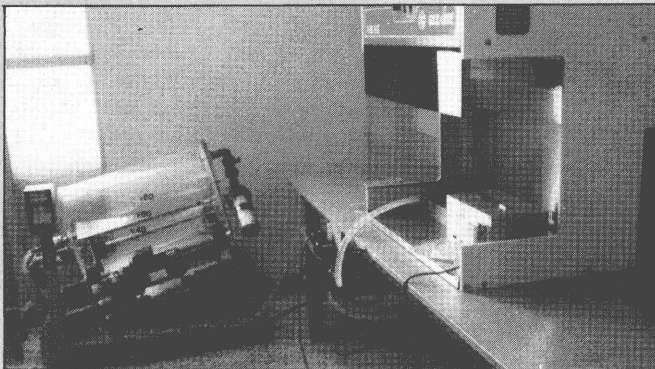
The production staff for a plant of this size would consist of a pharmacist and about four unskilled workers for the operations of filtration, mixing, filling and sealing drip-bags, final sterilization, handling and storage.

The first plant of this kind to be installed has been operating for five years in East Africa. Further plants are being established in other countries.

One can also envisage adding a laboratory for quality control where there are no existing facilities for carrying out the necessary tests. The cost of this would be Ecu 15 500 FOB Europe (\*).

Plants with the larger capacity of 1000 or 2000 litres a day are also available. For plants of this size it becomes worthwhile to add equipment for the manufacture of PVC drip-bags. The cost would be Ecu 83,000 FOB Europe (\*) for an output of 2500 drip-bags a day.

The European supplier offers the following services: a feasibility study, assembly, start-up and training of local staff. It is also prepared to consider joint venture participation in certain cases. ■



*Some of the equipment for producing intravenous solutions. Mixer (on floor) and unit for filling and sealing drip-bags.*

(\*) For the value of the Ecu see page 6.

# OPERATIONAL SUMMARY

No. 31 — January 1986

(position as at 17 December 1985)



## EEC-financed development schemes

The following information is aimed at showing the state of progress of EEC development schemes prior to their implementation. It is set out as follows:

### Geographical breakdown

The summary is divided into three groups of countries, corresponding to the main aspects of Community development policy:

- the ACP countries (Africa, the Caribbean and the Pacific), which signed the multilateral conventions of Lomé I (28 February 1975), Lomé II (31 October 1979) and Lomé III (8 December 1984), plus the OCT (overseas countries and territories) of certain member states of the EEC, which get the same type of aid as the ACP countries;
- the Mediterranean countries (Maghreb and Mashraq), which signed cooperation agreements with the EEC in 1976 and 1977;
- the non-associated developing countries of Asia and Latin America, beneficiaries since 1976 of annual aid programmes.

The information within each of these groups is given by recipient country (in alphabetical order).

### Note

As the information provided is subject to modification in line with the development aims and priorities of the beneficiary country, or with the conditions laid down by the authorities empowered to take financial decisions, the EEC is in no way bound by this summary, which is for information only.

### Information given

The following details will usually be given for each development scheme:

- the title of the project;
- the administrative body responsible for it;
- the estimated sum involved (prior to financing decision) or the amount actually provided (post financing decision);
- a brief description of projects envisaged (construction work, supplies of equipment, technical assistance, etc.);
- any methods of implementation (international invitations to tender, for example);
- the stage the project has reached (identification, appraisal, submission for financing, financing decision, ready for implementation).

### Main abbreviations

Resp. Auth.: Responsible Authority  
Int. tender: International invitation to tender  
Acc. tender: Invitation to tender (accelerated procedure)  
Restr. tender: Restricted invitation to tender  
TA: Technical assistance  
EDF: European Development Fund  
mECU: Million European currency units

Correspondence about this operational summary can be sent directly to:

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who will pass on requests for information to the services in charge of projects. Please cover only one subject at a time.

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## ACP STATES

★ Denotes new projects

### ANTIGUA AND BARBUDA

**Livestock development – Phase I.** Resp. Auth.: Ministry of Agriculture. Estimated cost 1.8 mECU. Works, supplies, T.A. T.A.: Darudec (DK). Project on appraisal. Date foreseen for financing decision 1st half 86. 5th EDF. EDF AB 5003 A3a

**Road Reconstruction.** Resp. Auth.: Ministry of Public Works. Estimated cost 3.1 mECU. Study: GEOPROGETTI (I). Project in execution. Date financing decision October 85. 4th and 5th EDF. EDF AB 5002 – 4004 A2d

### BAHAMAS

**Fruit crop nursery.** Resp. Auth.: Ministry of Agriculture. Estimated total cost 1.016 mECU. EDF 0.510 mECU, local 0.506 mECU. Works, supplies and T.A. T.A.: I.R.F.A.(F). Project in execution. 5th EDF. EDF BM 5003 A3a

### BARBADOS

**Orchard fruits programme.** 0.55 mECU. Date financing decision November 85. 5th EDF. EDF BAR 5006 A3a

**Speightstown fishing port.** Construction of a jetty and market centre. Estimated total cost 2.9 mECU. EDF 1.5 mECU, local 1.4 mECU. T.A.: C.E.P. (ACP). Date financing decision November 85. 4th and 5th EDF. EDF BAR 5003 – 4009 A3a

### BELIZE

**Belize College of Arts, Science and Technology (BELCAST).** Resp. Auth.: Ministry of Education. Estimated cost 7 mECU. Works and supplies. T.A. for tender dossier

and plans: short-list already drawn up. Project on appraisal. 4th and 5th EDF. EDF BEL 5001 A6b

### BENIN

**Djougou-Porga road.** Resp. Auth.: Ministère des Travaux Publics. Intermittent road improvements over 180 km. Works: Int. tender foreseen in the 1st half 86. 4th EDF. EDF BEN 4013 A2d

**Dassa-Savé road renovation.** Resp. Auth.: Ministère des Travaux Publics. Reinstatement and asphaltting of 75 km of the road. Estimated total cost 55 mECU. EDF participation 17.420 mECU. Cofinanced by IBRD and possibly by CEDEAO, BOAD and FADES. Economic study: SEDES (F). Int. tender (conditional) launched in September 85. Date financing decision December 85. 5th EDF. EDF BEN 5005 A2d

**Upgrading of health service infrastructure in Porto Novo Hospital.** Resp. Auth.: Ministère de la Santé Publique. Estimated cost 10 mECU: renovation and construction of the hospital building and equipment. Project on appraisal. Works: Int. tender with prequalification, launched (conditional) in August 84. 4th and 5th EDF. EDF BEN 5010 A7a

**Parakou polytechnical complex.** Resp. Auth.: Ministère de l'Enseignement Moyen, Général, Technique et Professionnel. Total estimated cost 6.9 mECU. Construction of 8 000 m<sup>2</sup> of pedagogical and administrative buildings and hostels. Supplies and equipment. Technical and architectural study: Arch. VINOUE (Local). Project on appraisal. Date foreseen for financing decision 1st half 86. 4th EDF. EDF BEN 4011 A6b

**Cotonou maternity hospital.** Resp. Auth.: Ministère de la Santé Publique. 2.5 mECU. Works: Acc. tender. Equipment: int. tender in '86. T.A.: TECHNO-SYNESIS (I). Project in execution. 4th EDF. EDF BEN 4010 A7b

**Livestock development in the Borgou region.** Resp. Auth.: Ministère des Fermes d'Etat, de l'Elevage et de la Pêche. Numerical and stabilizing cattle improvement for meat production increase. 5.950 mECU. T.A.: Consulint (I). Project in execution. 5th EDF. EDF BEN 5001 A3a

### BOTSWANA

**Village water supplies.** Resp. Auth.: Ministry for Mineral Resources and Water Affairs. Planning Study: DECON-FLOTO (D). Project on appraisal. 5th EDF. EDF BT 5017 A2b

**Sheep and Goat development, phase II.** Resp. Auth.: Ministry of Agriculture. Animal Production Division and Animal Production Research Unit (APRU). Estimated total cost 2 mECU. EDF 1.6 mECU. Local 0.400 mECU. Works, supply of materials and equipment and T.A. Project in execution. T.A.: GITEC (D). 5th EDF. EDF BT 5002 A3a

**Services to livestock owners in communal areas (SLOCA), Phase II.** Resp. Auth.: Ministry of Agriculture. 4.100 mECU. Works by acc. tender, supply of vehicles and equipment by int. tender. T.A. T.A.: B.M.B. (NL). Project in execution. 5th EDF. EDF BT 5003 A3a

**Francistown Rural Training Centre.** Resp. Auth.: Ministry of Agriculture. Estimated total cost 1.245 mECU. EDF 1.025 mECU, local 0.220 mECU. Works by acc. tender. Project in execution. 5th EDF. EDF BT 5018 A6b

**Wildlife tourism environment.** T.A. in the area of Tourism and Wildlife. 2.1 mECU. Short-list done for restr. tender. Date financing decision November 85. 5th EDF. EDF BT 5019 A8f

### BURKINA FASO

**Development of the Douna plain.** Resp. Auth.: Ministère du Développement Rural.

10 mECU. Irrigation and drainage works, supply of equipment, inputs and T.A. Int. tender for works launched in May 84. T.A.: GERSAR (F). Project in execution. 5th EDF. EDF BK 5009 A3e

**Young farmers' training.** Resp. Auth.: Ministère du Développement Rural. 2.880 mECU. T.A., works and equipment. T.A.: C.E.R.E.P. (F). Project in execution. 5th EDF. EDF BK 5010 A6ci

**Drinking water supply in the Yatenga region. Phase II.** Resp. Auth.: Ministère de l'Eau. Estimated cost 5 mECU. Boreholes and wells. Supplies. All by int. tenders. Project in execution. 5th EDF. EDF BK 5016 A2b

★ **Improvement of halieutic production in Burkina Faso.** Resp. Auth.: Ministère de l'Environnement et du Tourisme. Estimated total cost 3.850 mECU. EDF 2.850 mECU, local 1 mECU. Infrastructural works, buildings, supply of equipment and vehicles, T.A. and training. Works by direct labour, supplies by int. tender, T.A.: restr. tender. Project on appraisal. Date foreseen for financing decision February 86. 5th EDF. EDF BK 5018 A3a

★ **Ouagadougou-Kaya railways.** Resp. Auth.: Ministère Promotion Economique. 5.5 mECU. Supply of rails, equipment and ballast. Project on appraisal. 5th EDF. EDF BK 5019 A2d

#### BURUNDI

**Institut Universitaire de Sciences de l'Education (IUSE).** Resp. Auth.: Ministère de l'Education Nationale — 0.7 mECU. Construction and equipping of educational buildings (general teaching classes, laboratories, workshops). Int. tender dossier: TETRA Consultants (Lux). Project on appraisal. 4th EDF. EDF BU 4124 A6b

**Faculty of agronomy.** Int. tender dossier: BRUSA-PASQUE (I). Works: int. tender (conditional) launched in December 85. Project on appraisal. 5th EDF. EDF BU 5017 A6b

**Improvement of the social and economical conditions in the Imbo-Centre in relation with the rural development of the East Mpanda.** Resp. Auth.: Ministère du Plan. 8.5 mECU. Health programme, sewage, feeder roads, buildings, works and supplies. Int. tender for supplies launched in September 85. T.A.: W.P.W. (D). Project in execution. 5th EDF. EDF BU 5002 A8c

