

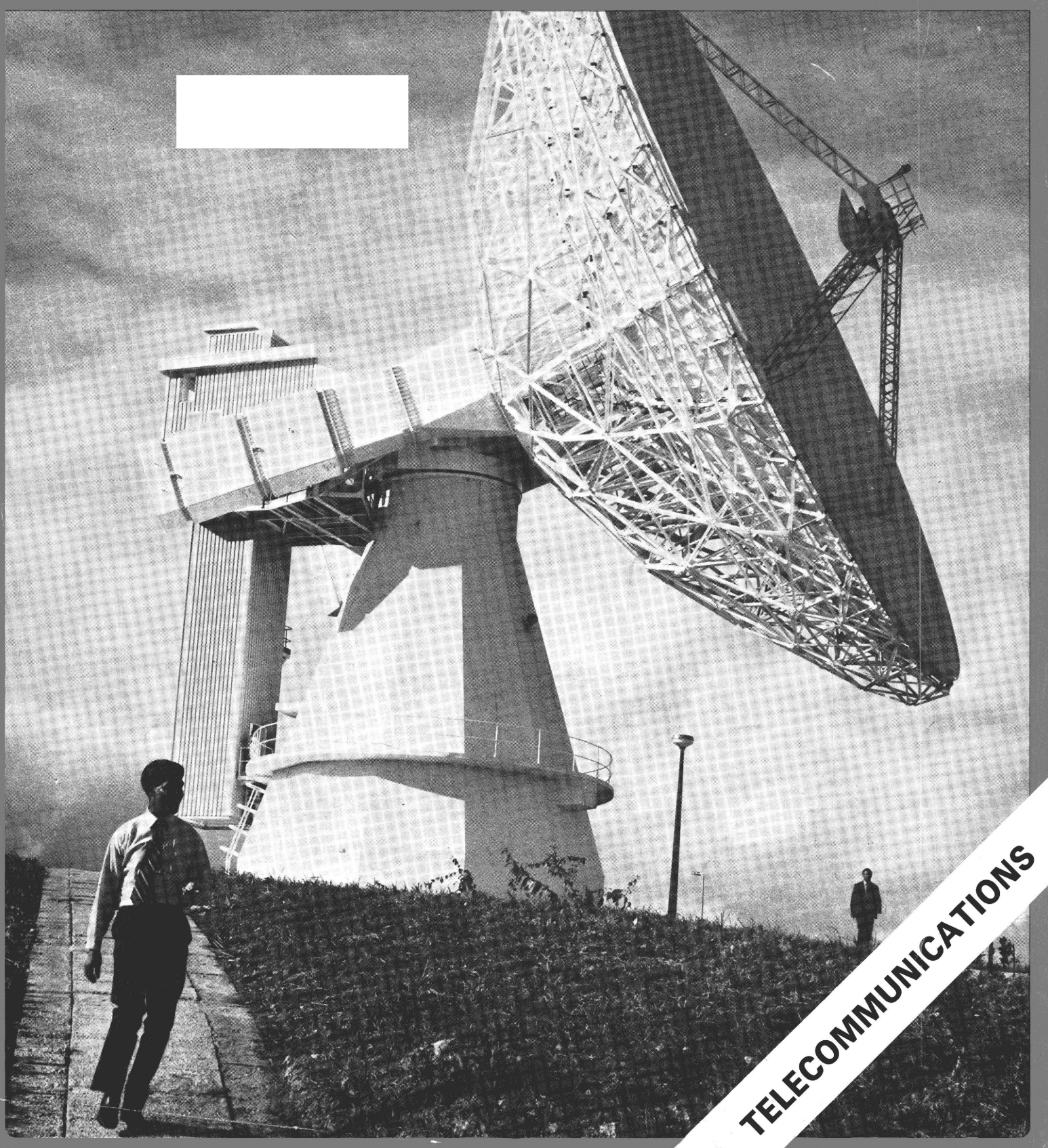


the courier

AFRICA-CARIBBEAN-PACIFIC—EUROPEAN COMMUNITY

Published every two months

No 77 — JANUARY-FEBRUARY 1983



TELECOMMUNICATIONS

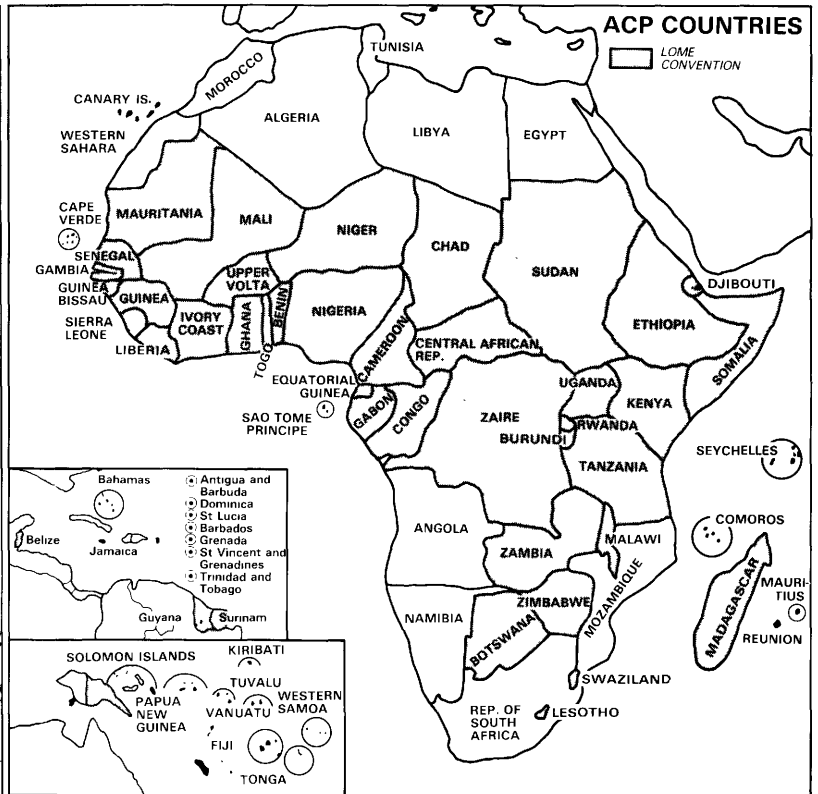
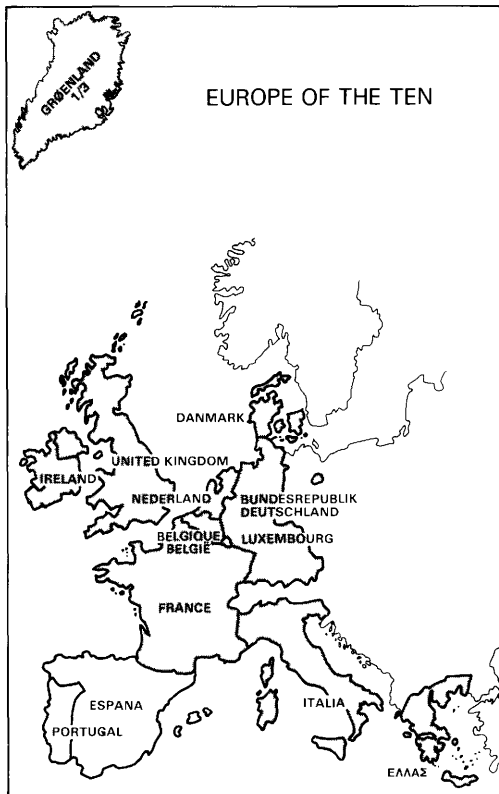
**THE EUROPEAN
COMMUNITY**

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DENMARK
FRANCE
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NETHERLANDS
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Best wishes for 1983

THE ACP STATES

ANTIGUA AND BARBUDA
BAHAMAS
BARBADOS
BELIZE
BENIN
BOTSWANA
BURUNDI
CAMEROON
CAPE VERDE
CENTRAL AFRICAN
REPUBLIC
CHAD
COMOROS
CONGO
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DOMINICA
EQUATORIAL GUINEA
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FIJI
GABON
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NIGERIA
PAPUA NEW GUINEA
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ST. LUCIA
ST. VINCENT & GRENADINES
SAO TOME PRINCIPLE
SENEGAL
SEYCHELLES
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SOMALIA
SUDAN
SURINAM
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TOGO
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WESTERN SAMOA
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ZAIRE
ZAMBIA
ZIMBABWE



FRANCE

(Overseas departments)

Guadeloupe
Guiana
Martinique
Reunion
St Pierre and Miquelon

(Overseas territories)

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

NETHERLANDS

(Overseas countries)

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

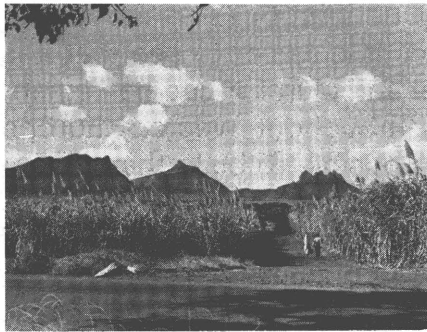
UNITED KINGDOM

(Overseas countries and territories)

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

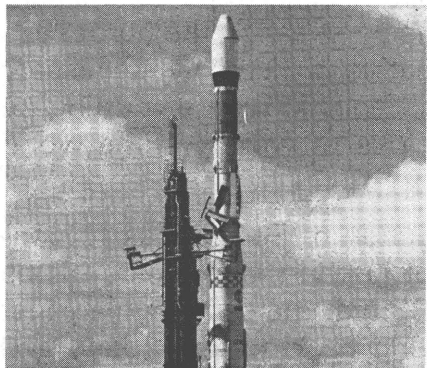
This list does not prejudice the status of these countries and territories now or in the future.

ACP-EEC — The ACP-EEC Consultative Assembly met, for the first time outside Luxembourg, in Rome from 3-5 November 1982, shortly after its Joint Committee had completed three days of deliberations in the Italian capital. On the agenda were notably the Vergeer report on the implementation of the Lomé Convention and the Chasle report on cultural cooperation. These provided parliamentarians from both sides with the opportunity to demand radical changes in ACP-CEE relations. **Page 3**



Mauritius — A cocktail of three continents, Africa, Asia and Europe, Mauritius seems cast away in the Indian Ocean. On 11 June 1982 elections were held in Africa's most far-flung country and the Mauritians took a clear option on a socialist solution to the stagnation of their once booming economy, still dominated by sugar. Prime Minister Aneerood Jugnauth and finance minister Paul Bérenger, the driving force behind Mauritius' pragmatic socialism, explain the priorities and policies of the new-left wing governmental alliance. **Page 13**

Europe — Following initiatives from the ACP side, the ACP-EEC Joint Committee now has a working party studying ways of promoting ACP-EEC cultural cooperation. The question of ACP students and workers in the EEC was added to its tasks as a result of a request by the ACP Council of Ministers. Two documents, both by ambassador Chasle of Mauritius, have already been produced. Both look at the problems of ACP students and migrant workers. The *Courier* asked Amédée Turner, chairman of the working party, what progress had been made so far in this area. **Page 33**



Dossier — 1983 is World Communications Year. Every country is to analyse its communications policy, at a time when the remarkable possibilities of information technology are becoming apparent outside the laboratory. If developing countries were fully linked into the world's media networks, would they be better able to assert themselves or swamped by foreign broadcasts? This dossier looks at some aspects of telecommunications for the developing world. **Page 38**

The arts — The new memorandum on the Community's development policy mentions "the cultural aspects of development" among such primary objectives as self-reliance and food self-sufficiency. Yet cultural cooperation involves intangible values which overseas aid is seldom designed to foster. There was some hard thinking on the subject in Italy recently, at a meeting organized by the Académie mondiale pour la paix on the theme of "a new cultural order: the case of EEC-ACP relations". **Page 71**



THE COURIER

**AFRICA - CARIBBEAN - PACIFIC
— EUROPEAN COMMUNITY**

No 77 — January-February 1983

CONTENTS

2. Editorial: By way of a New Year greeting
3. **ACP-EEC**: Consultative Assembly in a radical mood
8. **CID**: Agro-food conference

AFRICA - CARIBBEAN - PACIFIC

13. **Mauritius**: Interview with the Prime Minister
18. Stirring up a stagnant economy
26. Interview with the finance minister
30. EEC-Mauritius cooperation

EUROPE

33. ACP students and migrant workers in the EEC — interview with Amédée Turner MEP
36. Books about Europe
38. **DOSSIER: Telecommunications**
40. World Communications Year 1983
43. "There is an urgent need to develop telecommunications": interview with Mohamed Mili
47. Telecommunications: the changing techniques
50. Solar-powered telecommunications for remote areas
52. Energy from space
53. Educational video
54. Panaftel 20 years on
57. Telecommunications and socio-economic development
59. Bringing better communications to the developing world

62. EDF aid for telecommunications
64. Examples of EDF projects: Air navigation in the Indian Ocean
65. Mano River Union
66. WCY 1983 and the ACP countries — some case studies — Bahamas, Fiji and Swaziland

DEVELOPING WORLD

68. "Afrika Verein" — a service for German industries involved in African development
69. Transfer of technology and cultural identity in the Third World

EDF PROJECTS

70. Brain drain in reverse

THE ARTS

71. Cultural cooperation: the Val d'Aosta seminar
73. European museum of the year award goes to Greece
74. Books

NEWS ROUND-UP (yellow pages)

CID INFORMATION (pink pages)

OPERATIONAL SITUATION

(blue pages)

By way of a New Year greeting

The year that has just come to a close was a bicentenary that passed almost unnoticed. In 1782, a Scottish engineer, James Watt, invented the steam engine. It is not really oversimplifying things to say that until then, our civilizations had been essentially rural—after all, the greatest speed a man had ever travelled was on horseback. In 1782, a new era began, the industrial revolution, a revolution that is still going on and has speeded up history, for better or for worse, in a fascinating manner.