**Social-economic development of the Kirundo Province.** Resp. Auth.: Ministère de l'Agriculture et de l'Elevage. 15.5 mECU. Works: springwales catchment, wells boring, buildings, feeder roads. Supply of agricultural inputs, equipments, vehicles, T.A. and training. Works by acc. tender, supplies by int. tender or direct agreement. T.A. and training by restr. tender. Date financing decision December 85. 5th EDF. EDF BU 5005 A3a

#### CAMEROON

**Fishery development in the Lagdo basin.** Resp. Auth.: Mission d'Etude de la Vallée Supérieure de la Benoué. Stabex 81. Estimated total cost  $\pm 3$  mECU. EDF 2 mECU, FAC, local and NGO  $\pm 1$  mECU. Fisheries research, monitoring and T.A. T.A.: Haskoning (NL). 5th EDF. EDF CM 5017 A3d

**Yaoundé — Ayos Road — Technical study.** Resp. Auth.: Ministère des Transports. Estimated cost 0.860 mECU. Technical study for the execution and preparation of the tender dossier. Restr. tender. short-list drawn up. Project in execution. 5th EDF. EDF CM 5019 A2d

★ **Dibombari oil palm-tree plantations. Phase II: feeder roads.** Resp. Auth.: SO-CAPALM. EDF 1.110 mECU. Feeder roads rehabilitation and construction. Works by direct labour. Project on appraisal. 5th EDF. EDF CM 5005 A3A

#### CENTRAL AFRICAN REPUBLIC

**Renovation and equipment of Lycée Technique de Bangui.** Resp. Auth.: Ministère de l'Education. 0.800 mECU. Supply of equipment and renovation works. Studies: O.R.T. (UK). Project on appraisal. Date foreseen for financing decision: 1st half 86. 5th EDF. EDF CA 5006 A6a

**Upgrading of the R.N.5.** 0.900 mECU. Works by direct labour. Supply of road equipment and vehicles by int. tender. Date financing decision September 85. T.A.: Gitec (D). 3rd EDF. EDF CA 3001 A2d

#### CHAD

**Priority actions programme in the educational field.** Resp. Auth.: Ministère du Plan et de la Reconstruction. Estimated cost 5.2 mECU. Works, supplies, scholarships and T.A. T.A.: short-list done for restr. tender. Project in execution. 5th EDF. EDF CD 5003 A6a

**Agricultural programme in the Sudan zone.** Estimated cost 5.5 mECU. Various actions for: organizing the peasantry, stocking and marketing, utilization of improved seeds and production techniques. Project on appraisal. Date foreseen for financing decision 1st half 86. 5th EDF. EDF CD 5010 A3b

**Rehabilitation of hospital and health sector.** Resp. Auth.: Ministère du Travaux Publics, de la Santé et Médecins sans Frontières (MSF-B). Estimated total cost 5.590 mECU. EDF 4.560 mECU, MSF(B) 0.505 mECU, Aviation sans Frontière (F) 0.100 mECU, local 0.425 mECU. Works by direct agreement or direct labour. Supply of medical equipment, supplies, medicines by int. tender. Project in execution. 5th EDF. EDF CD 5011 A7a

**Livestock priority actions programme.** Resp. Auth.: Ministère de l'Elevage. Estimated cost 5.3 mECU. T.A.: M. Motte (B). Project in execution. 5th EDF. EDF CD 5012 A3a

#### COMOROS

**Small stock-farming promotion in Anjouan.** Estimated cost 0.200 mECU. Supply of equipment. Project on appraisal. 5th EDF. EDF COM 5010 A3a

#### COTE D'IVOIRE

**Prawn farming pilot farm.** Resp. Auth.: Ministère du Dév. Rural. Estimated total cost 1.875 mECU. EDF 0.850 mECU. Works, supplies, T.A. and training. T.A.: SEPIA Int. (F). Date financing decision December 85. 5th EDF. EDF IVC 5019 A3d

**Rural development of the central region.** Resp. Auth.: Ministère du Dév. Rural. Development of irrigated rice-growing. Works, supplies and T.A. Project on appraisal. 5th EDF. EDF IVC 5021 A3a

#### DJIBOUTI

**Revitalization and improved use of the doum palm plantations.** Resp. Auth.: Ministère de l'Agriculture et du Dév. Rural. Estimated cost 0.750 mECU. 1st stage: study for preserving and making better use. After the study a pilot programme to improve project. Only for the study 0.200 mECU. Special hunger programme. Project in execution. 958-DI 5006 A3a

**Administrative training centre.** Resp. Auth.: Ministère de la Fonction Publique. Construction of two buildings. Estimated cost 0.560 mECU. Cofinanced by EDF and France. EDF 0.270 mECU. Works and supplies. Works by int. tender. Project in execution. 5th EDF. EDF DI 5004 A6e

**Ranch construction.** Resp. Auth.: Ministère de l'Agriculture. Studies and Works. Works by int. tender. 1.030 mECU. Int. tender dossier prepared by Dubois (ACP). Project in execution. 5th EDF. EDF DI 5005 A3a

#### EQUATORIAL GUINEA

**Rural interventions.** Project stage: identification. 5th EDF. EDF EG A3a

**Rural development in the Bata district.** Resp. Auth.: Ministère de l'Agriculture, de l'Elevage et du Dév. Rural, Ministère de la Santé. 1.350 mECU. Study by BDPA (F). Supervision of works: short-list done. T.A.: Short-list already drawn up for restr. tender. 5th EDF. Project in execution. EDF EG 5004 A3a

**Malabo's electrification (Phase II).** Estimated cost 3 mECU. Purchase of generator sets, repairing of the power-station and

town mains extension. 2 int. tender launched in June 85. Project on appraisal. 5th EDF.  
EDF EG 5003 A2ai

**Cocoa-tree plantations rehabilitation on Bioko island.** Estimated total cost 22.6 mECU. EDF 1.2 mECU. World Bank 13 mECU. OPEC 1.4 mECU, BADEA 3.9 mECU, local 3.1 mECU. EDF part: supply of fertilizers. Project on appraisal. Date foreseen for financing decision January 86. 5th EDF.  
EDF EG 5008 A3a

**Assistance to the road maintenance service in Rio Muni. 2nd phase.** Resp. Auth.: Ministère des Travaux Publics. 1.1 mECU. T.A., training and purchase of road equipments. Project in execution. 5th EDF.  
EDF EG 5009 A2d

## ETHIOPIA

**Construction and equipment of one agricultural research station in Bale-Arsi.** Resp. Auth.: Institute of Agricultural Research (I.A.R.). Special hunger programme. 1.5 mECU. Project in execution.  
958-ET 5015 A3c

**Rural Water Supply.** Resp. Auth.: Ethiopian Water Works Construction Authority. 1.9 mECU. Supply of equipments. T.A.: J. Taylor and Son (UK) and GITEC (D). Project in execution. Date financing decision October 85. 5th EDF.  
EDF ET 5016 A2b

## GAMBIA

**Brikama College, phase II.** Resp. Auth.: Ministry of Works and Communications. 1.925 mECU. Construction and equipment of academic and residential buildings. Works by mutual agreement. Equipment for phase II: int. tender, 1st quarter 1986. 4th EDF.  
EDF GM 4005 A6b

**Upper River Division feeder roads.** Resp. Auth.: Public Works Dept. Estimated cost 2.750 mECU. Construction and reinstatement of 83 km in the Sandu and Wuli districts. Works by direct labour. Supplies by int. tender. Project in execution. 5th EDF.  
EDF GM 5014 A2d

## GHANA

**Central and Accra Regions Rural Integrated Programme (CARRIP).** Resp. Auth.: Ministry of Finance and Economic Planning. Prefeasibility study for potential projects within the two regions, with the aim of improving the food situation in Accra and other coastal towns. Halcrow-U.L.G. (UK). Study: rehabilitation irrigation project: HED-ESELSKABET (DK). 5th EDF.  
EDF GH 5025 A3e

**Aveyme livestock development.** Resp. Auth.: Ministry of Agriculture. 3.2 mECU. Works, supply of vehicles and equipment, T.A.: ORYX (I) 5th EDF.  
EDF GH 5015 A3a

**Ghana Cocoa Marketing Board. Vehicle Workshop.** Resp. Auth.: Cocoa Marketing Board. (CMB) 2.936 mECU. Stabex 81. Completion and construction of workshops. Supply of equipment and T.A. Works by acc. tender. Supplies: int. tender. T.A.: direct agreement. Project in execution. 5th EDF.  
EDF GH STA 5019 A3e

**Second Line of Credit to the National Investment Bank (NIB).** Resp. Auth.: Development Service Institute of NIB. 2.9 mECU. T.A. and supply of equipment. T.A.: P.E. Int. (UK). Project in execution. 5th EDF.  
EDF GH 5013 B3a

**Line of Credit to the Agricultural Development Bank.** Resp. Auth.: Agric. Dev. Bank (ADB) 6mECU. Purchase of marine diesel engines, spare parts, fishing nets, and T.A. Project in execution. 5th EDF.  
EDF GH 5009 A5a

**Agricultural Rehabilitation through the Rural Banks Scheme. Phase II.** Supply of equipment to small scale farmers and fishermen. T.A. 8.760 mECU. T.A.: short-list done for restr. tender. Project in execution. 5th EDF.  
EDF GH 5004 A5a

**Supplementary finance for Twifo Oil Palm Development.** Resp. Auth.: Twifo Oil Palm Plantation Ltd. (TOPP). 5.043 mECU. Infrastructure, housing construction by direct labour. Supply of crop inputs, vehicles, tractors and T.A. Project in execution. 5th EDF.  
EDF GH 5003 A3a

**Twifo smallholder Oil Palm Project.** Resp. Auth.: TOPP. 3,715 m ECU. Works, supplies and T.A. Date financing decision October 85. 5th EDF.  
EDF GH 5021- STA A3a

**Takoradi harbour rehabilitation.** Resp. Auth.: Ghana Ports Authority. Estimated total cost 16.7 mECU. EDF 9.7 mECU, World Bank 5 mECU, local 2 mECU. Works and supply of equipment. Project on appraisal. 5th EDF.  
EDF GH 5028 A2d

## GUINEA

**Land development in Kankan and Labé regions. Phase II.** Resp. Auth.: Ministère de l'Agriculture et des F.A.P.A. Valuation: MacDonald and Partners (UK). Project on appraisal. 5th EDF.  
EDF GUI 5030 A3a

**New energy research and test.** Resp. Auth.: Ministère de l'Energie et du Kon-kouré. Study on hand by A.I.D.R. (B). 5th EDF.  
EDF GUI 5006 A2a

**T.A. to the Dir. Gen. de l'Habitat et de l'Urbanisme. Development of provincial centres.** Resp. Auth.: Ministère de l'Urbanisme et de l'Habitat. Estimated cost ±6 mECU. Aerial survey, supply of equipment, T.A. and training. Int. tender launched in December 85. 5th EDF.  
EDF GUI 5017 A8b

**Assistance to the «Ecole Nationale des Arts et Métiers-ENAM-Conakry».** 2.265 mECU. Building renovation and supply of equipment. T.A. Date financing decision December 85. 5th EDF.  
EDF GUI 5028 A6d

## GUINEA BISSAU

**Health infrastructures.** Resp. Auth.: Commissariat d'Etat au Travaux Publics. Estimated cost 1.9 mECU. Construction and equipment of 2 district hospitals, 4 health centres and staff housing. Supply of equipment: int. tender 2nd half 85. T.A.: Short-list done. Project in execution. 5th EDF.  
EDF GUB 5006 A7a

**North-East forestry development.** Resp. Auth.: Commissariat général au développement rural. Study under way by Atlanta (D). 5th EDF.  
EDF GUB 5004 A3c

**Rural hydraulics.** Resp. Auth.: Ministère des ressources naturelles. Estimated cost 1.4 mECU. Construction of big diameter wells (1.5 m). 85 wells in the GABU region. Works by acc. tender. Project on appraisal. Date foreseen for financing decision 1st half 86. 5th EDF.  
EDF GUB 5005 A2b

**T.A. for the reform of trade.** Estimated cost 1.6 mECU. T.A. to the Ministry and 2 state companies: Kelvingate (UK). T.A.: short-list done for restr. tender. 5th EDF.  
EDF GUB 5009 A5c

## IVORY COAST

(See Côte d'Ivoire).