So it is no exaggeration to say that, with Watt's invention, the Europeans made a deep mark on the history of the world for the second time. The first time was in the 15th century when the planet was launched into the great adventure of maritime discovery. Will there be a third time? Those who do not believe so cite Alexis de Toqueville who ended his famous work on democracy in America in 1835 with the prophetic vision of two great peoples, the Russians and the Anglo-Americans, working their way down separate paths from separate beginnings to the same goal—a share in the management of the planet. Europe's primacy would gradually fade.

In this second half of the 20th century, we are forced to admit that 50 years of war and economic crisis make it look as though Toqueville was right and that the economic and political centre of gravity of the world that Europe used to be has gradually become a group of second rate powers. If the trend continues, then Toqueville's prophesy will come true—and we will be there to see it. But the optimists point out that there was an improvement in Europe after the Second World War that made economic renewal possible; it brought about an exceptional improvement in standards of living and the gradual development of European unification, resulting, after the Messina Conference, in the signing of the

Treaty of Rome on 25 March 1957. Yet another anniversary—25 years ago.

In a previous editorial, we mentioned Gaston Thorn's recent call for another Messina Conference. And it is true that reminders of the past can help us with building the future. Now, 25 years on, it is easier to see that it is universal suffrage and pluralist and parliamentary democracy throughout western Europe that has made it possible to build that exceptional enterprise, the European Community, and that has acted, as it were, as a kind of cement. Democracy, which has always been a luxury and is still a rarity in the world today, was the fundamental ideological link between the states that signed the Treaty of Rome in 1957. And it is the fundamental link in the Community of the Ten today.

The European Community is founded on mutual consent, on a willingness to join together that the governments, parliaments and people freely express. The future will tell Europe how far its march to unity will go and what forms it will take. Going beyond the strictly quantifiable balance of advantages and drawbacks resulting from the Treaty of Rome and Community achievements, solidarity must increasingly appear to the Europeans as something that is a humanly necessary and economically realistic way of putting an end to Europe's loss of weight in the world today.

So the construction of Europe has to continue and it is not just in the interests of the Europeans in 1983 that the campaign against hunger in the world has to gain ground and the negotiations for a convention to take over from Lomé II must begin. For how is it possible to devise an external policy for a dynamic Europe of the Ten, in particular towards the developing countries, if the internal construction of the Community is standing still? ◦

ALAIN LACROIX

Consultative Assembly in a radical mood

The meetings of the ACP-EEC Consultative Assembly have always provided parliamentarians of both sides with opportunities to snipe at those aspects of the Lomé Convention they feel are malfunctioning. None, however, has had a more radical tone than the one that took place in Rome on 3-5 November 1982.

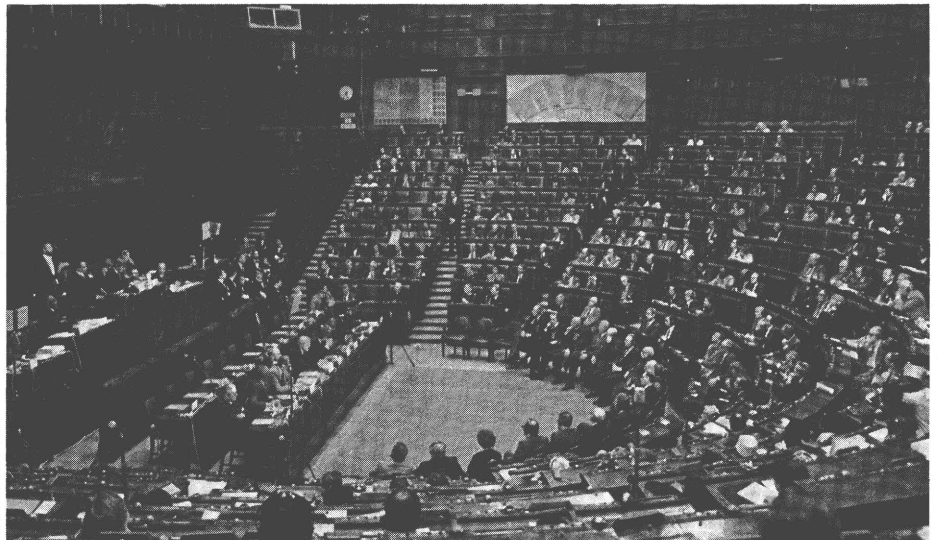
On the agenda were, notably, the Vergeer report on the sixth annual report of the ACP-EEC Council of Ministers for the period 1 April to 31 December 1981, and an analysis of the early experience of Lomé II; the Chasle report on cultural cooperation; the Ferrero report on the fight against hunger; the Harare (Zimbabwe) resolution on southern Africa; and the Saddig report on energy cooperation.

Co-chaired by Pieter Dankert, president of the European Parliament, and his newly-elected ACP counterpart, Mr Kolane, speaker of the Lesotho national assembly, the solemn session of the meeting was attended by Italian president Sandro Pertini. Pope Jean-Paul II, on a tour of Spain, sent a message expressing his "personal best wishes" to the Assembly and assuring it of his "deep interest" in its deliberations:

Earlier, the Joint Committee of the Consultative Assembly had sat from 1 to 3 November noon, preparing the various motions for resolution. Although such items as the situation in southern Africa, which had been passed in Harare in February 1982, and the Ferrero report on the fight against hunger were expected to be summarily dealt with, they took several hours to go through, the first as a result of the European democratic group move to stall its provisions on sanctions against the apartheid regime, and the second as a result of its emotive nature.

The Vergeer report

There was, however, no doubt that the cynosure of the conference was the Vergeer report, which was commissioned in September 1981 and of which the release in October 1982 came as a great surprise, even to critics of the Lomé Convention. It denounces the sixth annual report of the ACP-EEC Council of Ministers as vague and containing no "specific indications as to possible solutions to current problems" and criticises,



The Consultative Assembly in plenary session in Rome

among other things, several aspects of the Lomé Convention, particularly trade and Stabex.

The report says that, even under Lomé II, the ACP-EEC trade pattern has remained unchanged notwithstanding the free access to the Community market the Convention grants to ACP products, which, it notes, are made up "overwhelmingly" of raw materials. It therefore calls for ACP exports to the EEC to include finished products in the industrial, commercial and agricultural sectors and for the Community to observe "scrupulously" the provisions of the Convention relating to access of ACP industrial products, including textiles. The report also calls on the EEC to consider trade promotion as covering "all exports from ACP countries to the Community, to third

countries, and to other ACP states".

As for Stabex and Sysmin, the report deplores the shortcomings of the available resources, calling for substantial increases in appropriations to meet transfer requirements and for an expansion of the list of products covered by Stabex. It draws the attention of the Community to the Carajas steel project in Brazil, to which the EEC is contributing, warning that this should not be allowed to have negative effects on the implementation of Sysmin and the exploitation of ACP mineral deposits.

The report touches on industrial and cultural cooperation, which are themselves the subjects of other reports, to the extent that the authors, Mr Fuchs (French socialist) and ambassador Afolabi of Nigeria, raised objections to the paragraphs dealing with industrial cooperation. Their objection was based on the suspicion that the Vergeer report could divert attention from theirs, the progress report of which Mr Fuchs gave the Assembly in a speech that gave a lucid analysis of the difficulties facing the development of industries in the ACP states.

It should be noted that the Vergeer report was drawn up exclusively by Europeans, if not by one man: Mr Vergeer is a Dutch Christian democrat. The sharpness of the report's criticism so much astonished ACP

delegates that their silence over the report at the opening session of the Joint Committee was attributed to it. Mr Victor Michel (*) (Belgium Christian democrat) was somewhat taken aback by this silence. In fact he took the floor to ask the ACP group to comment on the report, but received no significant response.

What many did not realize was that the majority of the ACP delegates received the report too late to have a detailed examination of it. This they were able to do overnight on 1 November. By the deadline for the deposition of amendments the following day the co-chairmen of the Joint Committee, Giovanni Bersani (Italian Christian democrat) and Francis Butagyira, speaker of the Ugandan parliament, had received some 130 amendments. Inevitably a hot debate ensued, probably one of the hottest the Committee has seen in recent years. There were calls for the postponement of the resolution, perhaps until the meeting in Jamaica in May 1983, but the suggestion by Nigeria's ambassador Afolabi, supported by Victor Michel and Bruno Ferrero (Italian communist) to have the amendments examined by a working group, carried the day. It was felt that the Vergeer report was too important for deferment. When the Committee reconvened the following morning the amendments had been whittled down to 60 and, in the vote that followed, a number of amendments were approved. Others, notably those relating to industrial and cultural cooperation and training, were rejected on the ground that, far from being a diversion, they reinforce the importance of these areas in EEC-ACP relations.

Pisani on Vergeer

The debate on the Vergeer report was marked by the very much appreciated intervention of EEC development commissioner Edgard Pisani.

After regretting the absence of consultation with Commission officials while the report was being prepared, a consultation that he believed would have cleared up a number of points and thus avoided errors, Mr Pisani went on to answer the issues raised in the report.

(*) Mr Michel died in Brussels shortly after returning from the conference.

On the criticisms levelled against the EDF, the commissioner pointed out that the figures of commitments and disbursements under Lomé I and II can be misleading. They do not present the true picture of the situation. As of 30 September 1982, he said, the percentage of commitments under Lomé I was 95% of programmable

funds, of which 63% has been disbursed. Under Lomé II, commitments were 25% and 10% disbursed. These were average figures which, when analysed, revealed a different picture. There are ACP countries, Mr Pisani said, which, because they have either been affected by serious crisis or have adopted defective systems of programming, have not reached a high level of commitment. There were others, on the contrary, who have mastered their indicative programmes and for which commitments have, in fact, reached 60%. "I believe the blame should not be laid solely on the European Commission", he said. "We must have the courage to recognize that the faults

are attributable to both the long procedure foreseen by the Convention and to the difficulties that some countries have in mastering their own indicative programmes".

On Stabex, Mr Pisani analysed the situation in a similar fashion. "There are countries whose situations are relatively satisfactory and there are some whose situations are serious", he said. With regard to those that are experiencing difficulties, Mr Pisani distinguished two categories. "In the first are countries whose production capacities have considerably increased and which, in consequence, are penalized by Stabex. I mention in particular the Ivory Coast, which has



The co-presidents Pieter Dankert, Dutch president of the European Parliament (right), and J.T. Kolane, speaker of the Lesotho national assembly



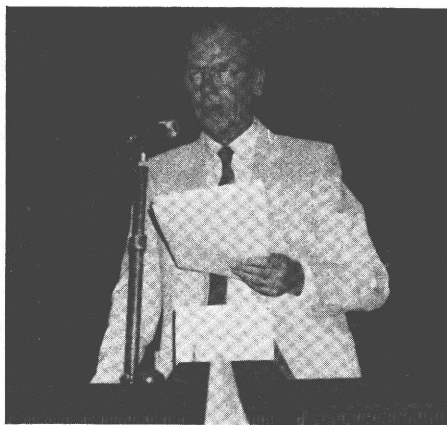
Pieter Dankert, president of the European Parliament (left) with President Pertini of Italy, and Nilde Iotti, president of the Italian chamber of deputies

engaged in an export drive in such a way as to rule itself out from benefiting from Stabex". Mr Pisani explained that Stabex was a system of regularizing resources. "If in one year you export 100 kilos at 100 francs and the next you export 200 kilos at 50 francs, the earnings, which are equal, mean that you have no right to Stabex even if you exported at half the price". At the other end of the ladder, he said, are countries whose volume of exports and share of the world market have continued to decline. These countries are mainly responsible for the present crisis in Stabex. He was happy that an extraordinary session of the ACP-EEC Council of Ministers would be discussing the situation.

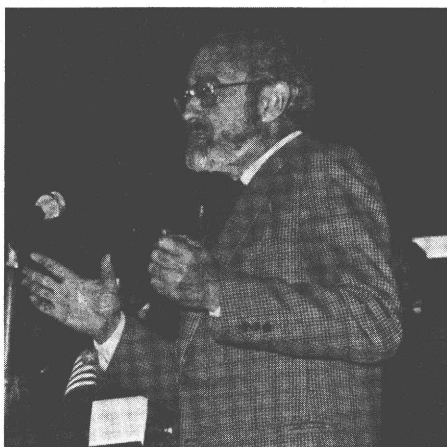
Referring to accusations against the Commission of failing to adhere to the letter and spirit of the provisions on Stabex, Mr Pisani pointed out that the Lomé Convention was signed by some 60 ACP states and 10 member states of the European Community in the fullness of their sovereignty. The Commission can neither change the terms nor modify the mechanisms. "The Convention is under way; it cannot be modified without the unanimous agreement of the ACP states and the Community countries. Stabex is a prisoner of the definition which the Convention gave it. The Convention has listed the products which Stabex covers, has established the mechanisms of calculation and has determined the ceiling of funds".

Mr Pisani drew the attention of the Joint Committee to the critical situation in Africa, where production is declining and export capacity deteriorating. The fault, he believed, lies not in the mechanisms of export but in the system of production.

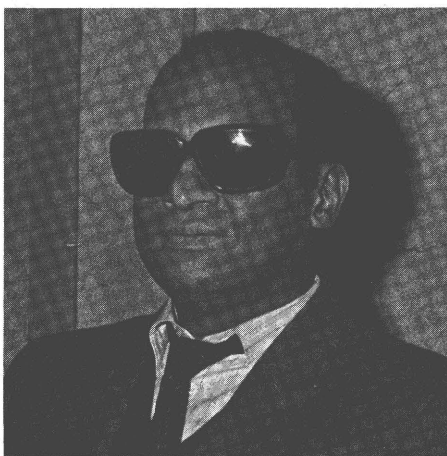
The Vergeer report, it should be noted, "deeply regrets" the food supply situation in many African states, in particular in the sub-Saharan regions, where production has deteriorated significantly. It maintains that the Community has a major responsibility in helping improve food supplies in the ACP states in accordance with the chapter of the Lomé Convention on agricultural cooperation. As a result, the report calls on the ACP-EEC working party on the provision of available agricultural products in the Community to



Willem Vergeer



Edgard Pisani addressing the Consultative Assembly



Ambassador Raymond Chasle of Mauritius

ACP states to complete its study as soon as possible. It should examine "whether and how EEC agricultural products could be supplied on more favourable terms".

This has been the demand of the ACP group for some time. It was one of the major issues discussed at the Joint Committee meeting in Freetown, Sierra Leone, in February 1981. Although the Vergeer report does deal with the problem of sugar,

the Joint Committee tabled a separate motion, which was debated at length. It was adopted after a few amendments.

The memorandum

Mr Pisani had the opportunity later to present his recently published memorandum to the Joint Committee, a memorandum which, it must be admitted, contained some of the points mentioned in the Vergeer report. In fact many of those who had read the memorandum felt that it somehow deflated the Vergeer report. Nonetheless, delegates found both documents interesting and one can say that the renegotiation of the Convention which starts in September 1983 will be very well prepared. Everyone seems to have the basic elements for talks.

It is a sign of the vitality of the ACP-EEC Consultative Assembly, as an institution of the Convention, that once it adopts a system of procedure it maintains it. The Joint Committee in Rome again reserved some minutes, "question time", for delegates to ask Mr Pisani questions on the implementation of the Convention. This procedure was adopted in Freetown in February 1981 with the then development commissioner, Claude Cheysson. It allowed Mr Pisani to clarify certain points. For example, Xavier Deniau (French EPD) had expressed dissatisfaction with the orientation of the Commission's policy as revealed in the memorandum. He wanted assurance that the document, which talks also of EEC cooperation with non-ACP developing countries, would have no adverse effects on the "privileged" relationship that exists between the ACP and the EEC. This assurance Mr Pisani gave.

On the Carajas steel project in Brazil, to which the Community is contributing, Mr Pisani revealed that the Commission had consulted European steel workers as to whether they could consider developing ACP iron deposits, but that they had expressed preference for Carajas, which will come on stream in 1985. It was a question of guaranteed sources of supply. However, Mr Pisani reaffirmed the Commission's commitment to the development of ACP mineral deposits. The Liberian

EPP - Netherlands

J.L. Debaize - EP

J.L. Debaize - EP



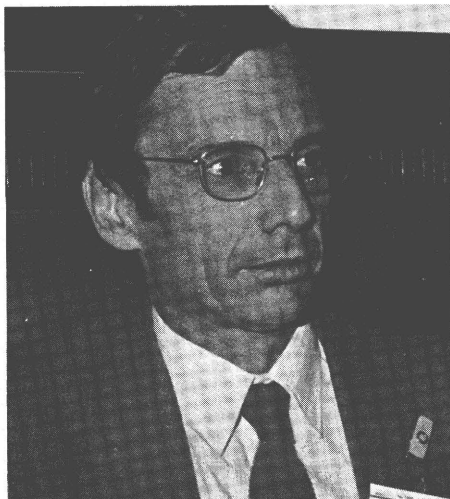
J.L. Debaize - EP

Ellemann-Jensen (left) and Desmond Cartey (right), co-chairmen of ACP-EEC Council of Ministers who addressed the conference

and Senegalese delegates expressed reservations on this assurance.

Fight against hunger

If the memorandum aims at developing EEC cooperation with other non-ACP developing countries, it will be mainly in the area of food aid—an illustration of the Community's concern about hunger in the world. In this regard, the Consultative Assembly was and still is on the same wave-length as the Commission. It was therefore not surprising that the Ferero report on the fight against hunger drew so many passionate speeches. On both sides there was unanimity on the urgent need for the industrialized countries to help developing countries improve agriculture and be self-sufficient in food. Notable contributions to the debate came from the Malian, Ugandan and Kenyan delegates, whose countries are drought-stricken and, in consequence, short of food. The Ferero report was unanimously carried.



J.L. Debaize - EP

Gérard Fuchs

Cultural cooperation

The Chasle report on cultural cooperation ranked as the second most important item on the agenda in the Rome meeting. Two years ago, when the idea of EEC-ACP cultural cooperation was bandied about as a possible chapter in the next Convention, few believed it would ever get off the ground. It is virtually certain that the next Convention will at least make references to cultural cooperation, thanks to the convincing manner in which ambassador Chasle of Mauritius presented his report. This was a fact recognized by many of those who contributed to the debate on the issue.

If man is the beginning and the end of development, efforts should be concentrated on him; this does not just mean his being able to read and write or being trained for specific skills, but being aware of himself and capable of relating to the outside world as well as to his own environment.

The Chasle report requests the Community to "give full support to the efforts of the ACP countries to embark on mutual cooperation in the fields of education, research and training". It deplores the difficult situation of ACP students in the Community, the discrimination they have been subjected to which, it believes, runs "counter to the aims of the present Lomé Convention". The report recommends that the "parties negotiating the third Convention jointly examine in detail the report adopted by the ACP-EEC Consultative Assembly meeting in Luxembourg and the present report, and take into consideration the practical proposals

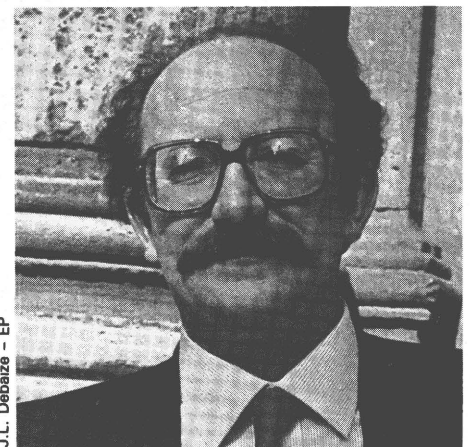
contained in them on various specific cultural sectors, especially the socio-cultural sphere, the role of women in development, education, training, research, the acquisition of technological skills, the promotion of craft industries, information and communication, cultural exchanges, development of tourism, the social and cultural position of ACP students and migrant workers in the member states of the EEC, and intra-ACP cooperation".

After a few amendments, which were accepted by the Assembly and by the rapporteur himself, the Chasle report was unanimously voted. A notable contributor to the debate on the situation of ACP students in Europe was Raymonde Dury (Belgian socialist), who recalled the recent increases in fees for foreign students in her country and the Commission's letter to the Belgium Ministry of Education seeking explanations. She called on the Commission to pursue the matter.

Southern Africa

The situation in southern Africa has always provoked passionate debate in the Joint Committee of the Consultative Assembly, but no one actually expected the resolution on southern Africa to be the subject of a debate in Rome, since the one that was being presented to the Consultative Assembly was the same as had been unanimously adopted by the Committee in Harare in February 1982.

Thus, at the meeting of the ACP group, the interim report of the fact-finding mission which was set up in Luxembourg in September 1981 "to obtain information on the countries affected by the consequences of



J.L. Debaize - EP

Bruno Ferrero

South African acts of aggression", commanded the attention of delegates. It was noted that the mission had already visited Angola, Zambia and Zimbabwe and was yet to visit Mozambique, Botswana and Tanzania. The ACP group, and later the Joint Committee, urged that the second part of the visit should take place as soon as possible and that the fact-finding mission should have its report ready for the Joint Committee meeting scheduled in Jamaica in May 1983. At the insistence of the delegation of Lesotho, the committee agreed to recommend to the fact-finding mission that Lesotho be included in the itinerary. Little did the ACP group know that, while the fact-finding mission preoccupied its delegates, the European democratic group, spearheaded by British Conservatives, was preparing a series of amendments to drop all paragraphs relative to sanctions against South Africa in the Harare resolution. It justified its move on the ground that since the Harare resolution was taken the European Parliament's position on sanctions in general had changed.

The ACP group got wind of this before the Joint Committee resumed seating and there were cries in the corridors of "hypocrisy" and "double standards" against the European democratic group. In the debate that followed it became evident that sanctions were not the thing being aimed at. There were parliamentarians like Olivier d'Ormesson (French European People's Party) who wanted to link the withdrawal of Cuban troops from Angola with Namibia's independence—an idea many considered repugnant and American/South African inspired.

It was clear, however, that the European democratic group was isolated on all the issues. It demanded and got a split vote (that is, the ACP group and the European parliamentarians voting separately) which it lost on all fronts. So the resolution on southern Africa was finally passed both by the Joint Committee and Consultative Assembly.

A new co-chairman for the Assembly

Before the plenary sessions opened the ACP group had the opportunity to elect to a successor to Solomon Tandeng Muna, president of Cameroon's national assembly, who has been the co-president of the ACP-EEC Consultative Assembly for the past four years. He is J.T. Kolane, speaker of the Lesotho national assembly. He was the only candidate. Mr Kolane promised to live up to expectation, and, judging from his performance at this conference, it looks as if he will do just that.

The Assembly discussed briefly a report on fisheries development, which is under preparation, and the Assembly's relations with representatives of the ACP-EEC economic and social groups. The summary of the discussions the Joint Committee held with the group in Geneva in June 1982 was presented to the Conference.

The Rome meeting was marked by criticism of the Lomé Convention. It has been established that the ACP states have not benefitted much from trade with the EEC. The ACP states' share of the Community market has fallen: they accounted for

only 5.5% of total EEC imports in 1981 as against 7% in 1980. Stabex is in crisis, even though many ACP states admit having benefitted from it and everyone agrees is a model for cooperation between industrialized and developing countries. Industrial, financial and technical cooperation have not resulted in increased industrialization of ACP states. But there is a positive note in this area. The Centre for Industrial Development, which was criticised under Lomé I, is at last obtaining results. Development commissioner Pisani expressed satisfaction with the CID's performance in recent months in his address to the Assembly.