## JAMAICA

**Citrus fruit production improvement.** Resp. Auth.: Ministère de l'Agriculture. Estimated cost 3.5 mECU. Equipment, training and T.A. Credit line. T.A.: VAKAKIS (GR). Project in execution. 5th EDF.  
EDF JM 5004 A3a

**Coffee development.** Resp. Auth.: Ministry of Agriculture. Estimated total cost 3.7 mECU. EDF 3.5 mECU. Local 0.2 mECU. Supply of equipment, T.A. and credit line. T.A.: Short-list already drawn up for restr. tender. Project in execution. 5th EDF.  
EDF JM 5005 A3a

**"Public Health Laboratory Services".** Construction and supply of equipment for a new laboratory in Kingston. Training. Estimated total cost 5.230 mECU. EDF 4.900 mECU. Local 0.300 mECU. Int. tender for supplies launched in December 85. Project in execution. 5th EDF.  
EDF JM 5011 A7a

**Bee-keeping Development Project.** Resp. Auth.: Ministry of Agriculture. 1.270 mECU. Supply of vehicles, T.A. and line of credit. T.A.: Short-list done for restr. tender. Project in execution. 4th and 5th EDF.  
EDF JM 5013 A3a

## KENYA

**Eldoret Polytechnic.** 6.5 mECU. Construction, supply of equipment (pedagogical)

and T.A. Works by acc. tender. Tender already launched. Supervision of works: Hughes and Polkinghorne (UK). Project in execution. 5th EDF.  
EDF KE 5010 A6b

**Strengthening of existing facilities for research in the field of public health.** Construction of a laboratory by int. tender. Work supervision: Dalglish Marshal (UK). 1 mECU. Project in execution. 5th EDF.  
EDF KE 5019 A7a

**Line of credit to the "Small Scale Enterprises Finance Company" (SEFCO).** Resp. Auth.: Development Finance Company of Kenya. 0.500 mECU. Project on appraisal. 5th EDF.  
EDF KE 5020 A4b

**Tambach-Biretwo road.** Asphalted road construction. 10.5 km. Estimated cost 5 mECU. Project on appraisal. Int. tender (conditional) launched in November 85. Date foreseen for financing decision February 86. 5th EDF.  
EDF KE A2d

★ **Reinforcement of the medical infrastructure in the district of Machakos.** 1.100 mECU. Works and supplies. Project on appraisal. 5th EDF.  
EDF KE 5022 A7a

## KIRIBATI

**Fishing-boats.** 2.8 mECU. Purchase of 2 boats, 26 m. each. Date financing decision October 85. 5th EDF.  
EDF KI 5002 A3d

## LESOTHO

**Rural hospitals improvement programme. 5th phase.** Resp. Auth.: Ministry of Rural Development. 0.641 mECU. Project in execution. 5th EDF.  
EDF LSO 5009 A7a

## LIBERIA

**Buto oil palm. Phase II.** Resp. Auth.: Ministry of Agriculture. 4.2 mECU. Continuation of the existing project in connection with the construction of an oil mill. T.A. and supply of equipment. T.A.: SODECI (F). Project in execution. 5th EDF.  
EDF LBR 5004 A3a

**Development of Harper Port.** Resp. Auth.: National Port Authority. Estimated cost 12.4 mECU. Rehabilitation and fendering of the existing jetty, dredging in the harbour basin, services. Int. tender with prequalification. Prequalification done. Supervision of works: short-list done for restr. tender. Project in execution. 5th EDF.  
EDF LBR 5017 A2d

**Rural Water Supply.** Resp. Auth.: Ministry of Rural Dev. Estimated cost 2.5 mECU. Project on appraisal. 5th EDF.  
EDF LBR 5018 A2b

## MADAGASCAR

**Rehabilitation of «Centre Semencier Riz» in Marofarihy.** Resp. Auth.: Ministère de la Production Agricole et de la Réforme Agraire. EDF 1.630 mECU. Works, supply of equipment and training. T.A.: Short-list already drawn up for restr. tender. Int. tender for supplies launched in June 85. Project in execution. 5th EDF.  
EDF MAG 5015 A3a

**Assistance to the Malagasy handicrafts industry.** Resp. Auth.: Ministère de l'Industrie. Estimated cost 1 mECU. Supply of raw materials for handicrafts by int. tender. T.A.: APRODI (F). Project in execution. 5th EDF.  
EDF MAG 5017 A4d

**Ambositra water supply.** EDF 1.86 mECU. Renovation of the whole water system for private and industrial needs. Date financing decision December 85. 5th EDF.  
EDF MAG 5019 A2b

**Micro and mini hydro-electric power stations development programme.** Resp. Auth.: Ministère de l'Industrie de l'Energie et des Mines. Soc. JRAMA. Total estimated cost 1.3 mECU. EDF 1 mECU, local 0.300 mECU. Study on micro and mini power stations. Restr. tender after prequalification by short-list. Prequalification launched in July 85. Date financing decision September 85. 5th EDF.  
EDF MAG 5018 A2a

**SOMAPALM rehabilitation. Phase 2.** 1.6 mECU. To improve cultivation, plants and cost prices. T.A.: I.R.H.O. (F). Date financing decision November 85. 5th EDF.  
EDF MAG 5020 A3a

**Slaughter-house rehabilitation in Antananarivo, Mahajanga and Morondava.** Resp. Auth.: Ministère de la Production Animale et des Eaux et Forêts, Direction de l'Élevage. Total estimated cost 9.070 mECU. EDF 7.570 mECU, France 0.200 mECU, local 1.3 mECU. Works by acc. tender, supply of equipment by int. tender. launched in December 85. T.A. by direct agreement. Date financing decision September 85. 5th EDF.  
EDF MAG 5024 A3a

**Intermediate level health infrastructure strengthening.** Resp. Auth.: Ministère de la Santé. Works for Ihosy and Maevatana hospitals. Int. tender launched in September 85. Project in execution. 5th EDF.  
EDF MAG 5013 A7a

**Rehabilitation of rice-growing areas in the Toliara Province.** Resp. Auth.: Ministère de la Production Agricole et de la Réforme Agraire. 7.2 mECU. Works: irrigation and drainage system and buildings. Supply of equipments, vehicles and T.A. Works and supplies by int. tenders. T.A. by restr. tender. Date financing decision November 85. 5th EDF.  
EDF MAG 5023 A3A

## MALAWI

**Salima Lakeshore Agricultural Development Division (SLADD) Phase IV.** Resp. Auth.: Ministry of Agriculture. Estimated cost: 19.1 mECU. EDF 9.5 mECU. Local

9.6 mECU. Works, Supplies and T.A. Project in execution. T.A.: restr. tender, short-list drawn up. 5th EDF.  
EDF MAI 5001 A3a

**Central and northern region fish farming development, training and research.** Resp. Auth.: Ministry of Agriculture. Estimated cost: 3 mECU. Works, supplies, T.A. Project on appraisal. 5th EDF.  
EDF MAI 5019 A3a

**Strategic fuel reserve.** Resp. Auth.: Office of the President and Cabinet. Contingency Planning Unit. 4.2 mECU. Construction of tanks farm for gasoil, petrol, ethanol. Associated infrastructure and equipment. T.A. Project on appraisal. 5th EDF.  
EDF MAI 5020 A2a

**Small Enterprise Development Organization of Malawi (SEDOM) — Phase II.** Resp. Auth.: Sedom secretariat. EDF 4.8 mECU. Works by direct labour. Supply of vehicles and equipment by int. tender in '85. T.A.: Short-list done for restr. tender. Project in execution. 5th EDF.  
EDF MAI 5021 A4e

**Ntchisi Project Area. Phase II.** Resp. Auth.: Ministry of Agriculture. Estimated total cost 6.4 mECU. EDF 4.0 mECU, local 2.4 mECU. Works, supplies and operating costs. Project in execution. 5th EDF.  
EDF MAI 5022 A3a

**Improvements to Mpemba staff training college.** 0.900 mECU. Works and infrastructures. Date financing decision November 85. 5th EDF.  
EDF MAI 5026 A6b

**Nkhotakota Rural Development.** Resp. Auth.: Ministry of Agriculture. Total estimated cost 9.32 mECU. EDF 4.820 mECU, local 4.5 mECU. T.A.: AGDEV (UK). Project in execution. 5th EDF.  
EDF MAI 5027 A3a

**Mwansambo Rural Growth Centre.** Resp. Auth.: OPC, Rural Development Division. Estimated cost 1 mECU. Works, supplies and T.A. Project on appraisal. 5th EDF.  
EDF MAI 5028 A3a

★ **Blantyre-Lirangwe M1 Road.** Resp. Auth.: Ministry of Works. 23.6 mECU. Road construction and rehabilitation. Works by int. tender (conditional) foreseen in the 1st quarter 86. Project on appraisal. 6th EDF.  
EDF MAI 6001 A2d

## MALI

**Strengthening of sanitary infrastructure in the Niore region.** Resp. Auth.: Ministère de la Santé et des Affaires Sociales et Ministère des Transports et T.P. 2.570 mECU. Buildings, equipment, training. Architectural and technical studies: GOUSIER (F). T.A.: Short-list already drawn up. 4th EDF.  
EDF MLI 4016 A7a

**Geological and mining research. Western Mali 1.** Resp. Auth.: Direction Nationale de Géologie et des Mines (DNGM)). 7.3 mECU. Geological and mining mapping, gold mine research by boring, supply of laboratory equipment. Geological mapping by



restr. tender. Boring by int. tender. Supervision of works by direct agreement. Equipment by int. tender. Short-list done for restr. tender. Int. tender for boring launched in October 85. Project in execution. 5th EDF. EDF MLI 5015 A4a

**Support to the food strategy. Phase II.** Special programme hunger. 3 mECU. Project in execution. 958-MLI 5019 B1a

**Support to the reforestation programme and to the fuel-wood saving programme. Phase II.** 0.300 mECU. Special hunger programme. Project in execution. 958-MLI 5020 A8f

**Rural hydraulics programme.** 5.8 mECU. 300 wells and pumps. T.A.: Géohydraulique (F). Date financing decision October 85. 5th EDF. EDF MLI 5017 A2b

## MAURITANIA

**Extension of Kaédi regional hospital.** Resp. Auth.: Ministère de l'Équipement. 1.925 mECU. Construction, equipment and TA for Kaédi hospital (100 beds). Works under way. Medical-technical equipment int. tender, foreseen in the 1st quarter 86. 3rd, 4th and 5th EDF. EDF MAU 5018 A7a

**Small dams construction in the Hodhs region.** Resp. Auth.: Ministère du Développement rural. Estimated cost 2 mECU. Study under way: Binnie and Partners (UK). Project on appraisal. 5th EDF. EDF MAU 5001 A3a