The delegation of Sao Tomé and Príncipe

It is normal that criticisms should be made because the Convention exists. No one can say whether the situation would have been better or worse without it. On the European side, there was a tendency at the conference to think in terms of a better third Convention, while on the ACP side the functioning of the present one was the main preoccupation. However, one thing is certain. Against a background of serious economic crisis and unemployment on a scale never before known in Europe, and a deteriorating economic situation in the ACP states, the partners of the Lomé Convention appear determined to cooperate. And, in a Western world economically dominated by the United States, the possibility of a counterweight economic region emerging one day stretching from the Cape of Good Hope to the North Sea, cannot be ruled out. The guardians of public opinion have met and given their views on the Lomé Convention. These are not binding, but it is good to feel that everyone is involved. ○

AUGUSTINE OYOWE



J.L. Debeize - EP

Palazzo Montecitorio (Italian parliament) where the conference took place

Agro-food meeting

CID promotes over 30 industrial projects

The Centre for Industrial Development (CID) held a meeting in Brussels on 26 and 27 October 1982 to promote ACP projects in the agro-food sector. The projects promoted at the meeting had earlier been identified by the CID through the use of roving ACP and EEC consultants who visited the sixteen French-speaking and English-speaking states of the Economic Community of West African States (Ecowas). The CID then got EEC consultants to identify potential industrial investors in their own countries, for these ACP agro-food projects.

In his speech at the opening session of the meeting, Dr Isaac Akinrele, deputy director of the CID, emphasized the importance of the agro-food sector. He said: "We see the agro-food industries in ACP states as a productive sector which deserves priority attention from the CID; this is not only because this sector supplies basic human needs, but also because it generates labour-intensive employment and thus helps to balance rural-urban population growth".

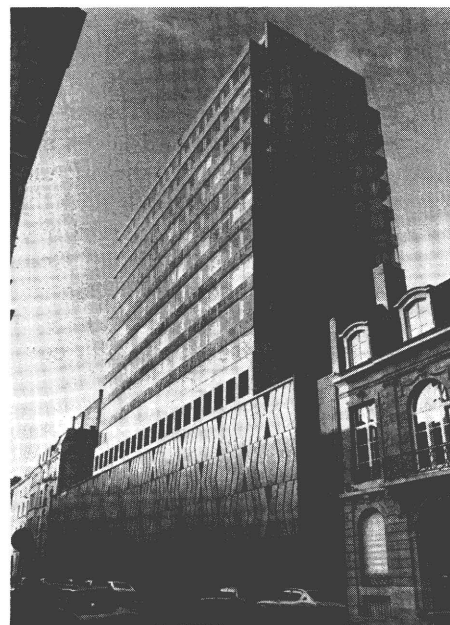
The CID meeting was attended by 28 project sponsors from the ACP members of Ecowas, and 65 potential industrial investors from EEC countries came to the meeting to discuss projects with the ACP sponsors.

There were 42 observers present among whom were representatives

of financial institutions such as the IFU (Denmark), FMO (Netherlands), SBI (Belgium) and Proparco (France).

The main work of the two-day meeting took place during 175 private meetings at which CID professionals aided negotiations between project sponsors and EEC industrialists. They discussed grain milling, fish processing, fruit and vegetable canning and a wide variety of other projects in the agro-food sector. It is too early to predict the results of these discussions. However, the CID is hopeful that the success rate will be even better than it has been for similar meetings which it held for other industrial sectors.

A number of speeches marked the opening session of the agro-food meeting, during which CID director Jens Mosgard was in the chair.



The Brussels building that houses CID headquarters

Among those who spoke were Peter Afolabi, Nigerian ambassador to the EEC and chairman of the Ecowas committee of ambassadors in Brussels; Michel Delefortrie, vice president of the CID's advisory council; and Dr Wolfgang Lehmann, who spoke for the German development company (DEG) and for similar financial institutions in other EEC countries. Their speeches are reported on the following pages.

The CID's activities in the agro-food sector are also featured in Industrial Opportunities in the pink pages at the back of the *Courier*.



The opening session of the CID's agro-food meeting

"Preservation and processing of basic foods ... must feature on our list of priorities"

An ACP view from Chief Peter Afolabi

Chief Peter Afolabi, Nigerian ambassador to the EEC and chairman for October of the Ecowas group in Brussels, spoke at the opening session of the CID's agro-food meeting about the food problems of Africa and the importance of the Ecowas countries.

Ambassador Afolabi said the neglect of agriculture had become a matter of concern for all Africans. The apparent inability of the African continent to feed itself is "paradoxical" since one of the region's chief assets is its huge agricultural potential.

"Africa, especially the West African countries of Ecowas, has all the conditions needed for becoming one of the world's major food baskets".

The ambassador also remarked that West Africa was once self-sufficient in food but is today increasingly dependent on external supplies: "Dependence on foreign food is not simply a function of population growth or environmental deterioration. Rather, it is an aspect of Africa's incorporation into the world economic system. Africa's involvement in the international division of labour means that she produces primary products for export, such as coffee, tea, cotton, groundnuts and skins, while she imports basic commodities that she can no longer provide for herself, like wheat, rice, meat and fish."

The ambassador said that food production in West Africa, with the exception of the Ivory Coast, had been falling steadily: "One can state without contradiction—from statistics bursting out of institutions such as FAO—that by the end of the 1970s food production was 20% down on what it was 20 years earlier".

Food losses

About 40% of the food produced in developing countries does not reach the consumer due to poor post-harvest infrastructure. The fig-



Chief Peter Afolabi

ure of 40% compares badly with the industrialized world, where the figure is only 10%.

The rural methods of food processing in many ACP states are not suited to the life-style of a modern industrial economy requiring convenience foods. If industrialization—through the storage, preservation, processing and distribution of food—could halve the volume of post-harvest food losses in the poorest countries, it would considerably relieve the problem of hunger. "Strategic areas such as the storage, preservation and processing of basic foods like tomatoes, beans and fish must feature on our list of immediate priorities", ambassador Afolabi said.

The ambassador added that in order to develop ACP agro-industries it would be necessary to bring about higher productivity in the agricultural sector: "We must grow enough crops not only for our own consumption, but also to supply exports to earn the foreign exchange we need to buy capital goods which we are not yet in position to produce ourselves".

Infrastructure needed

Ambassador Afolabi went on to say that the Ecowas region will want

a good infrastructure of roads and telecommunications if it is to take advantage of increased agricultural production and become an efficient and viable economic unit. Ecowas has already got plans in motion to create this infrastructure through the harmonization of the industrial programmes of Ecowas member states under the Treaty of Lagos.

Briefly mentioning other areas related to agro-industry—such as boat-building, furniture-making and the manufacture of building materials—he said that these also deserve support in view of the ready market for such products and the growing purchasing power of people in the Ecowas region.

CID's role

The ambassador expressed his long-standing concern about the low level of industrialization in ACP states and said that the CID had a "key role" to play in implementing the Lomé Convention's chapter on industrial cooperation.

He said the CID was "the only action-oriented institution within the framework of the Lomé Convention". He added that the CID is "regularly and effectively operational—despite limitations on its capacity and many other constraints, including shortage of finance and external factors militating against the industrialization of ACP states—especially the growing threat of protectionism".

Ambassador Afolabi referred to his own contribution to the building up of the CID under Lomé I. He made this contribution in the hope that under Lomé II it would play a greater role. He said that today—two years after the signing of Lomé II—there are grounds for satisfaction at the CID's work. Today's event, he said, speaks for itself: "*res ipsa loquitur*". He also added that the meeting marked "another stage in the life of the CID and its continuing attempt to forge marriages between EEC and Ecowas investors".

The importance of Ecowas

Ambassador Afolabi stressed the significance of the 16 members of Ecowas within the group of 63 ACP states. "If by simple arithmetic 16 is

taken out of 63, it is almost one-third; in terms of population, Ecowas claims over three-fifths of the entirety of the ACP; in terms of trade, exports and imports, it claims almost five-sevenths of the totality of trade between the ACP and EEC".

He also said that Ecowas trade barriers are falling, that there are moves to create a common monetary institution for the region and that

Ecowas member states have "a galaxy of flexible and attractive investment laws".

Floreat Ecowas

He hoped that the CID's two-day meeting for the agro-food sector would lead to follow-up action and jointventure agreements that would be fair and that would avoid delays,

production losses and wasted funds.

The ambassador noted that Ecowas was represented at this CID meeting by nearly all its member states and said that from a brief glance at their shopping list it was obvious that they "really mean business". He wished them well in their efforts at the heart of the EEC workshop and concluded in Latin: "*Floreat Ecowas*".

"It is indispensable that agricultural development be coordinated with agro-food industries"

An EEC view from Michel Delefortrie

Michel Delefortrie has been on the CID's advisory council since the organization was established in 1977. He served as chairman of the council from 1980 to 1981 and is the current vice-chairman.

Article 81 of the Lomé Convention provides for an advisory council to assist the directorate of the CID. The sixteen members of this advisory council are drawn half from ACP geographic regions and half from the EEC. They are all executives from either industrial enterprises, financial institutions or industrial promotion bodies. They are chosen for their personal merits and proffer advice and suggestions about the work of the CID. The advisory council pools so many diverse geographic and sectoral interests that it can voice a balanced and constructive opinion on any problem. In his address to the CID's recent agro-food meeting, Michel Delefortrie indicated what the CID's advisory council thinks are priority areas for CID action.

"It is the opinion of the CID advisory council that the creation of new industries in ACP states, with the help of European investors, may be less important in the context of development cooperation than the creation of an industrial mentality.

"The advisory council believes that this industrial mentality is best developed through small and medium-sized enterprises. Management and staff alike are more directly in-

involved and committed in such enterprises.

"For the same reason the council believes that the CID is right to be giving priority to assisting the rehabilitation or expansion of existing enterprises.

"This is also why the council—on the basis of its own members' experience—places great stress on the need for centralized mechanical workshops. These can ensure that foremen and skilled workers will receive training so that, in time, they may themselves establish new workshops in strategic parts of a country or region. The council believes that skilled labour is as important—if not more so—than executives and managers.

"The council strongly emphasizes that a thorough assessment of the potential of domestic and foreign markets is another fundamental aspect of ACP-EEC industrial cooperation.

The agro-food sector

"The council encourages the CID in its policy of concentrating on particular industrial sectors and on particular country groupings. The council is therefore pleased that the CID holds meetings such as this one, which is concentrating on both an industrial sector (agro-food) and a



Michel Delefortrie

country grouping (the members of Ecowas).

"The council specially welcomes the CID's current promotional efforts for the agro-food sector, for this is a time when food shortages are increasingly causing grave concern. It is indispensable that agricultural development be coordinated with agro-food industries, above all to satisfy domestic needs, but also to provide exports for neighbouring and overseas markets.

"The top priority for CID action has been the processing of the raw materials of ACP countries and the maximum use of local resources. Agro-food industries are one way of utilizing local resources. But those resources must first of all be available. It is therefore necessary that agricultural development, whether it be on a small or large scale—and perhaps small scale is best—should be the main objective of every country.

Further encouragement

"The advisory council has always encouraged the CID, when implementing projects, to explore all the possibilities available through the technical and financial assistance offered by multilateral bodies like the European Development Fund (EDF), the European Investment Bank (EIB) and regional development banks. We have also encouraged the CID to work with institutions which work on a bilateral basis, such as ACP and EEC industrial promotion and development bodies.

"The advisory council has approved the Industrial Cooperation Experts Programme (ICEP) which the CID has developed with the support of the European Development Fund. Industrial experts will soon be working locally, under this programme, to promote CID-assisted projects in the various ACP regions. The advisory council will pay keen attention to this most promising experiment.

Obstacles to investment

"The EEC members of the council would like to draw the attention of ACP and EEC states to those factors which cause European investors to hesitate before taking risks in industrial ventures in developing countries:

- Political instability in certain developing countries which creates the fear that existing national investment codes may be revised;
- Possible lack of foreign exchange in certain countries which could mean that the repatriation of profits may be prevented even though it is permitted by the investment codes. Profits are necessary to ensure the profitability of an enterprise and to motivate those participating in it.

"The council would also like to highlight factors in EEC countries which likewise hinder initiatives by European operators in developing countries. For instance:

- the high cost of finance on European money markets
- the unavailability (or reduced availability) of public funds to supplement the initiatives of private industrialists thereby depriving them of a needed incentive for investment in developing countries.

Confidence overcomes problems

"ACP states have clearly shown that most of them have investment codes which ensure that there will be no discrimination against EEC countries and that local and foreign investors have equal rights.

"They have also made the point that nationalization also occurs in European countries.

"It finally boils down to a question of confidence. It is of cardinal importance that a country should win people's confidence. One should have confidence in the country as a whole, its leaders and its people. There should be mutual confidence be-

tween a country and an outside investor. Confidence overcomes all kinds of problems.

CID's limited means

"Although CID's terms of reference cover a wide variety of tasks, its means are very limited. Success will depend on the extent to which CID's executives and staff can put these means to effective use.

"The advisory council is convinced that CID officials can live up to their terms of reference. They can count on our full support for the greater good of all those for whom we all must shoulder some responsibility".

"This sector is particularly relevant to development"

Financing joint ventures in the agro-food sector, by Wolfgang Lehmann of DEG

Dr Wolfgang Lehmann is the Africa director of the German development company DEG in Cologne. He spoke at the opening session of CID's agro-food meeting about the role of the DEG and the special investment considerations attached to projects in the agro-food sector.

"DEG provides equity and loan finance for joint-venture projects in developing countries in association with German or EEC industrial partners. It is financed by share capital of DM 1 000 million (US \$400 m) of which DM 882 million has been committed to 205 ventures in 70 developing countries. More than one third of DEG's investments are in ACP African countries.

"DEG's priority task as a Federal government-owned development cooperation body is the promotion, co-financing and implementation of medium-sized industries in association with smaller German or EEC firms. Emphasis is given to qualified management, effective technology transfer and mutually beneficial long-term joint-venture arrangements. DEG also emphasizes the need to set

up export industries based on local raw materials.

"DEG tries to encourage smaller German firms to invest in developing countries by providing a variety of services such as:

- the identification of attractive investment opportunities;
- project planning and evaluation;
- negotiation of agreements and contracts;
- financial engineering;
- management assistance and control, via representatives who take seats on boards of those companies in which DEG takes equity.

DEG investments in agro-industry

"About 10% of DEG's equity and loan investments have gone to 17 agro-industrial and food processing projects for the following products: fruit and vegetables, milk packaging horticulture, sugar, palm oil, castor oil, peanut butter, jojoba oil, alcoholic and soft drinks, tobacco processing, animal feeds, molasses and meat.

“German experience in the growing and processing of tropical agricultural produce is limited. DEG has therefore financed projects sponsored by other EEC countries when the development impact promised to be particularly high.

“The DEG’s partners in the developing countries are sometimes private, sometimes state-owned, companies and sometimes development finance institutions. DEG usually takes an equity share of 20% on top of loans (which are normally in excess of the equity investment).

Special problems with agriculture-based industries

“One must tackle some familiar difficulties and constraints to successfully run any industry in a developing country. Agro-industrial projects, however, face a number of specific additional problems:

— Land ownership

The participation by foreigners in land-ownership is not always welcome. In such circumstances special solutions have to be found to secure the agricultural supply base for an agro-industry.

— Raw material supply

Food processing industries rely on

a regular supply of raw materials in sufficient quantities and at competitive prices. Many an agro-industry has failed because the needs of a modern industrial enterprise could not be reconciled with traditional agricultural production structures.

— High technology

Modern food-processing plants supply advanced technologies (e.g. integrated refrigeration chains). These must comply with national or international hygienic and sanitary standards.

— State interference

State interference such as the arbitrary fixing of producer and consumer prices, can cause serious difficulties for a food processing industry. It might find itself squeezed between high raw material purchasing prices and low exfactory selling prices. Interference in the organization of trade may also be detrimental. For example, trade in general, or exports in particular, may be put under state control or be reserved for state enterprises.

— Financial reserves

The special risks attached to agriculture-based projects must be catered for by providing additional financial reserves. This is achieved both by way of a favourable debt:

equity ratio, and by attractive conditions for long-term loans.

Confidence: a precondition for successful jointventures

“The success of a jointventure depends fundamentally on how much confidence the partners have in each other. It is absolutely essential to determine the exact role of each partner and for each partner to check, in advance, whether the other is in a position to honour his commitments. The size of the financial contribution of each partner shows how serious he is and effects the confidence the other partner will have in him.

“Another decisive factor in determining success or failure, is management. This factor is often neglected.

Preference for agro-food industry

“DEG takes a particular interest in agro-based industries in African countries. This sector is particularly relevant to development because it processes local rawmaterials, is labour intensive and requires the transfer of modern technology.

“DEG therefore greatly appreciates the CID’s promotional efforts in this particularly interesting sector and is willing to lend its full support to CID activities. Also, DEG is confident that for viable projects with good management, finance should not be a major obstacle. Apart from DEG, other sources of investment finance in the EEC are:

- the Commonwealth Development Corporation, in the UK;
- the Caisse Centrale de Coopération Economique and Proparco, both in France;
- the Belgian Corporation for International Investment (SBI);
- IFU in Denmark;
- FMO in the Netherlands;
- the European Investment Bank (EIB);
- the International Finance Corporation (IFC).

“There are now also regional and national finance institutions operating successfully in virtually all African countries”. o

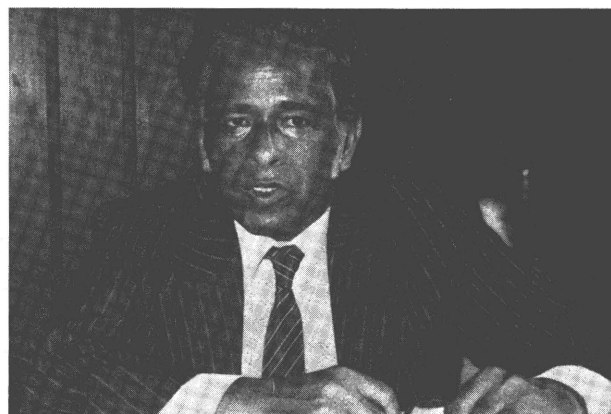


At the CID’s agro-food meeting were (left to right) Jens Mosgard, director of the CID who chaired the meeting; Peter Afolabi, Nigerian ambassador to the EEC and chairman of the Ecowas committee of ambassadors in Brussels; Dr Wolfgang Lehmann, Africa director of the German development company DEG

MAURITIUS

“We firmly believe in the emergence of a Mauritian culture”

An interview with Prime Minister Aneerood Jugnauth



Prime Minister Aneerood Jugnauth

There have been few occasions in the history of parliamentary democracy when the opposition has won all the seats in a general election. In Mauritius it happened on 11 June 1982 when the MMM/PSM alliance (Mouvement Militant Mauricien/Parti Socialiste Mauricien) swept to victory in all 60 seats, defeating every supporter of the outgoing government coalition. On the smaller sister-island of Rodrigues, the OPR (Organisation du Peuple Rodriguais)—with MMM/PSM support—won both seats. A new socialist government of the modern democratic type was sworn in on 16 June and thus put an end to the political career of the veteran Sir Seewoosagur Ramgoolam, whose Labour Party (Parti Travailleiste) had dominated the island's political life for over 34 years and had governed for 23 years.

Keen supporters of the Westminster system and political fair play, the Mauritians last June clearly showed their desire for change and renewal. By permitting this MMM/PSM/OPR landslide they voted to halt the stagnation and immobility which had build up since the 1976 election. As one out of five adult workers is unemployed, getting the coun-

try back to work and relaunching the national economy are the main priorities of the new government. They will also promote national reconciliation in order to lessen the tendency towards communalism, a latent antagonism between the different ethnic groups which has survived in this multiracial society.

The new Prime Minister, Aneerood Jugnauth (52) has always been a keen defender of “thinking Mauritian” instead of Hindu or creole. A lawyer by profession, he quickly became active in politics and took part in Mauritius' negotiations for independence which was achieved in 1968. In 1965 he became minister under Sir Seewoosagur, but resigned in 1967 over a policy difference. He later joined the MMM and as party chairman was leader of the opposition from 1976 to 1982.

In this interview Prime Minister Jugnauth outlines the main policy guidelines for the next five years, comments on some of the pending changes and the need for more cooperation in the Indian Ocean, which in his view should become a “zone of peace”.

Consolidating the economy

► *The election results of 11 June opened the way to socialism in Mauritius. What will be your basic policy guidelines over the next few years?*

— The Mauritian people have manifestly opted for a new way of life and for a socialism which will be acceptable in the Mauritian context. Given the difficulties the people were facing, this tremendous change brought great expectations. As is well known, we are in a very difficult economic situation, and it is in that light that we are planning to execute our socialist programme.

We have balance of payment difficulties and to solve them we have to

rely on the IMF. The conditions of the IMF are very rigid these days and they do not give us much room for manoeuvre. Therefore our policy is geared firstly to comply with the exigencies of the IMF, secondly to relaunch our economy and thirdly, to help and improve, with the means that are available, the situation of those who are at the bottom rung of the ladder in our society. Now once we have consolidated our economy, then of course we'll move towards implementing the promises that we have made in our programme. This programme, in fact our whole faith in socialism, is based on participation and complete independence in the administration of the various sectors

concerned. During the first five years, for instance, we want to nationalize two sugar estates. But we want to move with great caution: we want to make all the necessary studies to assure that this operation becomes a success without upsetting the whole economic system of Mauritius, and also without discouraging those who are concerned with the economy of the country. We are also setting up a state trading corporation as well as a cargo handling corporation in the harbour—in order to be able to control prices better, and prevent consumers from being unduly exploited. These are a few of the things that we intend doing in the near future.



The capital, Port Louis

The bulk sugar terminal in the foreground is the third biggest in the world with a capacity of 350 000 tons

In Mauritius we have a population which originated from different parts of the world: from Africa, Madagascar, Europe, China, India. The descendants of all these people today form the Mauritian nation. They have brought with them different customs, cultures and languages, and every section of the Mauritian population has its pride in its own culture and religion. As a government we mean to protect and maintain all this, but at the same time we are doing everything to promote the creation of a Mauritian culture which we finally believe will emerge and which will be accepted by the whole Mauritian nation over and above their own heritages. We believe our multiracial society will be no handicap in creating this new Mauritian culture, nor will the type of Mauritian socialism this government intends to create.

► *How much time is the new government giving itself to consolidate the economy?*

— The previous government had been in power for a very long time and this was the first time they faced a real challenge. Before the elections there were indications that they were going to be ousted; given that we were a new party and that so much had been said against us, there was some sort of national hesitation which brought the economy to a halt for some time. That is one of the reasons why our problems became complicated. We are also at the mercy of nature, as we have cyclones. This again affects our economy. Then we must not forget the short-

comings of the outgoing government. For all these reasons our economy had become completely stagnant. Now that we are in power, by our first actions I think we have restored the confidence that people needed in order to move ahead, and I believe that in one or two years time our economy will be consolidated. Once this is accomplished we will have plenty of room to manoeuvre and start fulfilling what we have promised in our programme.

“Sugar is the lifeblood of our economy”

► *How would you describe the present state of the key sector in the Mauritian economy, the sugar industry?*

— It is a fact that sugar is the lifeblood of our economy. The problems we have had with inflation, world recession and high pay for the labour have caused a difficult situation for the sugar industry. There have been a lot of complaints from those concerned with it that the economic situation is becoming very difficult. Therefore we are setting up a commission of enquiry into the sugar industry, to go into all its aspects and make recommendations in the light of which we'll be able to implement what changes are needed. In the meantime, we have made certain concessions to this sector: for example, we reduced the surcharge levy on export taxes from 75 % to 50 % to alleviate the economic difficulties of the sugar industry. We have also granted a 10 % investment

allowance to act as an incentive for new investment, especially for plant and buildings, and this for the economic year from July 1982 to the end of June 1983. The price of sugar on the world market is below the cost price; yet given our quota on the EEC market, and with the new market openings that we are trying to establish with other friendly countries, we believe the sugar industry will be—and we will see to it—the main factor in our economy for quite a long time yet.

► *What sort of restructuring or modernization could be introduced? Aren't 21 sugar factories, some with outdated equipment, rather too many for a sugar acreage of this size?*

— We have given this 10 % allowance to the sugar estate owners. For the time being it is up to them to say what changes they have to bring about. The sugar industry is mainly in the hands of the private sector; only one estate is government owned, but that sugar factory was going to be closed because it really doesn't pay, it is what you might call a lame duck. There is a lot of mechanization going on and the sugar producers want to improve productivity and efficiency, but it is a bit premature for me to say exactly what we are going to do before we get the recommendations of the commission of enquiry.