**Aioun El Atrouss hospital.** Resp. Auth.: Ministère de l'Équipement. 1.050 mECU. Renovation and supply of equipment for 3 buildings. Works by acc. tender. Supplies by int. tender. Project on appraisal. 5th EDF. EDF MAU 5012 A7a

**Centre de Formation Professionnelle Maritime de Nouadhibou (C.F.P.M.).** Resp. Auth.: Ministère de l'Équipement. 2.5 mECU. Construction, supply of equipment and purchase of a wooden-trawler, T.A. Project in execution. 5th EDF. EDF MAU 5014 A6d

## MAURITIUS

**Development of Ile Rodrigues.** Resp. Auth.: Ministry of Agriculture. 3 mECU. Development centred on agricultural production. Economical and technical study under way. T.A.: Luxconsult (Lux.). 5th EDF. EDF MAS 5001 A3a

## NIGER

**Air Valley development.** Resp. Auth.: Ministère du Dév. Rural. Estimated cost 2.052 mECU. Hydro-agricultural works. Construction and equipping of wells. Equipping and operation of nurseries. T.A. and training. Works and equipment: int. tender. T.A.: VAKAKIS (GR). Project in execution. 5th EDF. EDF NIR 5002 A3a

**Training for Cooperatives.** Resp. Auth.: Ministère du Dév. Rural. Estimated cost 2.8 mECU. T.A. and supply of equipment. T.A. by restr. tender. Supplies by int. tender or direct agreement. Date financing decision October 85. 5th EDF. EDF NIR 5004 A3b

**Rural Development in the Zinder Department.** Resp. Auth.: Ministère du Dév. Rural. Estimated cost 2.5 mECU. Project on appraisal. 5th EDF. EDF NIR 5019 A3a

**Area extension in Tillakaina.** Resp. Auth.: Ministère du Dév. Rural. 0.340 mECU. Date financing decision October 85. 5th EDF. EDF NIR 5020 A3a

**Traditional wells repairing in the Oualam Region.** Resp. Auth.: Ministère de l'Hydraulique. 2.560 mECU. 100 wells. Works, supervision and training. Project on appraisal. 5th EDF. EDF NIR 5010 A2b

## NIGERIA

**Kaduna afforestation project.** Resp. Auth.: Federal Department of Forestry. 9.4 mECU. Works, supplies and T.A. Project in execution. T.A.: restr. tender short-list done. 5th EDF. EDF UNI 5001 A3c

**Mambilla tea irrigation.** Resp. Auth.: Nigerian Beverages Production Company Ltd. EDF 2.6 mECU. Works and supplies. Supply of irrigation equipment by int. tender, conditional, launched in June 85. Date financing decision November 85. 5th EDF. EDF UNI 5004 A3a

## PAPUA NEW GUINEA

**Magi highway.** Resp. Auth.: Department of Transport. 3.5 mECU. Upgrading and sealing of a road section. Works: int. tender foreseen 1st half '86. 5th EDF. EDF PNG 5006 A2d

**Diesel Power Replacement Programme.** Resp. Auth.: Electricity Commission (ELCOM). Estimated cost 4.850 mECU. 4 small hydroelectric power plants with transmission line extensions from existing grids. Project on appraisal. Date foreseen for financing decision 1st half 86 for the 1st power plant. 1st int. tender (conditional) foreseen end 85. 5th EDF. EDF PNG 5011a A2a

**Kimbe-Talasea Road.** Resp. Auth.: Departments of Works and Transport. Estimated total cost 9.5 mECU. EDF 7 mECU, local 2.5 mECU. Upgrading of ±35 km of the road. Works and supervision. Project on appraisal. 5th EDF. EDF PNG 5013 A2d

## RWANDA

**Development of the small-scale tin industry.** Resp. Auth.: Ministère de l'Industrie, des Mines et de l'Artisanat.

2.840 mECU. Sysmin. Works, supplies, training and T.A. T.A.: M. Molzem (Lux). Project in execution. 5th EDF. EDF RW 5016 A4a

**Food strategy. Priority measures (continuation).** 3 mECU. Special programme hunger. Project in execution. 958-RW 5021 B1a

## ST CHRISTOPHER AND NEVIS

**Electricity Supply Project.** Resp. Auth.: Electricity Dept. 1.322 mECU. Upgrading electricity supply system. Date financing decision November 85. Supplies: int. tender (conditional) launched in August 85. 4th and 5th EDF. EDF SCN 5001 A2ai

## SENEGAL

**New energy research and test in rural region.** Resp. Auth.: Secrétariat d'Etat à la Recherche Scientifique. 1.5 mECU. Creation of pilot unit for solar energy, biomass and wind energy. Studies, T.A. and equipment. Studies: AGIP-AFOR (I). Equipment: int. tender in 86. Project on appraisal. 5th EDF. EDF SE 5005 A2a

**Trade Promotion programme.** Resp. Auth.: Centre Sénégalais du Commerce Extérieur. 1.083 mECU. Actions for production, marketing and T.A. Contract: direct agreement or restr. tender. T.A.: M. Farine (F). 5th EDF. EDF SE 5016 A5d

**Consolidation of the livestock development programme.** Resp. Auth.: SODESP. Estimated cost 1.6 mECU. Study under way by Bessel Ass. (UK). Project on appraisal. 5th EDF. EDF SE A3a

**Artisanal fishery development in the Casamance Region.** Resp. Auth.: Secrétariat d'Etat à la Pêche Maritime. Total cost 2.443 mECU. EDF 1.6 mECU, C.C.C.E. (F) 0.843 mECU. Works, supplies and training. Project on appraisal. Date foreseen for financing decision January 86. 5th EDF. EDF SE 5024 A3a

**Study on irrigated rural units in the Podor region. (Senegal River Valley).** Resp. Auth.: S.A.E.D. Estimated cost 1 mECU. Soil survey, mapping, preparation of the tender dossier, economic study. Study. M. Dhonte (F). Project in execution. 5th EDF. EDF SE 5030 A3a

## SIERRA LEONE

**Rural hydraulics.** Resp. Auth.: Ministry of Agriculture and Forestry. Estimated cost 1.55 mECU. Construction of water points for villages with 2000 inhabitants. Study to prepare project and appraisal: IWACO (NL). 5th EDF. EDF SL 5001 A2b

**Kambia Fishery Development.** Resp. Auth.: Ministry of Agriculture and Forestry. 0.900 mECU. Construction of 2 buildings

and a boatyard, supply of boats, motors, vehicles and T.A. T.A.: MacAlister, Elliot and Partners (UK). 5th EDF.  
EDF SL 5019 A3d

**Economic study of the Sambamba-Kabala Road.** Short-list already drawn up. Project stage: identification. 5th EDF.  
EDF SL 5027 A2d

**Buildings for Njala University College (N.U.C.).** Resp. Auth.: Ministry of Education. 2.5 mECU. Construction of academic block and student hostel, supply of equipment and work supervision. T.A.: OLU WRIGHT ASS. (ACP). 5th EDF.  
EDF SL 5022 A6b

**Rubber development project.** Resp. Auth.: Ministry of Agriculture and Forestry. Estimated cost 5 or 6 mECU. Project on appraisal. 5th EDF.  
EDF SL 5023 A3a

**Rehabilitation of the Telecommunications Network.** Resp. Auth.: Post and Telecommunications Dept. Estimated cost ±9.5 mECU. Study to prepare technical specifications and int. tender dossier: short-list done for restr. tender. Project on appraisal. 5th EDF.  
EDF SL 5024 A2c

**Port Loko rural development programme.** 6 mECU. Infrastructures, T.A., training and supplies. Project on appraisal. Date foreseen for financing decision January 86. 5th EDF.  
EDF SL 5006 A3a

**Support to the Geological Surveys Department.** 1.30 mECU. T.A. and training, supply of equipment. Project in execution. 5th EDF.  
EDF SL 5016 A4a

**Creation of regional centres for small enterprises.** Estimated cost 1.25 mECU. Project stage: identification. 5th EDF.  
EDF SL 5017 A4d

**Rural health development programme.** Estimated cost 1.5 mECU. Buildings, equipment and training. Project state: identification. 5th EDF.  
EDF SL 5025 A7a

**Tourism development project.** Estimated cost 0.850 mECU. T.A. for Ministry of Tourism and supply of equipment. Project stage: identification. 5th EDF.  
EDF SL 5026 A5c

## SOLOMON ISLANDS

**Coconut industry development project.** Resp. Auth.: Ministry of Land and Natural Resources. Study under way by Agrar and Hydrotechnik (D). Project stage: identification. 5th EDF.  
EDF SOL 5009 A3a

**Noro Port and Township.** Resp. Auth.: Ministry of Communications and Public Authority. Estimated total cost 27.5 mECU. EDF 7.5 mECU, Japan 14 mECU, local 6 mECU. Construction of a new deep-water wharf and road network, trunk water supply, water reticulation and sewage treatment. Project on appraisal. Int. tender (con-

ditional) launched in October 85. Date foreseen for financing decision January 86. 5th EDF.  
EDF SOL 5010 A2d

## SOMALIA

**Bardheera Dam.** Resp. Auth.: Bardheera Dam Authority (BDA). 600 mECU. (Estimated) Dam Project 500 mECU. Powerline to Mogadishu 100 mECU. Funding: EDF, Italy, Germany, France, Saudi Arabia, Abu Dhabi, Kuwait Funds, FADES, Isl. Dev. Bank. Local. Power and river regulation for agricultural development. Construction of a concrete gravity dam with hydro-power station, associated infrastructure and electrical transmission lines. The dam will provide water, flood protection and power for up to 223 000 ha of irrigated agriculture in the Juba Valley, and energy to Mogadishu. Civil works: first int. tender launched in 1984. Transmission lines int. tender in 1986. Equipment: powerhouse main equipment and auxiliary equipment, int. tenders in 1987. Gates, valves, intake equipment, int tender in 1987. Project in execution. 5th EDF.  
EDF SO 5003 A2a

**"Aula Magna" Mogadishu National University.** Resp. Auth.: Ministry of Public Works. ±2.5 mECU. Project on appraisal. 4th EDF.  
EDF SO 4015 A6b

**Upgrading of the road Afgoi-Shalambot-Goluen.** Resp. Auth.: Ministry of Public Works. Works by int. tender in 86. Supervision of works. Studies: AIC. PROGETTI (I). Project on appraisal. 5th EDF.  
EDF SO 5017 A2d

**Grapefruit Development Project.** Resp. Auth.: Ministry of Agriculture. 3.8 mECU. Works supply of vehicles, equipment and rural inputs. T.A.: Agriconsulting (I) and Istituto Sperimentale per l'Agricoltura (I). Project in execution. 5th EDF.  
EDF SO 5009 A3a

**Food Early Warning System.** Resp. Auth.: Ministry of Agriculture. Estimated total cost 4 mECU. EDF ±3.1 mECU. Supply of meteorological and office equipment and T.A.: Transtec (B). Project in execution. 5th EDF.  
EDF SO 5015 A8f

**North-West agricultural development project.** Estimated total cost 36 mECU. EDF: 7.6 mECU, World Bank 14.9 mECU, IFAD 9.9 mECU, local 3.6 mECU. Infrastructural work and supply of equipment and T.A. T.A.: Short-list done for restr. tender. Project in execution. 5th EDF.  
EDF SO 5016 A3a

**Rinderpest programme assistance.** Resp. Auth.: Ministry of Livestock. 0.207 mECU. Stabex 81. Supply of vehicles and equipment by int. tender. Project in execution. 5th EDF.  
EDF SO STA 5018 A3a