Diversification

► *Over the past years successful agricultural diversification has mainly been initiated by the private sector. To what extent will the new government go into this?*

— We believe firmly in the diversification of agriculture because among our main problems are balance of payments difficulties and shortage of foreign exchange. No less than 25 % of our import bill goes on food. Yet quite a large amount of those foodstuffs can be produced in Mauritius; that is why we have always pressed for the diversification of agriculture. The previous government did not get itself involved in that and left it to the private sector to do whatever they could. Of course the necessary incentives were not given and the private sector's first priority was to do what was easier



Every section of Mauritian society takes pride in its own religion and culture, such as the Hindus, here celebrating the feast of Shiva...

for them, what would bring them more profit. As a matter of fact, there was a time when Mauritius was self-sufficient, for example, in meat and meal. We also had a lot of fruit; in all sugar estates at one time there was an orchard and people in every locality were getting plenty of fruit. All this has gone and every inch of the land has been planted with cane, which of course was encouraged by the outgoing government. That is why we are strongly involved in diversification. In fact we held a seminar with our top people and they have worked out a plan of action which we want to implement. In that context we are also nationalizing 20 000 acres of land, which we intend to give to people who are badly in need of employment and form into cooperatives. We believe here in proper planning: what we have to do is to identify the foodstuffs for which we can assure a reasonable price and for which there is a market, so both prices and markets must be ensured. We are working along those lines and we believe that a lot can be done. The Ministry of Agriculture is already making a lot of efforts: we are setting up two units for processing maize as well as a cold storage unit. These are the infrastructures that are necessary if we really want to promote the diversification of agriculture. We believe that we can succeed, especially at this juncture, as we have adopted a policy of dialogue and telling the truth to the people to

make them realize what the problems are. We have got the population involved.

A key problem: job creation

► *Mauritius is confronted with a very severe unemployment problem. Its once successful export-oriented industrial zones have now, to put it mildly, lost their momentum. How can more productive jobs be created?*

— On the social front unemployment is our biggest problem. We have to find a solution to this because we cannot allow the alarming



or Muslims, at prayer at the Jumah mosque, the largest on the island...

unemployment figures to go on increasing without doing something about it. As you are aware, our export processing zone was once very flourishing and created an important number of jobs. Unfortunately, with the present international and domestic economic difficulties, in this sector is now also in trouble. Some of the factories have closed and people have lost their jobs. What we are trying to do is to create new incentives, give more facilities and create a new impetus. As I said, there was a moment of hesitation when people did not know what the political situation would look like but now we believe the economy can make another start and I think there is plenty of hope in the industrial sector for a new departure and new job creation. We have also set up what is known

as the export services zone. I have noticed recently that the number of applications for certificates in that sector is really very encouraging, and there too there is plenty of hope for job creation. At the same time, besides the industrial sector, we also have to do the best we can in other sectors, for example in tourism; we can also do a lot in the fishing industry, which we have not exploited on a commercial basis up till now. Then we have agriculture itself, and we have the cooperative movement. If we combine all this, and if we have a proper planning, I think we can cope with the situation and create a fair number of jobs in the coming years. With the incentives we have given to the private industrial sector and that we intend giving to the sugar industry, I think there will also be some scope even in those sectors.

Tourism: "we won't do anything to jeopardize this industry"

► *How could a new impetus be given to tourism and to what extent will the new government directly participate in tourism exploitation and infrastructure?*

— The tourism industry is right now in a rather difficult situation, but not only in Mauritius, this is a world phenomenon. Part of it is due to air tariffs going up, but the economic uncertainty in many industrialized



but all Mauritians share enthusiasm for the sega, a popular dance of African origin

countries, the probability of people losing their jobs, is inducing people to travel less and especially not long distance. It is affecting our tourist industry and right now we can't rely so much on people who come from very far. On the other hand, we have noticed that the number of tourists from neighbouring countries in the region is rising. I think we must encourage that and make every effort to work along these lines so that there is an increase. At the same time, we are not neglecting our efforts in so far as tourism promotion is concerned; on the contrary, we want to redouble our efforts in the USA and in Europe. We are also giving incentives for people to come and invest in the creation of hotels and provide the necessary infrastructures for the tourist industry to develop here. We have also sponsored a tourism exhibition, both for the Mauritian people and for local and foreign professionals, journalists, travel agents etc. To those who came from abroad, we showed what they can expect from the tourist industry here: to our local people we tried to show the part this industry is playing in the social and economic life of our country. I would like to assure all people who are investing in tourism that they should have no fear as my government is going to encourage and to respect all our undertakings and we do not want to do anything that will jeopardize this industry.

Adopting education to development requirements

► *Mauritius has a high literacy rate, but its educational system of the Oxbridge type seems little adapted to its socio-economic environment. What changes or reforms are being planned?*

— This is a very delicate area as it is directly linked to culture, to a certain extent. What must be kept in mind here is that the education system given to us by the British has simply been preserved. In the past, as you are aware, the education system was largely meant to train people for white collar jobs, for the civil service, etc. We just continued on the same lines. There has been some diversification now, because the need is felt, but on the whole it is still the same old system. It is true that

the literacy rate is very high in our country. I should add that during the 1976 elections, secondary education and even university education was made completely free: but that was a purely electoral measure, taken without any planification and without keeping in mind the requirements of the country. Now we think we must bring in the necessary changes, but before we do that, here again we want to be well advised. Therefore we have set up a functional enquiry to go into all aspects of education, such as curriculum development, educational methods, the types of education and the proper requirements of the country. How to plan, year to year, our educational system to match our economic development, is the key question. We are waiting for the recommendations of the report of this commission of enquiry and in the light of these recommendations we will be able to bring about the changes that should be brought into our system of education.

"Regional cooperation is a must"

► *How do you view overall regional cooperation with both ACP and non-ACP states in the area, and what efforts could you undertake to diversify trade links in this context?*

— We firmly believe in regional cooperation and as a matter of fact

we have taken a first step in setting up an Indian Ocean Commission. At first we are starting with three countries, the Seychelles, Madagascar and Mauritius. We are glad to see that France is very much in favour of it and is encouraging it: we have been promised that even Reunion Island will be made to join in. We expect that other islands in the vicinity, such as the Comoros, will also be joining us. We want this regional cooperation to extend and even to have bilateral agreements with the other ACP and non-ACP countries of the region; but these things are not easy. There are tremendous difficulties. Up to now there has been very little cooperation between these countries. Many difficulties, such as communications and transport, remain. Although we may have wished to move very fast, I think we will move only very gradually. But we will make all possible efforts from our side because we believe that regional cooperation is a must; it will solve many of the problems of the countries in the region and it will be mutually beneficial to the countries involved.

At the same time, there are discussions taking place on a preferential trade agreement between 18 African countries including Mauritius. This trade agreement is meant to bring about a common market between these 18 southern and eastern African countries. Given our commitment to this, it is one more proof of our belief in regional cooperation, for which we spare no efforts. But we cannot expect immediate results; it's only a long-term undertaking that will bring about concrete results.

A concept of peace for the Indian Ocean

► *You have stressed your government's intention to contribute towards the concept of the Indian Ocean as a zone of peace. What could be the economic and political consequences for Mauritius of this idea?*

— Our outlook is that every reasonable person in the world today agrees that we must have peace. Nobody would like to have a war, because we all know that it will be self-destructive. The Indian Ocean



Although there is already a high degree of literacy, the education system will be strengthened and adapted to the country's economic system

Ministry of Information

fits into this general context of world peace. Today the Indian Ocean is a ground for rivalry between the superpowers. For them it's a question of who is going to have more influence over the countries in the region. The superpowers are bringing in their nuclear weapons and are developing their military bases. But I personally fail to see in what way all this helps the countries in the region. As a matter of fact, if we consider the tremendous amount of energy and money that is being put into arms, if they had been used for peaceful purposes the world would have been a paradise. So it is in this context that we say we need peace and in our immediate region, the Indian Ocean, it will benefit not only the countries of the region but also contribute to bringing about world peace. That is why we keep on raising this matter whenever the opportunity arises. We are imploring both superpowers, the Soviet Union and the United States, that instead of going on increasing their armaments, they should on the contrary get together and discuss how they can gradually diminish this arms race until the time comes when it can be completely eradicated. Therefore we want the Indian Ocean to be open to all nations for peaceful navigation, for trade and commerce. Nobody in this area should have any fear at all that his commercial right as a nation is going to be jeopardized or blocked in any way whatsoever. So we are working with that aim. Now you realize, what a threat this Diego Garcia base (1) and its nuclear weapons poses to us if there is any conflict. If by any mishap these weapons were ever used, we, the countries in the region, will be the first to suffer. The matter of Diego Garcia is therefore, in our view, directly linked to our concept of peace. But the Diego Garcia issue goes a step further, because we believe Diego Garcia was wrongly taken from us the United Kingdom. We believe that it is our territory and we are determined to do everything in our power to claim it back. That is why we have recently

(1) A US base is established on the atoll of Diego Garcia in the Chagos Archipelago, which was leased by the UK to the USA for 50 years. The 25 June 1982 Queen's Speech states on this issue: "The reunification of our national territory will receive particular attention. In this context, my Government will press for the retrocession of the Chagos Archipelago and will assert its sovereignty over Tromelin Island."



"What we have to explain to the EEC countries is that for many of us our economy rests entirely on sugar"

changed one of our laws, which gives a description of the Mauritian territory, to include Diego Garcia—just to show symbolically that we are bent on pressing for this. In all forums, at all levels, wherever possible, we will try to get world public opinion in our favour. We believe that, in the long term, if we succeed in getting the Indian Ocean demilitarized and making a step toward world peace then there will be no reason whatsoever for the United Kingdom or for the United States to stick to that little piece of territory. But to us it means a lot, because all around that territory we have an exclusive economic zone. Who knows, there may be plenty of marine riches there and in years to come maybe these are the riches which will enable the population of Mauritius to find their living. So it means a lot to us.



Potatoes planted between rows of sugar cane. The new government wants to see greater planning of agricultural diversification

ACP-EEC: "We'll do everything to keep this association going"

► How do you view relations and cooperation with the EEC so far? Would you outline the importance you attach to the Lomé Convention and its sugar protocol, and your view on a successor to the Lomé Conventions?

— To us this Lomé Convention and our association with the ACP and the EEC is of vital importance. We were one of the first Commonwealth countries to associate ourselves with the ACP and the common market. This has helped us tremendously. Firstly, in so far as our industry in the export processing zone is concerned: the EEC countries provided a sure market for our products and therefore helped in the growing up of these industries and the creation of jobs. What is more important is our sugar itself, because this too has a sure market, where we have a guaranteed profitable price, that is negotiated every year as well as a guaranteed quota for little less than 500 000 tonnes. Therefore to us it is a matter of vital importance and we are going to do everything to keep this association going. Of course, there is talk of a new convention. All ACP countries have to get together so that the discussions take place in an environment that can bring about results. We expect these negotiations to be tough, but given the present economic difficulties we cannot allow the existing facilities to be lowered, or even the prices that we are given, in competition with the beet sugar from the European farmers. What we have to explain to the EEC countries is that for many of us our economy rests entirely on sugar. It therefore has to be looked on as a special case, so that whatever conventions are concluded, they bring us a reasonable contract—so that we can survive decently. That is what we are looking forward to and we will ask the ACP countries to make an effort so that we can at least assure this. But as I said, to us this ACP-EEC association is of vital importance and we have to see to it that it goes on. ◊

Interview by
Roger DE BACKER



PROSI

Stirring up a stagnant economy

Mauritians could-not have been more explicit in their desire for a fresh start when casting their votes on 11 June 1982. The overwhelming victory of the MMM/PSM/OPR clearly marked their will to have a new team putting things back in order and, in particular, to help them overcome their post-boom hangover. Indeed, during the early 1970s they enjoyed a real boom: sugar harvests were good and fetched record prices on the world market; the creation of export processing zones, with tax-free holidays, well-equipped industrial zones and free transfers of capital and profits, proved to be a winner; the island also started progressively developing its many tourist assets.

Then sugar prices tumbled. The energy crisis developed gradually into a worldwide economic recession with direct effects on local manufacturing

and tourism. Agriculture, other than cane growing, and particularly local food production, had been neglected and expensive imports had become a way of life. In the new climate the socio-economic aspirations of the highly educated Mauritians could-not be met any longer. Despite practically all the economic indicators turning red, little was done to find a cure and economic stagnation set in. All was set for a drastic change, therefore, though most tend to forget that already in the 1976 elections, the MMM became the biggest single party in terms of votes. Sir Seewoosagur's Parti Travailleiste (PT) only kept power by forming a coalition government. The change on 11 June 1982 was clear and the country, still dominated by "king sugar" however sour he had turned, set out on a new course.