**T.A. to the Ministry of Finance, the Central Bank and the Commercial and Savings Bank.** Resp. Auth.: Ministry of Finance. 1.875 mECU. Project on appraisal. 5th EDF.  
EDF SO 5019 A1b

## SUDAN

**Nuba Mountains Rural Development Project. Interim phase.** Resp. Auth.: Ministry of Agriculture. 2.200 mECU. Supply of equipment and vehicles by int. tender, T.A. and training. T.A.: Halcrow-ULG (UK). Project in execution. 5th EDF.  
EDF SU 5019 A3a

## SURINAME

**Rice project at Coronie.** Resp. Auth.: Ministerie van Landbouw, Veeteelt, Visserij en Bosbouw. 7.650 mECU. Rice production developments. T.A.: EUROCONSULT (NL). Project in execution. 3rd and 5th EDF.  
EDF SUR 5002 A3a

**Biomass energy project at Wageningen.** Resp. Auth.: Government. Installation of an energy generator on the basis of rice husks. Project stage: identification. 5th EDF.  
EDF SUR 5009 A2a

**Artificial Insemination Project.** Resp. Auth.: Ministry of Agriculture, Fisheries. 0.72 mECU. Building of a new station and provision of equipment and material. Project on appraisal. Date foreseen for financing decision February 86. 5th EDF.  
EDF SUR 5010 A3a

**Rehabilitation of the road Burnside-Wageningen.** Resp. Auth.: Ministry of Finance and Planning. Estimated total cost 5.5 mECU. Study to be done: technical methods for the implementation of the project: Delft Universteit (NL). Project on appraisal. 4th and 5th EDF.  
EDF SUR 5011 A2d

## SWAZILAND

**Rural hydraulics.** Resp. Auth.: Rural Water Supply Board. Estimated cost 2.456 m ECU. Study construction, works supervision. 12 villages. Supply of equipment and material. Study and works supervision: Carl Bro (DK). Project in execution. 5th EDF.  
EDF SW 5001 A2b

**Smallholders Support Project, Credit and Marketing.** Resp. Auth.: Ministry of Agriculture. 3.550 mECU. Works, line of credit, T.A. and training. T.A.: Cooper Lybrand (ACP branch). Project in execution. 5th EDF.  
EDF SW 5005 A4e

**Matsapha Vocational Training College.** Resp. Auth.: Ministry of Education. EDF 3.9 mECU. Construction and equipping of the college. Date financing decision December 5th EDF.  
EDF SW 5006 A6a

## TANZANIA

**Mtwara water supply.** Resp. Auth.: Ministry of Water, Energy and Minerals. 5 mECU. Works: drilling of new wells, and constructions. Supply of equipment and T.A. Drilling activities and power supply

connections by direct labour. Other works: int. tender in '86. Supplies: int. tender in '86. Supervision of works: G.W.E. (D). 5th EDF.  
EDF TA 5003 A2b

**Banana improvement and pest control (Phase 1).** Resp. Auth.: Ministry of Agriculture. Estimated total cost 3.740 mECU. EDF 3 mECU, local 0.740 mECU. Supply of pesticides, vehicles, equipment by int. tender. T.A. Short-list done for restr. tender. Project in execution. 5th EDF.  
EDF TA 5008 A3a

**Ports of Zanzibar and Pemba.** Estimated cost 10.17 mECU, T.A. for management, organization, pricing and financial systems, training. Restoration of infrastructure. T.A.: NEDECO (NL). Project stage: identification. 5th EDF.  
EDF TA 5024 A2d

**Rehabilitation of Zanzibar Hospitals (Phase I).** Resp. Auth.: Ministry of Health, Zanzibar. Estimated total cost 1.125 mECU. EDF 0.9 mECU, local 0.225 mECU. Works and supply of equipment. Date financing decision November 85. 5th EDF.  
EDF TA 5017 A7a

**★ Cooperative Rural Development Bank (CRDB) Project.** 3.15 mECU. Provision of equipment, training and T.A. Project on appraisal. 5th EDF.  
EDF TA 5026 A3a

## TOGO

**Enquiry into consumer expenditures.** Resp. Auth.: Ministère du Plan, de l'Industrie et de la Réforme Administrative. Estimated total cost 1.3 mECU. EDF 1 mECU, Local 0.3 mECU, T.A. to produce, collect and treat statistical data, training and supply of equipment. T.A.: short-list done. Project in execution. 5th EDF.  
EDF TO 5011 A1e

## TONGA

**Supply of a dredger.** Resp. Auth.: Ministry of Works. Estimated cost 0.500 mECU. Technical study: EUROCONSULT (NL). Int. tender foreseen 1st half '86. Project on appraisal. 5th EDF.  
EDF TG 5002 A2d

**Faua Fisheries Harbour.** Resp. Auth.: Ministry of Works. Estimated cost 3.3 mECU. Construction of a new fisheries harbour, repair yards, fish market and wholesale store with ice-making equipment. Int. tender for the supply of sheet steel piles launched in November 83 (conditional). Supply of cooling and ice equipment int. tender in 86. Works by direct labour. T.A.: M. Imrie (UK). Project in execution. 5th EDF.  
EDF TG 5001 A3d

## TRINIDAD AND TOBAGO

**Training programme, health sector.** Resp. Auth.: Ministry of Health and Environment. 1.2 mECU. Training awards, laboratory equipment (sound-meters, chemical chro-

matographs, spectrometers) by int. tender. Short-term T.A. to coordinate and establish new laboratory. Project in execution. 5th EDF.  
EDF TR 5003 A8c

## VANUATU

**Public Works plant project.** Resp. Auth.: Public Works Dept. (P.W.D.). 1.2 mECU. Supply of bulldozers, graders, tractors and spare parts by int. tender launched in November 85. Project in execution. 4th and 5th EDF.  
EDF VA 5005 - 4002 A2d

## ZAIRE

**Kalemie port rehabilitation.** Resp. Auth.: Département des Transports et Communications. 6.5 mECU. 2 Int. tenders (conditional) launched in March 84. Works and supplies. Project on appraisal. Date foreseen for financing decision 1st half 86. Regional project. 5th EDF.  
EDF REG 5215 A2d

**Banana deep water port.** Resp. Auth.: Département des Transports et Communications. Economic and financial evaluation: SEMA (F). 5th EDF.  
EDF ZR 5013 A2d

**Butembo-Beni hydro-electrical development.** Preliminary study done by Tracotionnel (B) on local funds. Detailed economic and technical studies: WLPU (UK). Project on appraisal. 5th EDF.  
EDF ZR 5006 A2a

**T.A. to the O.F.I.D.A.** Resp. Auth.: Office des Douanes et Accises du Zaire (OFIDA). 10 mECU. T.A., supply of equipments, scholarships and training. Customs experts will be chosen among customs officers from EEC Member States Customs Departments. Date financing decision December 85. 5th EDF.  
EDF ZR 5025 A1b

## ZAMBIA

**Animal vaccine unit production.** Laboratory construction. Supply of equipment and T.A. Estimated cost 3.79 mECU. EDF 3 mECU, local 0.79 mECU. T.A.: Central Diergeneeskundig (NL). 5th EDF.  
EDF ZA 5018 A3a

**Mkushi electrification.** Estimated cost 6.07 mECU. EDF 3.07 mECU. Cofinancing needed. Study on hand: MERTZ-McLENAN (UK). Project stage: identification. 5th EDF.  
EDF ZA 5007 A2a

**Animal health improvement.** Special hunger programme. Project on appraisal. Date foreseen for financing decision 1st half 86.  
958-ZA 5022 A3a

**Environmental conservation measures.** 2 mECU. Special hunger programme. Project in execution.  
958-ZA 5023 A8f

**Rehabilitation of the Zambian Copper & Cobalt Mining Industry. II.** Resp. Auth.: Z.C.C.M. Sysmin. 28 mECU, Italy 4.5 mECU. Local 4.9 mECU. EDF part supply of equipment by int. tender or restr. tender or direct agreement. Project in execution. 5th EDF.  
EDF ZA/SYS/5024 A4a

## ZIMBABWE

**Small-holder Coffee and Fruit Development Programme.** Resp. Auth.: Ministry of Lands, Resettlement and Rural Development. Estimated total cost 5.85 mECU. EDF 4.2 mECU, local 1.65 mECU. T.A.: I.R.F.A. (F). Project in execution. 5th EDF.  
EDF ZIM 5006 A3a

**Mashonaland East Smallholder Fruit and Vegetable Programme.** Resp. Auth.: Agricultural and Rural Development Authority (ARDA). 2.9 mECU. Works, supply of equipment and materials, T.A. and credit line. Project on appraisal. Date foreseen for financing decision January 86. 5th EDF.  
EDF ZIM 5012 A3a

**Rural water supply in South Matabeleland.** Resp. Auth.: Ministry of Energy, Water Resources and Development. Boring, wells, supply of hand pumps (MEWRD). 4.1 mECU. Project on appraisal. Date foreseen for financing decision February 86. 5th EDF.  
EDF ZIM 5005 A2b

## Overseas Countries and Territories (OCT)

### NETHERLANDS ANTILLES

**Curaçao slaughterhouse.** Resp. Auth.: Departement voor Ontwikkelingssamenwerking, Willemstad, Curaçao. cost 3.45 mECU. Work plans: Bureau T. Janga (Local). Works by int. tender foreseen in the 2nd half 85. Project on appraisal. Date foreseen for financing decision 1st half 86. 5th EDF.  
EDF NEA 5012 A3a

**Line of credit to the Aruba Dev. Bank to improve agriculture, livestock and fishery.** Resp. Auth.: Departement voor ontwikkelingsamenwerking. Estimated cost 0.3 mECU. Project on appraisal. 4th EDF.  
EDF NEA 4003 A5a

### FRENCH POLYNESIA

**Tahiti territorial abattoir.** Resp. Auth.: Service de l'Economie Rurale, Papeete (Tahiti). Secrétariat d'Etat des Départements et Territoires d'Outre-Mer, Délégation de la Polynésie Française, Paris. Cofinancing with France. 1.270 mECU. Project in execution. 4th EDF.  
EDF POF 4003 A3a

**Pearl and mother of pearl handicraft centre.** 0.450 mECU. Building construction. Project in execution. 5th EDF.  
EDF POF 5004 A3d

## NEW CALEDONIA

**Reafforestation programme.** Resp. Auth.: Territoire de la Nouvelle Calédonie des Eaux et Forêts. Estimated total cost 4.7 mECU. EDF part  $\pm$  3 mECU. Cofunding with France, CCCE (F) and Local. 3.000 ha plantation "Pin de Caraïbes" with all necessary infrastructure and investment. Project on appraisal. 5th EDF.  
EDF NC 5003 A3c

## MONTSERRAT

**Water Supply Project.** Resp. Auth.: Montserrat Water Authority and Ministry of Public Works. 1.1 mECU. Project planning: Short-list already drawn up for restr. tender. Project on appraisal. 4th and 5th EDF.  
EDF MON 5001 A2b

## PACIFIC OCT

**Regional programme rural photovoltaic electrification.** Resp. Auth.: SPEC. Estimated total cost 4.365 mECU. EDF 3.184 mECU. T.A.: short-list done for restr. tender. Supplies by int. tender launched in January 85. Project in execution. 5th EDF.  
EDF REG 5715 A2a