Pearl of the Indian Ocean

Lying approximately 2000 km off the east coast of Africa—Madagascar is only 900 km away—Mauritius seems cast adrift in the Indian Ocean. Approaching it from the air, it appears pear-shaped with striking volcanic mountains peaking above the all-pervasive sugar cane fields. Almost completely ringed by reefs, the tranquil blue lagoons contrast sharply with the bleached beaches. Africa's most far-flung country and doorway to the East benefits from a sub-tropical climate. Its physical characteristics certainly represent a major tourist asset.

As part of the Mascarene Archipelago, Mauritius is, in fact, composed of a number of islands. The main one giving its name to the whole country

covers 1865 km². About 600 km further east lies the sister-island Rodrigues (104 km²); Agalega and the group of Cargados islands, commonly known as St Brandon, together cover some 71 km². In addition, the present government demands the return—and in fact changed the constitution in this respect—of the Chagos Archipelago including Diego Garcia (see interview with Prime Minister Jugnauth p. 13) and also has a claim, shared with France and Madagascar, on Tromelin. Small though the land surface may seem, it represents 1.7 million km² of exclusive economic zone, promising riches for tomorrow.

Asia, Africa and Europe; Mauritius' culture is built on and influenced by elements of these three continents where its forefathers came from. Out of the total population of 984 000

inhabitants, just over 950 000 live on the main island, 33 000 on Rodrigues and 350 inhabit the smaller islands. The country's population density of 482 persons per km² (in fact 510 on the main island) ranks among the highest in the world. At independence in 1968 Malthusian doomsday forecasts were made by demographers, but a successful birth control programme has kept the population increase within limits, though pressure on the scarce economic resources remains high.

Indo-Mauritians, both Hindus (52%) and Muslims (16.5%), form the largest ethnic group, representing over two-thirds of the population; the so-called general population totals 28% and comprises people of African, European and mixed—Creole—descent; the Sino-Mauritians, originally stemming from China, form a small

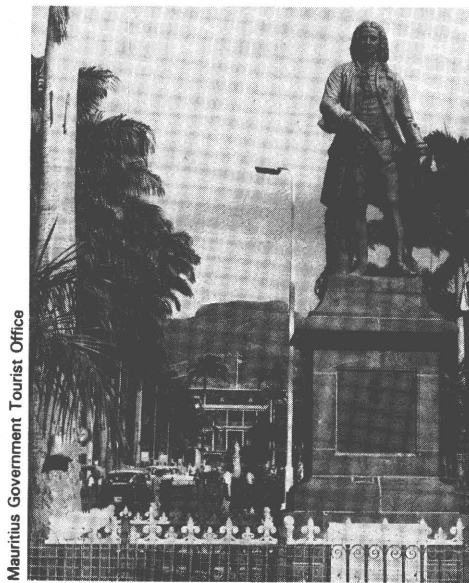
minority of 3 to 4 % of the total population. Mauritians are gifted in languages as, apart from the lingua franca, Creole, English (still the official language) and French (e.g. press) are widespread; Hindi and a wide variety of other Indian languages such as Tamil, Telegu and Urdu, can also be heard quite frequently as well as Chinese and Bhodjpouri (a sort of Indian slang). However cosmopolitan they are, most ethnic groups maintain their own sub-culture to a certain degree as is shown by the multitude of temples, churches, mosques and pagodas found on the island.

From Mauritius to Isle de France and back

In fact Mauritius has known four periods of colonization in its history: two Dutch, one French and then British up to independence in 1968. Though there is evidence that the island was known to early Arab navigators it was only spotted by Europeans at the beginning of the 16th century. The Portuguese found it but did not settle. In 1538 the Dutch took possession and gave it the name Mauritius in honour of "stadhouder" Maurits of Nassau. In 1638 they made a first serious attempt at a permanent settlement, which lasted only two decades. The second Dutch occupation, started in 1664, also proved unsuccessful and in 1710 they left for good. Although they failed to achieve what they wanted, they nevertheless played a key role for the country's future by introducing, among other things, sugar cane, which is today the backbone of the economy.

In 1715 the French, who had already shown their interest in this area by colonizing Madagascar and the Isle de Bourbon, today Réunion, took possession of the island and rebaptized it Isle de France. Up to 1765 it was exploited by the renowned Compagnie des Indes. Later it became a full royal colony, a status which lasted until 1810.

Among the colonial administrators, Governor Mahé de Labourdonnais (1735-1746) stands out, as he played an important role in the development of infrastructure, agriculture and commerce. His statue today still dominates the heart of Port Louis. Bernardin de St Pierre, author of the famous novel *Paul et Virginie*, which

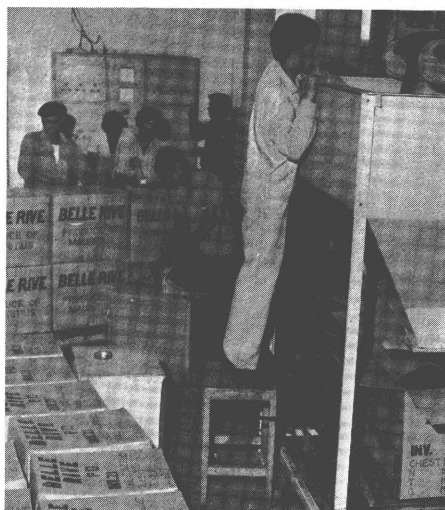


Mauritius Government Tourist Office

The most famous person in the history of the Isle de France was François Mahé de Labourdonnais, whose statue still dominates the centre of Port Louis

is set in Mauritius, landed in 1768. From 1773 the island had a newspaper, *Le Cernéen*, known as the third oldest French language newspaper. By the end of the 18th century, French pirates, using the island as a home base, had captured over 2000 British vessels.

In August 1810 the British made a first attempt to conquer the island, but the naval battle of the Vieux Grand Port allowed Napoleon to have one more victory inscribed on the Paris 'Arc de Triomphe'. In November of the same year the British launched a new, and this time successful, attack from Rodrigues. Under the Treaty of Paris signed in



Ministry of Information

Packaging tea, the second industrial crop after sugar, at the Belle Rive tea estate

1814, the French ceded the Isle de France to the British, thus putting an end to 89 years of French rule.

Rebaptizing the island "Mauritius", the British rapidly developed sugar cane production. After the abolition of slavery in the 1830s there was a massive influx of Indian labour who, in the 1860s, became the largest ethnic group. From this period philatelists certainly remember the famous Mauritian blue penny, a two pence stamp—misprinted "penoe"—issued as early as 1848. Later the colony was to experience rapid demographic growth — from less than 400 000 people in 1931 to over 700 000 in 1968. At the same time Mauritius' society became more and more sophisticated, politically and economically. Launched in 1936, the Parti Travailleurs (Labour Party) fought for independence and built up its momentum in several pre-independence electoral victories, to see its prime aim achieved on 12 March 1968.

Today Mauritius, a member of the Commonwealth, is a monarchy with Queen Elizabeth II as head of state. The new government, however, has indicated its intention of changing the constitution and organizing a referendum to become a republic within the Commonwealth.

With its originally Dutch name, Mauritius is often referred to as a British country (though the only Commonwealth member that never adopted cricket) with a Franco-Indian way of life, where one drives on the left and pays in rupees. It is, in fact, a cocktail of these three continents.

"An economic crisis of momentous proportions"

These are the terms used in the "state of the economy" report, which new finance minister Paul Bérenger issued in July 1982. He considers the economic inheritance to be a catastrophe, a feeling shared by the private sector, whose spokesman Benoît Arouff, chairman of the Chamber of Commerce and Industry, declared: "one cannot disassociate economic progress from its political environment. The political situation over the past five years led to economic stagnation".

The economic picture for 1976-1981 is far from rosy. Inflation aver-



Rose Belle is the only state-owned sugar factory out of a total of 21; considered as the "lame duck" of the sector, it is badly in need of rationalization

aged 17.1% per annum and limited the growth of GDP in real terms to 3.1% p.a. which, with an annual population increase of 1.5%, leaves a per capita income growth of only 1.6%. The main income-generating sectors, agriculture and manufacturing, virtually stagnated. Consumption became more and more unrelated to economic realities and, expressed as a percentage of GNP, rose from 69% in 1976 to 86% in 1981.

The labour situation deteriorated and, by mid-1982, 50 000 people were unemployed. It is forecast that throughout the 1980s there will be a fresh influx of 9 000 people per year on the labour market.

The budget gap widened as expenditure grew by 19% p.a. while revenue grew by only 16% p.a. The budget deficit grew from Rs (1) 439.6 million or 8.3% of GDP in 1976/77 to Rs 1516 million or 13% of GDP in 1981/82, which made the country resort to the IMF for several standby agreements. Outstanding debt, which totalled Rs 1226.6 million in June 1976, had soared to an impressive Rs 5213.7 million by May 1982. For the 1981/82 fiscal year the public debt service was therefore estimated at over Rs 900 million. Two devaluations of the rupee, linked to the SDR—in October 1979 by 30% and in September 1981 by a further 20%—provided little cure and public expenditure could not really face the post-boom requirements

(the 1976 sugar market collapse). Mounting budget deficits and credit expansion aggravated the balance of payments problems. The trade balance over the period under review has been continuously in deficit and the balance of payments has become very critical (an estimated deficit of Rs 538 million for 1981/82). All this and its calls on IMF intervention gave Mauritius a reputation few will envy: in terms of quota it has become one of the IMF's heaviest debtors.

However depressing these economic indicators seem, and they are a serious problem causing a real burden for the new government, one should remember the boom Mauritius experienced in the early 1970s. Not only was sugar then fetching



Planning minister Kailash Ruhee

good prices, tourism proved to be a good initiative and, combined with the creation of the export processing zones, it all led to growth rates of around 10%, rivalling those of more Eastern success stories. Expectations of the generally highly educated Mauritian workers rose, as did their wages. A fairly extensive social security system was set up. The 1976 sugar market collapse put an end to this pattern of growth and policies adopted after that failed to bring the recession under control.

"We will take up the challenge"

Planning minister Kailash Ruhee, working in close cooperation with his colleague in charge of finance, stressed the new government's recognition of the "blunt economic truth". "Productivity is our new key word and we should be able to establish a new working mentality which puts an end to the old unproductive routine and is more in line with our idea of management", he declared. He remains confident "that the Mauritian population, continuously being kept informed now of the state of their economy, will take up the challenge". In his view, fighting unemployment and underemployment, in the public service in particular, is a top priority. It may be significant that one of the first decisions of the new team was to sack 21 000 people "who got recruited on the eve of the election for doing nothing".

Putting together a new development plan will, in his view, "require the blessing of all Mauritians in order not to be out of touch with reality and to propose targets that really can be met". The new plan is to cover the 3-year period 1983-85, and is designed to be flexible enough to take account of the country's changing socio-economic parameters.

"We have always continued to produce sugar for the former metropolitan country and not paid enough attention to local food production. Now we will try to remedy this, certainly in view of our food import bill, but not at the expense of the sugar sector". Apart from that, job creation is expected from small and medium-scale industrial developments, tourism, agro-industries and fisher-

(1) 1 ECU = Rs10.35 (November 1982).

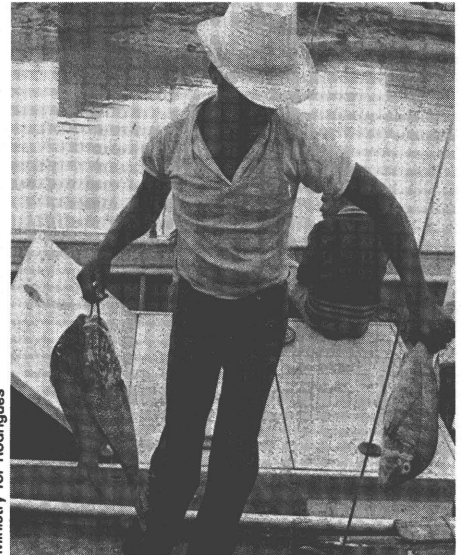


*Agriculture minister
Kishore Deerpalsingh*



FAO

Milkman on his round. Meat and dairy products have to be imported to a large extent



Ministry for Rodrigues

A Rodrigues fisherman landing part of his catch

ies, so far under-exploited. The financial strain caused by energy imports will be contained by putting more emphasis on local energy resources such as the pelletization of bagasse, a cane by-product, and eventually ethanol production.