## WALLIS AND FUTUNA ISLANDS

**Futuna electrification.** 1.2 mECU. Project in execution. 5th EDF.  
EDF WF 5002 A2a

# Regional Projects

## CENTRAL AFRICAN REP. — CONGO

**Aid to the "Service Commun d'Entretien des Voies Navigables. (SCEVN).** Estimated cost 3.3 mECU. Supply of equipment and improvement of the maintenance base in Bangui. Int. tender (conditional) launched in August 85. Project on appraisal. Date foreseen for financing decision January 86. 5th EDF.  
EDF REG 5202 A2c

## MEMBER COUNTRIES OF CEAO

**ESITEX Ségou (Mali).** Resp. Auth.: CEAO Secretariat. Management training for textile industry. Complex construction in Ségou. Supply of equipment. Project stage: identification. 5th EDF.  
EDF REG 5118 A6d

## MEMBER COUNTRIES OF CEDEAO

★ **Trade and investment promotion in West Africa (Forum industriel de l'Afrique de l'Ouest-Dakar).** Resp. Auth.: CEDEAO. 0.700 mECU. Information and investment promotion and organization of the Forum. Project on appraisal. Date foreseen for financing decision February 86. 5th EDF.  
EDF REG 5142 A1b

## MEMBER COUNTRIES OF OCCGE ORGANISATION DE COORDINATION ET DE COOPERATION POUR LA LUTTE CONTRE LES GRANDES ENDEMIES

★ **Strengthening of the OCCGE Centres.** Resp. Auth.: National Authorizing Officer in Côte d'Ivoire. 0.500 mECU. Purchase of vehicles and equipment. Project on appraisal. Date foreseen for financing decision February 86. 4th EDF.  
EDF REG 4082 A3a

## WESTERN AND CENTRAL AFRICAN COUNTRIES MEMBERS OF THE CONFERENCE MINISTERIELLE SUR LE TRANSPORT MARITIME

**Académie régionale des Sciences et techniques de la mer in Abidjan.** Resp. Auth.: Ministère de la Marine, Côte d'Ivoire. Estimated total cost 32 mECU. EDF part for pedagogical equipment 2 mECU. Works, T.A. and other equipment: BAD, Japan, Norway, UNDP, France and local. Int. tender for supplies at pedagogical equipment launched in December 85. Project in execution. 5th EDF.  
EDF REG 5134 A6b

## GAMBIA — SENEGAL (O.M.V.G.)

**Bridge barrage on the river Gambia.** Resp. Auth.: Ministry of Works and Ministère des Travaux Publics. Estimated cost in 78: 60 mECU. Foreseen funding: F.R.G. 20 mECU. Canada 21.7 mECU, USA 11/22 mECU, Technical study: DHV-Rijks-waterstaat-Waterloopkundig Laboratorium Delft (NL). For Phase I — Phase II: Rhein-Ruhr (D). Project stage: identification. 5th EDF.  
EDF REG 5110 A2d

**Agronomical study for the area concerned by the bridge barrage.** Short-list already drawn up. 5th EDF.  
EDF REG A3a

## GUYANA — SURINAME

**Guyana — ferry-link.** Resp. Auth.: Ministry of Public Works and Ministerie van Openbare Werken. Link ferry on Corentine river. Study under way by C.A. Liburd and Ass. + Sescon Group (ACP). Date financing decision December 85. 4th and 5th EDF.  
EDF REG 5602 — 4084 A2d

## MEMBER COUNTRIES OF M.R.U. (MANO RIVER UNION)

**Telecommunication and Postal Training Institute (TPTI) of the MRU.** Resp. Auth.: MRU Secretariat in Freetown. Extensions, supplies and training. Estimated total cost 8.5 mECU. EDF 2.5 mECU. Project on appraisal. 5th EDF.  
EDF REG 5104 A6b

## NIGER BASIN AUTHORITY

**Protection and reafforestation in the "Haut Bassin Versant du fleuve Niger en Guinée".** Works, supplies and T.A. Estimated total cost 1.5 mECU. Project stage: identification. 5th EDF.  
EDF REG 5112 A8f

## ZAIRE — CONGO — GABON — SAO TOME AND PRINCIPE — EQUATORIAL GUINEA — CAMEROON

**Fishery development in the Gulf of Guinea.** Estimated cost  $\pm$  5 mECU. T.A. to prepare these projects: Short-list done. Project on appraisal. 5th EDF.  
EDF REG 5206 A3d

## SENEGAL — MAURITANIA

**Establishment of cultivated areas in the Senegal River Valley.** Special hunger programme. Project in execution.  
958-REG 5140 A3a

## TOGO — MALI — BURKINA FASO — NIGER — CHAD

**Agricultural products regional transit centre, in the Lomé port.** Resp. Auth.: Ministères du Plan. Estimated total 7 mECU with cofunding. Technical and economic feasibility study: Bureau SATEC (F). Project stage: identification. 4th and 5th EDF.  
EDF REG 5125 A3a

## BURKINA FASO — CAPE VERDE — CHAD — GAMBIA — MALI — MAURITANIA — NIGER — SENEGAL

**Establishment of a regional plan for food policy and ecology.** Special hunger programme. Project in execution.  
958-REG 5141 A8f

## MEMBER COUNTRIES OF UDEAC

**Sub-Regional Institute for Applied Technology and Planned Economy (ISTA).** Resp. Auth.: ISTA Secretariat in Libreville-Gabon. Estimated cost  $\pm$  6 mECU. Building centre construction and T.A. for 3 actions. Project on appraisal. 5th EDF.  
EDF REG 5210 A6b

## PACIFIC ACP COUNTRIES

**Pacific Regional Tourism Programme.** Resp. Auth.: Tourism Council of the South Pacific (TCSP) and SPEC. 3.2 mECU. Study to be done: data base, organization and strategy. Short-list already drawn up. for restr. tender. Project in execution. 5th EDF.  
EDF REG 5714 A5c

**University of the South Pacific. Agricultural, Rural and Marine Resources Programme. Stage II.** Resp. Auth.: SPEC. 0.830 mECU. Project in execution. 5th EDF.  
EDF REG 5707 A6b

**Pacific Regional Aircommunications.** Stage I. Resp. Auth.: SPEC. 4.6 mECU. Buildings, runways and supply of navigational aids. Project on appraisal. 5th EDF. EDF REG 5717 A2d

#### MEMBER COUNTRIES OF CILSS

**Provisional survey of natural renewable resources in the Sahel.** Resp. Auth.: CILSS Secretariat. Estimated cost 6 mECU. EDF  $\pm$  2 mECU. Setting up of an observation unit to forecast crop production. Remote sensing by satellite, air survey and ground control. Project in execution. 5th EDF. EDF REG 5116 A8f

**Millet, maize, sorghum and niébé project.** Resp. Auth.: CILSS Secretariat. Estimated cost 2 mECU. To provide improved varieties for farmers. Local tests. Purchase of vehicles and equipment and to take charge for local tests control staff. Project stage: identification. 5th EDF. EDF REG 5116 A3a

#### MEMBER COUNTRIES OF U.A.P.T.

**Satellite telecommunications project.** Resp. Auth.: U.A.P.T. Secretariat in Brazzaville. R.P.C. Parametric study under way by national organizations of I, UK, F and D. Project stage: identification. 5th EDF. EDF REG 5307 A2c

#### EAST AFRICAN COUNTRIES

**Statistical training centre for Eastern Africa in Tanzania.** Resp. Auth.: Secretariat of the centre. 2.0 mECU. Widening of the capacity. Construction of class-rooms, offices and housing. Project stage: identification. 5th EDF. EDF REG 5311 A6b

**Kabale-Gatuna Road.** Resp. Auth.: Uganda Government. Estimated cost 2.5 mECU. Asphalted of the road (21 km) up to the Rwanda border. Study to be done: final dossier and tender documents. Short-list already drawn up. Project on appraisal. 5th EDF. EDF REG 5329 A2d

#### INDIAN OCEAN ACP COUNTRIES

**New and renewable energy programme.** Resp. Auth.: AIRDOI-COI. 1.7 mECU. Supply of gas-generators vehicles and wind-generators. T.A.: CREUFOP (F). Project in execution. 5th EDF. EDF REG 5503/80 A2a

#### DJIBOUTI-ETHIOPIA

**Djibouti-Ethiopia Railways. Phase II.** Resp. Auth.: CFDE (Compagnie du Chemin de Fer Djibouti-Ethiopie). Estimated total cost 28 mECU. EDF 15 mECU, France 13 mECU. Supply of rails, wagons and equipment. Int. tender foreseen in 86. T.A.: C. Lotti (I). Project in execution. 5th EDF. EDF REG 5301 A2d

#### CAMEROON — COTE D'IVOIRE — GHANA — MAURITIUS — SENEGAL — ZAIRE

**Strengthening of scientific and technical capacities in the field of food and nutrition in Africa.** Resp. Auth.: Association des Universités africaines. AUA. 1.5 mECU. T.A., training, supply of equipment, production and diffusion of scientific information. Project on appraisal. Date foreseen for financing decision January 86. 5th EDF. EDF REG 5054 A3a

#### KENYA — UGANDA — BURUNDI — RWANDA

**Turbo-Webuye Road.** Resp. Auth.: Ministry of Public Works, Kenya. 10.50 mECU. Works and supervision. Works: int. tender launched in May 85. Date financing decision November 86. 5th EDF. EDF REG 5334 A2d

#### AFRICAN COUNTRIES

**Campaign against rinderpest in African.** Resp. Auth.: OUA and IBAR. Estimated total cost for 2 years 50 mECU. Supply of equipment T.A. vaccines and research. Project on appraisal. Date foreseen for financing decision December 85. 4th and 5th EDF. EDF REG 5007 - 4085 A3a

#### S.A.D.C.C.

**Maseru Container Terminal.** Resp. Auth.: Lesotho GOL and SADCC. 1.350 mECU. Construction of container terminal and supply of containers, handling equipment. Study required: detailed design of works. Short-list already drawn up. Project on appraisal. 5th EDF. EDF REG 5421 A2d

#### MALAWI — ZAMBIA — ZIMBABWE

**Regional Tsetse and Trypanosomiasis Control Programme.** Resp. Auth.: Technical and financing responsibility: Zimbabwe national authorizing officer. 19.150 mECU. Works by direct labour. Vehicles, veterinary products, aerial spraying and equipments by int. tender. T.A. by direct agreement. Int. tender for vehicles and insecticides launched in October 85. Project in execution. 5th EDF. EDF REG 5420 A3a

#### MEMBER COUNTRIES OF CARICOM

**Regional hotel trade school in St Lucia.** Resp. Auth.: Caricom Secretariat. Estimated total cost 0.9 mECU. EDF 0.2 mECU. Work financed locally. EDF part: supply of pedagogical equipment, furniture and 1 vehicle. Project on appraisal. 5th EDF. EDF REG 5635 A6d

**Assistance for Point-Salines International Airport-Grenada.** Resp. Auth.: Caricom Secretariat and Grenada Int. Airport

Authority. EDF part 1.74 mECU, T.A. and supply of radio and electronic navigational equipment. T.A. by direct agreement. Equipment by int. tender. Date foreseen for financing decision 1st half 86. 5th EDF. EDF REG 5608 A2d

**Moko Disease Control.** Resp. Auth.: Windward Islands Banana Growers Association (WINBAN). 0.900 mECU. Works, supplies and T.A. Project in execution. 5th EDF. EDF REG 5675 A3a

#### CARIBBEAN AND ACP COCOA PRODUCERS

**Cocoa Research Unit (CRU), Phase II.** Resp. Auth.: CRU in Trinidad. 2.624 mECU. Works, supply of equipments and agricultural inputs, T.A. and training. Project in execution. 5th EDF. EDF REG 5043 A3a

#### ACP COUNTRIES

**T.A. to the ACP-EEC professional organizations (Association des Produits à Marché, APROMA).** 1.4 mECU. Further training, marketing improvement, development of concerted actions. Date financing decision December 85. 5th EDF. EDF REG 5052 A5d

## MEDITERRANEAN COUNTRIES

#### EGYPT

**Soil improvement programme in Ka-freeel-Sheikh Governorate.** Resp. Auth.: Executive Authority for Land Improvement Projects (EALIP). Provisional amount 8 mECU. To reclaim an area of 65 000 acres of saline soil, located in Hamoul district of the Kafre-el-Sheikh Governorate. Short-list already drawn up. Project in execution. MMI EGT 1001 A3e

**Egyptian Renewable Energy Development Organization. EREDO.** Resp. Auth.: Egyptian Government. EEC contribution 7.7 mECU. Construction and equipment for the centre. Works and supplies: int. tender with prequalification foreseen in 2nd half 85. T.A.: GET/KFA (D). Int. tender dossier: Phoebus (I). MMI EGT 1002 A2a

**Feasibility study for Thermal Power Station at Sidi-Krir.** Resp. Auth.: Egyptian Electricity Authority. Study for a 1200 MW thermal power station. Estimated cost 2 mECU. Short-list already drawn-up. MMI EGT 2004 A2a

**Export Promotion.** Resp. Auth.: Egypt Export Promotion Company (EEPC). T.A. to the EEPC. 0.920 mECU. Short-list already drawn up. Project in execution. MMI EGT 2005 A5e

**Kom-Ombo Soil Improvement Study.** Resp. Auth.: EALIP. 1 mECU. Project in execution. Short-list drawn up. MMI EGT 2003 A3e

**Animal feed improvement.** Resp. Auth.: Research Institute for Animal Production (RIAP) — Cairo. EEC Contribution 1.3 mECU. T.A., supply of equipment and training. T.A.: M. Barker (UK). Project in execution. MMI EGT 2001 A3a

## LEBANON

**Industrial planning and industrial census.** Resp. Auth.: Ministère de l'Industrie. 0.518 mECU. Foreign expert to supervise local experts for census. Mission in Lebanon 2 months EEC contribution covers all expenses for foreign expert and  $\pm 50\%$  of total cost of the project. Project on appraisal. MMI LE 1001 A1b

## ALGERIA

**Training for heavy industry.** Resp. Auth.: Ministère de l'Industrie Lourde (MILD). 3.9 mECU. T.A., training, supply of pedagogical equipment. Project on appraisal. MMI aL 2003 A6d

**Training for Ministry of Public Works.** Resp. Auth.: Ministère des Travaux Publics. Direction de la Formation. EEC contribution 2.75 mECU. T.A., training, scholarships and supply of pedagogical equipment. Project on appraisal. MMI AL 2002 A6d

**Support to the «Ministère de l'Enseignement supérieur et de la recherche scientifique» (MESRS).** Resp. Auth.: MESRS. 2.2 mECU. Training and supply of scientific equipment and T.A. Project on appraisal. MMI AL 2004 A4g

## TUNISIA

**Participation in creating 3 Training Vocational Centres: in Nabeul, Menzel-Bourguiba, Zaghuan.** Resp. Auth.: O.T.T.E.E.F.P. (Office des Travailleurs Tunisiens à l'Étranger de l'Emploi et de la Formation Professionnelle.) EEC Contribution 3.87 mECU. Supply of equipment, T.A. and training. Supplies: int. tender for Nabeul foreseen in 1st half '86. T.A.: A.A.B. (D). MMI TUN 1001 A6d

**Experimental station to compost household refuse in the city of Tunis.** Special hunger programme. 0.800 mECU. T.A.: Short-list done. Project in execution. 958-TUN 0001 A2a

**Date-palm plantations study project in Régime Maatoug.** Resp. Auth.: Banque Nationale de Dév. Agricole (B.N.D.A.). 1.9 mECU. Feasibility study, drillings and access roads. Works by direct labour. Study: Short-list done. Project on appraisal. MMI TUN 2001 A3a

**Rural credit project to benefit small holders.** Resp. Auth.: B.N.D.A. Estimated cost 16 mECU. Project on appraisal. MMI TUN 2002 A3a

**Water resources research and training study.** Resp. Auth.: Ministère de l'Agriculture. 1.0 mECU. Supply of soil equipment and data system. T.A. and training. Project on appraisal. MMI TUN 2004 A2b

**Evaluation of soil resources and their liability to desertification in Southern Tunisia.** Resp. Auth.: Ministère de l'Agriculture. Estimated cost 1.2 mECU. EEC 0.400 mECU, local 0.800 mECU. T.A. and training. Supply of specialized equipment. Project on appraisal. MMI TUN 2005 A3c

★ **Management improvement in the public irrigated areas in Tunisia.** Resp. Auth.: Ministère de l'Agriculture. EEC contribution 2 mECU. Rehabilitation of hydro-electric equipment, training and T.A. Project on appraisal. MMI TUN 2006 A3A

★ **T.A. to the "Unités Coopératives de Production Agricole (U.C.P.A.).** Resp. Auth.: B.N.D.A. 1.800 mECU. T.A., training and supply of equipment. Project on appraisal. MMI TUN 2007 A3a

## JORDAN

**Research Programme into Agricultural Production in the semi-arid zones and areas suffering from desertification.** Special hunger programme. 0.700 mECU. Project in execution. 958-JO 0001 A3a

**Yarmouk University — Faculty of Science.** Resp. Auth.: University of Yarmouk. 2.5 mECU. Supply of equipment for laboratories by int. tender launched in October 85. T.A. by restr. tender: short-list done. Project in execution. MMI JO 2001 A6c

**Business training centre at Sahab.** Resp. Auth.: Vocational Training Corporation. 1 mECU Supply of equipment, T.A. and training. Supplies: int. tender launched in July 85. Project in execution. MMI JO 2003 A6a

**Faculty of Engineering and Technology, University of Jordan, Phase II.** 2 mECU. Supply of equipment, A.T. and training. T.A.: M. Van Ryckegem (B). Project on appraisal. Date foreseen for financing decision 1st half 86. MMI JO 2002 A6a

## SYRIA

**ISSAT. Institut Supérieur des Sciences Appliquées et de Technologie.** Resp. Auth.: State Planning Commission. Estimated total cost 22.2 mECU. EEC part: supply of teaching and training equipment for the institute. Project on appraisal. MMI SYR 2002 A6b

**Euphrates drainage and irrigation.** Resp. Auth.: Ministry of Irrigation. General Organization for land development (GOLD). Estimated total cost 134.9 mECU. EEC 10 mECU, EIB 20 mECU, local 104.9 mECU. Works, supplies and T.A. Project in execution. MMI SYR 2003 A3a

**Rural Water Supply Suweida Region.** Resp. Auth.: Ministry of Local Administration and Ministry of Housing and Utilities. Estimated total cost 8.1 mECU. EEC 3.2 mECU, local 4.9 mECU. Project in execution. MMI SYR 2001 A2b

# Non-associated developing countries

## ANGOLA

**Assistance to the fishing and fish-processing industry in the Namibe Province.** Resp. Auth.: Ministerio das Pescas. EEC 4.250 MECU. Supply of equipment and T.A. Project on appraisal. Date foreseen for financing decision December 85. ALA ANG 8415 A3d

**Rural Water supply.** Resp. Auth.: Ministère de l'Industrie et des Ressources Naturelles. HYDROMINA. Parallel cofinancing with UNICEF. EEC contribution 2.250 mECU. Study, T.A. and supply of hand-pumps, tubes, drilling equipment, vehicles. Date financing decision October 85. ALA ANG 8425 A2b

## MOZAMBIQUE

**Rural development in the Moamba District.** Resp. Auth.: Ministerio da Agricultura. Estimated total cost 9.15 mECU. EEC 7.5 mECU. Supply of equipment, rural inputs and T.A. Project on appraisal. Date foreseen for financing decision 1st half 86. ALA MOZ 8333 A3a

**Environmental conservation measures: fight against tse-tse infestation.** 1.5 mECU. Special hunger programme. Project in execution. 958-MOZ A3a

**Fishery development and rehabilitation.** Resp. Auth.: Secrétariat d'état pour la pêche. Total estimated cost 8.885 mECU. EEC 7.4 mECU. Supply of equipment and T.A. Date financial decision December 85. ALA MOZ 8507 A3d

## BANGLADESH

**Small-scale irrigation sector project.** Resp. Auth.: Bangladesh Water Development Board (BWDB). Estimated total cost

82 mECU. EEC contribution 12 mECU. Cofinancing with ADB (Asian Dev. Bank). Works, supply of equipment and vehicles, T.A. and supervision. Works: acc. tender. Supplies: int. tender, 1st half 86.  
ALA BD 8112 A3a

**Building of storage for fertilizers.** Resp. Auth.: Bangladesh Agricultural Development Corporation (BADC). Cofinancing: EEC and Netherlands. Total cost 4 mECU. EEC 2 mECU Netherlands 2 mECU. EEC part: Works by int. tender. Netherlands part: buildings and T.A.  
ALA BD 8201 A3f

**Rangpur. Rural Development Programme.** Resp. Auth.: Central Coordination Committee. (CCC). Total cost 40 mECU. EEC 25.5 mECU, NL 7 mECU, local 6 mECU. Works by acc. tender. Supplies by int. tender or direct agreement. Project in execution.  
ALA BD A3e

**Cotton Development. Phase II.** Resp. Auth.: Central Coordination Committee (CCC) and Cotton Development Board (CDB). EEC 4.9 mECU. Supply of T.A. training and equipment. Date financing decision December 85.  
ALA BD 8504 A3a

## CHINA (PEOPLE'S REP.)

**Fruit Cultivating and Preservation Techniques.** Estimated total cost 4.350 mECU. EEC 1.650 mECU. Cofinancing with Italy. T.A. and transfer of technology. T.A.: Applies: B.D.P.A. (F). Citrus: Media Coop (I). Project in execution.  
ALA CHN 8337 A3a

**Flood forecasting and management of Beijiing River.** Estimated total cost 5.5 mECU. EEC 1.7 mECU T.A. and transfer of technology. Project in execution. Prequalification launched in October 85.  
ALA CHN 8338 A8g

**Prawn farming development.** Estimated cost 0.700 mECU. Supplies and T.A. T.A.: Fish Farming Int. (UK). Project in execution.  
ALA CHN 8341 A3d

**Hainan Cashew Development.** Resp. Auth.: Prefecture of the Autonomous Department of Li and Miao National Minorities. Estimated total cost 2.350 mECU. EEC 0.800 mECU. Supply of equipment and T.A. T.A.: K.I.T. (NL). Project in execution.  
ALA CHN 8340 A3a

**Vegetable Seedling Production in Beijing.** Estimated cost 1.2 mECU. Supplies and T.A. T.A.: Oranjewoud (NL). Project in execution.  
ALA CHN 8339 A3a

## INDONESIA

**Bali Irrigation Sector Project.** Resp. Auth.: Ministry of Public Works. DG for Water Resources Development. EEC 12 mECU. ADB ± 37 mECU. Local ± 55 mECU. Rehabilitation and expansion of 50 village-level irrigation schemes, establishment of a

water-management training centre, and establishment of climatological stations. T.A. Works: acc. tender.  
ALA IND 8114 A3a

**Provincial Irrigation Development (Western and Central Java).** Resp. Auth.: D.G.W.R.D. Estimated total cost 423.6 mECU. EEC 26.3 mECU, World Bank 232.6 mECU, local 164.7 mECU. EEC part: dam construction and T.A.: study, execution project and tender dossier. Prequalification for dam construction launched in August 85. Project on appraisal. Date foreseen for financing decision February 86.  
ALA IND A3a

## INDIA

**Development of Water Control Systems for diversification of crops in Maharashtra.** Resp. Auth.: Irrigation Department of the Government of Maharashtra. EEC contribution 15 mECU. Works, supplies, T.A. and training. Project in execution.  
ALA IN 8418 A3a

★ **Supply of fertilizers.** Resp. Auth.: Minerals and Metals Trading Corporation of India (MMTC). 45 mECU. Supply of urea by int. tender. Project on appraisal. Date foreseen for financing decision February 86.  
ALA IN 8512 A3a

## YEMEN

**Seed production centre.** Estimated cost 5.8 mECU. Project in execution.  
ALA YAR A3a

## PAKISTAN

**Karachi fishing port.** Resp. Auth.: Fishery department of the Sind Province. Estimated cost 12 mECU. New facilities: quay, boat repair yard, fish-shed, dredging. Rehabilitation of existing facilities, equipments and TA. TA: Prof. Dr. Lockner & Partners (D). Works and supplies in 86.  
ALA PAK 8101 A3d

**Irrigation project in Palli and Lehri.** Resp. Auth.: Department of Irrigation and Agriculture Baluchistan Provincial Government. Estimate ± 10 mECU. Works and infrastructures. Studies for the execution and supervision of works. Project on appraisal. Date foreseen for financing decision 1st half 86.  
ALA PAK 8422 A3a

## NEPAL

**Nepal Administrative Staff College. NASC.** Resp. Auth. NASC Secretariat. Estimated total cost 6.5 mECU. EEC 5 mECU, U.K. 1.5 mECU. Renovation and construction works, supply of equipment and training. Project on appraisal. Date foreseen for financing decision 1st half 86.  
ALA NEP 8407 A6b

**Soil and water conservation in Bagmati Watershed.** Special hunger programme. 5.5 mECU. Project in execution.  
958-NEP 8401 A3a

## BHUTAN

**Water supply.** Resp. Auth.: Inter dep. Commission on water and sanitation. Works by direct labour. 4.5 mECU. Supplies int. tender or direct agreement. T.A.: UNICEF. Project in execution.  
ALA BHU A2b

## THAILAND

**Oilseed crop development programme.** Resp. Auth.: Ministry of Agriculture — Oilseed Project Steering Committee. Total estimated cost 4.2 mECU. EEC 3.3 mECU. T.A. and supply of equipment. T.A.: Crown Agents (UK).  
ALA TH 8203 A3a

**Mae Nam Chi River Basin. Water Management Development.** Resp. Auth.: Ministry of Agriculture and Cooperatives. Royal Irrigation Department. Estimated total cost 5 mECU. EEC 4 mECU. Supply of equipment, T.A. and training. Project in execution.  
ALA TH 8412 A3a

**Strengthening of planning capacities for diversification and rural development.** Resp. Auth.: Ministry of Agriculture and Cooperatives. 2 mECU. T.A. for coordination, management, training needs, project identification and planning. T.A. for central and peripheral computer system for rural areas. Training and supply of computerized equipment. Short-list done. Project in execution.  
ALA TH 8420 A3a

**Rural credit and rubber planting.** Resp. Auth.: Ministry of Agriculture and Cooperatives. 35 mECU. Supply of lines of credit, T.A., training, rural inputs, equipments. Project on appraisal. Date foreseen for financing decision December 85. Int. tender for fertilizers launched in November 85 (conditional).  
ALA TH 8509 A3a

## NICARAGUA — HONDURAS

**Bridges reconstruction.** Resp. Auth.: Ministry of Public Works. 3.2 mECU. Reconstruction of 3 bridges. Works, T.A. and site supervision. Date foreseen for financing decision 1st half 86.  
ALA NI 8209 A2d

## MEMBER COUNTRIES OF PACTO ANDINO

**Technical cooperation (industry and economic planning).** Resp. Auth.: Junta del Acuerdo de Cartagena, Lima-Peru. Estimated total Cost: 1.7 mECU. EEC 1.1 mECU. To place experts, equipment and T.A. and training at Junta's disposal. Contracts, T.A. and experts by the Junta and the EEC.  
ALA JUN 8107 A4a

**Andean Programme for technological development (Rural PADT).** Resp. Auth.: Junta del Acuerdo de Cartagena, Lima-Peru. Estimated total Cost: 7.560 mECU. EEC 3.927 mECU. Supply of equipment, training and T.A. Vehicles purchase: int. tender. T.A.: Short-lists to be drawn up by the EEC and decision by the Junta.  
ALA JUN 8108 A3a

**Regional programme for technical cooperation: food strategy.** Resp. Auth.: JUNAC. EEC contribution 7 mECU for European T.A. and supply of data-computerized equipment by int. tender. Project in execution.  
ALA JUN 8406 B1a

**Regional programme for technical cooperation: industry and sub-regional exchanges.** Resp. Auth.: JUNAC. EEC Contribution 7 mECU. T.A. and supply of equipment. Project in execution.  
ALA JUN 8503 A4a

**COSTA RICA — HONDURAS — NICARAGUA — PANAMA — DOMINICAN REPUBLIC**

**Latin American qualified nationals reinstatement in 5 Central American countries.** Resp. Auth.: CIM (Comité Intergouvernemental pour les migrations). 1.4 mECU. Reinstatement of 75 qualified nationals via CIM. Date foreseen for financing decision 1st half 86.  
ALA CIM 8302 A8b

**COLOMBIA**

**Reconstruction Programme.** Resp. Auth.: Corporation de Reconstruction de Cauca. Total cost 5.9 mECU. EEC 3.9 mECU. EEC part: supply of materials and T.A. Project in execution.  
ALA CO 8403 A8a

**BANCO CENTRO-AMERICANO DE INTEGRACION ECONOMICA**

**Support for SME in Central America.** Project on appraisal. Date foreseen for financing decision 1st half 86.  
ALA BCI 8414 A4a

**DOMINICAN REPUBLIC**

**Integrated rural development pilot project in Western Cibao.** 6 mECU. Special hunger programme. Project in execution.  
958-DO 8402 A3a

**COSTA RICA**

**Productive projects programme for refugees in Costa Rica.** T.A. and line of credit. 3.6 mECU. Project in execution.  
ALA CR 8501 A8b

**Integrated rural development of the region of OSA/GOLFITO.** Total cost 21.635 mECU. EEC 9.95 mECU. Supply of equipment, infrastructural works, maintenance, lines of credit and T.A. Date financing decision November 85.  
ALA CR 8506 A3a

**PANAMA — COSTA RICA — NICARAGUA — HONDURAS — EL SALVADOR — GUATEMALA**

**Regional programme of technical cooperation for food security.** Resp. Auth.: CADESCA (Comité de acción para el desarrollo económico y social de centroamerica — Panama). Total cost 9.07 mECU. EEC 4.82 mECU, France 0.350 mECU, local 3.9 mECU. T.A. training and supply of equipment. Date financing decision November 85.  
ALA REG 8505 A3a

**ECUADOR**

**Rural development in the region of the Chambo river.** Resp. Auth.: Institut Equatorien des Ressources Hydrauliques (INERHI). EEC 9 mECU. T.A. and training, irrigation works, line of credit, supply of equipment. Project on appraisal. Date foreseen for financing decision December 85.  
ALA REG 8508 A3a

## INTERNATIONAL CALLS FOR TENDER

All international calls for tender (int. tenders) referred to in this Operational Summary are notified in due time in the Official Journal (O.J.) of the European Communities' «S» supplement.

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David C. JONES — **Municipal Accounting for Developing Countries** — The Chartered Institute of Public Finance and Accountancy, 3 Robert Street, London WC2N 6BH — 900 pages — £ 20 — 1984

The Chartered Institute of Public Finance and Accountancy, London and The World Bank, Washington DC, have combined to publish the first comprehensive training manual for municipal accountants in developing countries.

The objective of this book is to help make good the dearth of training available for prospective local government accountants in developing countries and to contribute towards the improvement in financial systems within municipalities, many of which have responsibilities for the provision of essential services such as education, highways, health care, water and sanitation and power. Improved financial management can result in additional resources being made available for these, with resultant development benefits.

"Municipal Accounting for Developing Countries" is based on training material developed by the author, David Jones in Uganda. Starting from basic accounting principles such as double entry bookkeeping and journal entry, students are taken on to more advanced concepts, such as depreciation and budgeting, and those specific to public sector finance, such as loans pooling and non-trading accounts. The book is designed to enable students, with the minimum of formal supervision, to reach a level of competence and understanding where they are ready to advance to full accountancy training. Its packaging and pricing are designed for its market: the cost of its durable protective cover has been offset by word processing, rather than typesetting, its 900 pages.

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E. A. BRETT — **The World Economy since the War: the politics of uneven development.** Macmillan Publishers Ltd, Houndmills, Basingstoke, Hampshire, UK — 1985

In the 1950s and 1960s theorists generally assumed that the world economy was developing along stable and increasingly integrated lines and that the survival of an open and inter-

dependent world economic system depends upon the adequate functioning of key international agencies. Since then we have experienced a collapse of faith in the dollar, intensified exchange-rate instability, growing protectionism, the further marginalization of vast populations in the third world, and a debt crisis threatening the banking system and the viability of major third world economies.

Dr Brett provides both a critical introduction to the substance of contemporary international economic relations and an outline of the major theoretical positions and debates of the post-war period. The three core sections of the book analyse in detail the development and transformation of international organizations through the post-war boom and the ensuing recession, the changing strengths of the capitalist countries — in particular the decline in Britain and the USA in relation to West Germany and Japan — and the evolving crisis of development experienced by the mass of the world's population in the so-called "Third World".

The increasing diversity of the world economy with the emergence of "Newly Industrializing Countries" (or NICs), and the new-found wealth of the major third world oil producers, is taken fully into account, as is the looming crisis of indebtedness on an international scale and the threat of major financial collapse.

The book concludes with a discussion of alternative strategies within socialist tradition and of the political and economic changes required to lay the basis for a fairer and more stable international order.

Dr Brett is reader in Political Science at the University of Sussex.

○○○

Natan ELKIN — **Droit et Pratique des Préférences Généralisées.** Ciaco Editeur (Ave. Einstein 9, B-1348 Louvain-la-Neuve — Belgium) — 313 pages — 980 BF — 1985

This work is by an Argentinian lawyer who was resident in Belgium from 1976 to 1983, and is the result of a doctoral thesis handed in to the law faculty of the Université Catholique de Louvain in May 1983. After a historical section on the forerunners of generalised preferences, the author goes on to examine the main elements of the system, its legal scope, its operation, its place in the European Community's policy on trade, and also its principles and what it has achieved in institutional terms.

In his conclusions, Mr Elkin takes the view that examination of the functioning of safeguard measures illustrates that the preferential system is an instrument which is solely under the control of the donor countries. In particular, the example of the Community shows that the difficulty experienced by the Member States in reaching balanced compromises results in decisions taken at the expense of the interests of third countries. He adds that other preferential schemes, including that of the United States in particular, are also inadequate. The author feels that the future of the system depends primarily on possibilities for finding more efficient means to establish a new international economic order.

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