Sugar, the mainstay of the economy

Mauritius is a classic example of a country dominated by a monoculture. Excessively reliant on sugar production (the only other agro-industrial crops being tea and tobacco) Mauritian spokesmen will never fail to refer to this crop as being imposed by history and confirmed by geography. Not only is the combination of climate and soils decisive, the sheer capacity of sugar cane to be able to survive cyclonic winds reaching up to 265 kph better than any other crop leaves the country little choice in their eyes. In over 200 years they have built up impressive sugar cane growing expertise, notably through the Mauritius Sugar Research Institute, which is of world-wide repute.

Covering almost half of the territory, and over 90% of the arable land, the sugar sector (2) is both the main employer and main export earner and contributes almost a quarter of GNP.

Mauritius is also the main beneficiary of the Lomé sugar protocol, as its agreed quantity of 487 200 met-

ric tons of white sugar represents about 40% of the total protocol allowance. No Mauritian representative, whether in the private or public sector, would want this secure market outlet ever to be questioned and all insist on its "perennial" character.

In 1982 an estimated 690 000 tons of sugar will be produced, far better than the two previous years when adverse climatic conditions allowed a production of respectively only 475 000 and 575 000 tons. Out of the present 21 sugar factories (there were about 250 by the mid-19th century), only one is government owned. About half of the cane area is cultivated by those 21 millers.

"Scapegoat" for all problems?

In view of the industry's present difficulties and confronted with a world market price for sugar which does not even cover the cost of production, both the government and the private sector are committed to its rationalization. The latter's representatives, such as Pierre Dalais, chairman of the Chamber of Agriculture, are proud of the sector's proven efficiency and underline the industry's efforts to mechanize further. They would, however, appreciate more measures to increase the sector's profitability; the 21 millers forecast a global Rs 273 million loss in 1982. Measures such as the reduction of the surcharge on the sugar

export duty from 75% to 50% are certainly welcomed, but Pierre Dalais clearly wants the sugar industry to lose its image of "scapegoat for all problems". In his view the combination of taxes on turnover and exports weighs too heavily on the sector. "The planters' remuneration of 74% as against only 26% for the millers is probably the highest in the world and makes it difficult for the latter to rationalize effectively". The government's intention to nationalize and convert into other crops 8000 hectares (about 15% of the total sugar acreage) is equally a worrying prospect for Mr Dalais, who fears "the loss of viability of the estates concerned and an eventual reduction of the total labour force". In fact he declared himself optimistic that "in due course the new government will realize the advantage of putting the money available for those intended nationalizations to use for new developments, in other words, diversification and job creation".

Rationalizing the sugar industry

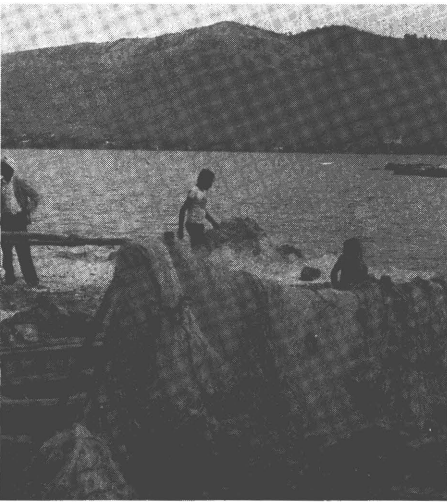
In order to determine the real state of the sugar industry the new government wants a commission of inquiry, composed of two Mauritian independent experts and one foreign expert, to carry out a one-year in-depth survey of the whole sector and propose concrete recommendations for rationalization. Agriculture minister Kishore Deerpalsingh clearly expects a lot to come out of this: "We need real long-term vision on

(2) See also *Courier* no 75 — sugar dossier pp. 69-70.



PROSI

Diversification in action: beans and other vegetables are grown between rows of cane



Mauritius Government Tourist Office

Fishermen will be entitled to more help from the government and will be organized in cooperatives



Mauritius Government Tourist Office

More attention will be given to breeding deer on ranches and in feedlots as their meat is not affected by religious taboos

the role of sugar in our whole economic structure, as its survival is the survival of the country as such".

The private sector welcomed this initiative. Pierre Dalais: "we are optimistic that this government has the genuine wish to improve the overall outlook of our industry. The sooner we will know the outcome of their inquiry, the better".

Minister Deerpalsingh views annual average sugar production of 800 000 tons without an acreage increase as feasible. Without running ahead of the inquiry results he already foresees a number of sugar-derived developments.

Sucro-chemicals could be promising with molasses forming the basis for an integrated chemical complex. A sugar by-products authority will look into this. Bagasse pelletization—already undertaken by a Mauritian sugar estate manager based in Hawaii—may be a genuine possibility for more effective electricity production, but would require heavy investments.

A good example of the new government's approach to the idea of rationalization and management was its appointment of Mervyn North-Coombes as manager of the only state-owned sugar factory, Rose Belle the so-called "lame duck" of the sector. Though politically not exactly an MMM/PSM militant, his managerial capacities are beyond doubt. He still manages a successful textile factory and reorganized, under the former government, the island's previously messy bus transport system. He aims to take a fresh look at the sugar industry and believes he can "explode the myth that only a sugar technician can understand the industry, which has been crying wolf too long". Rationalizing the Rose Belle estate and factory, i.e. by dismantling the latter, will obviously be a political decision, but as a manager he wants to bring a fresh trend into the somewhat conservative mentality of the country's "sugar milieu".

Diversification towards food self-sufficiency

Paradoxically enough, the much-needed attempts at agricultural diversification have so far mainly come from the sugar entrepreneurs. As far back as 1964, the Chamber of Agriculture created its "diversification

branch". Over the years they developed many techniques for growing such crops as potatoes, peanuts, beans, tomatoes in interrows between cane or in rotation with cane.

In view of the country's balance of payments problems and impressive food import bill, clearly agricultural diversification into food crops ranks high among the top priorities. Minister Deerpalsingh stressed "the chronic imbalance between depressed sugar export prices and ever-rising food import prices, and therefore our vulnerability in relying on outside sources in terms of both supplies and prices".

Pierre Rouillard, diversification officer of the Chamber of Agriculture, draws on his own experience in underlining "the necessity of a careful, realistic approach to diversification". This unit goes to great lengths to fight certain myths about food self-sufficiency. From the outset they felt the problem to be the local marketing and production costs. Figures show that the sheer economics of food crop production, e.g. for potatoes, maize or rice, and the purchasing power of the Mauritians could well in the end dictate how they are to go about it. In Rouillard's view "a balance has to be found between the consumers and the most efficient producers".

The main food requirement in Mauritius is rice, but attempts to produce it cost-effectively locally, as a substitute to imports, failed and have been dropped. Minister Deerpalsingh, however, feels that in view of the changed economic conditions "more research could be done into this field to determine the viability or not of local rice production".

The livestock sector also faces problems. A fair amount of meat, milk and dairy products have to be imported. As the quality of life on the island improved, the number of private owners dwindled and so did the number of cattle. "They were not given the consideration matching their contribution to the national economy", Mr Deerpalsingh thought. Studies have shown, however, considerable potential for cattle breeding and the new government intends to provide the necessary incentives. Breeding deer for venison may offer certain possibilities but a

lot more research will have to be put into it, with reference to such examples as Scotland and New Zealand. Deer adapt easily to very difficult terrain; they have another major advantage in that consumption of the meat is not affected by religious taboos such as concern Hindus regarding beef or Muslims with pork. Originally started to provide a rich man's sport, deer-hunting, the ranching of deer and now even their intensive breeding in feedlots may well in future contribute to the reduction of meat imports.

In view of the country's 1.7 million km² of exclusive maritime zone, there is great potential for the development of the fisheries sector. Yet for the time being the lack of effective control over the zone leaves Russian, Japanese, Korean and other vessels free to "exploit our fish banks without scruples", declared planning minister Ruhee. Minister Deerpalsingh feels the Mauritian fishermen are entitled to much more help from the government "as they have been a socially very exploited group". Fishing cooperatives will be created, frozen fish imports will probably be banned, credit facilities will be available to replace the often outdated equipment, port facilities will be improved and negotiations are being held with the Japanese over a deep sea fishing port. The huge task of controlling fish resources clearly goes beyond Mauritius' own capacity and is a basic argument for better regional cooperation.



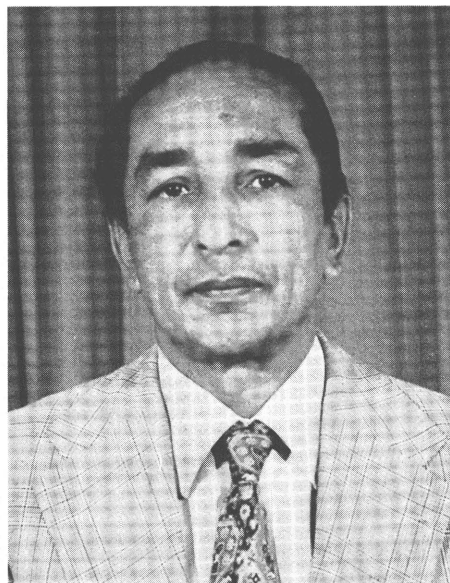
Industry and commerce minister Kader Bhayat



Textiles largely dominate the export processing zones

Remotivating the industrial sector

As referred to earlier, the private sector has reacted positively to the new government as it immediately embarked on a programme "to reverse the trend which was taking us down the road to chaos, and to create a new orientation, a new political will to steer the country up the slope again". Benoît Arouff, the Chamber of Commerce and Industry's chairman and executive director of one of the island's main general trading companies, is even more explicit in describing the stagnation of the economy. "Security is mortals' chiefest enemy and indeed the boom we lived in, in the first half of the



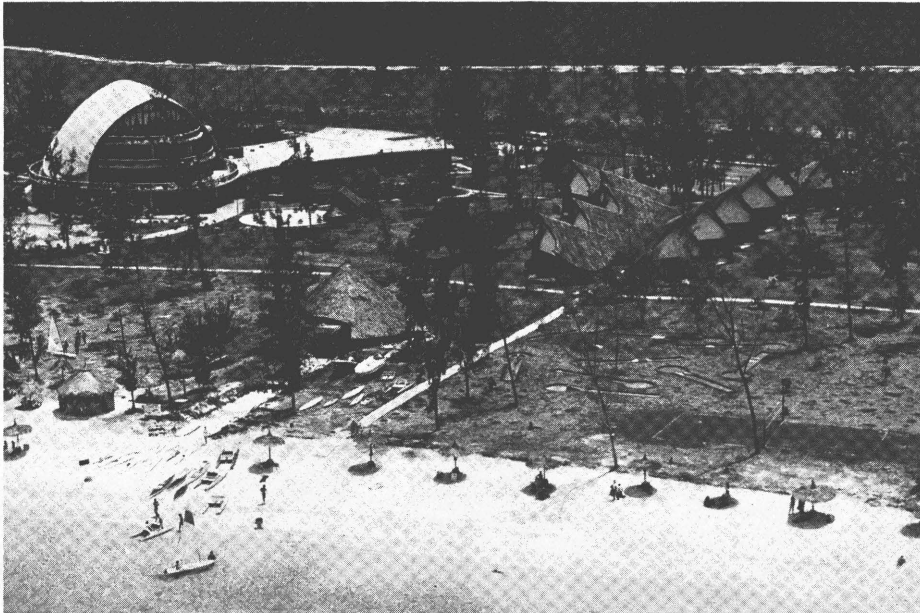
Benoît Arouff, chairman of the Chamber of Commerce and Industry

1970s, almost up to 1977-78, gave the government a false sense of security; worldwide recession combined with very slack local motivation took us down the road".

Mr Arouff, formerly permanent secretary for industrial development—and a Yaoundé and Lomé Convention negotiator—was one of the brains behind the success of the export processing zones (EPZ), which started in 1971 with nine firms employing 644 people and 10 years later numbered 115 companies employing 24 661 people. He feels the EPZs could find their second wind if enough commercial initiative is shown. New markets will have to be worked on and Mr Arouff has already headed a mission to the Middle East, "where the political stand of the new government could give a more favourable entry for our products".

Today EPZ activities are based on an approximately 40:60 ratio between foreign and local capital. There are a large number of joint ventures and many in the sugar business have successfully diversified into this area.

Textiles, ranging from spinning and knitting to complete garments, dominate the EPZs and represent almost 80% of total employment. Wool and knitwear have proved very successful and Mauritius has become the world's third largest exporter. There are worldwide difficulties in the textile industry, and in particular within the EEC. Mauritius has been



Hotels like "La Pirogue" have to attract tourists despite the steep rise in airline tariffs

criticized as being a springboard for firms originating from Hong Kong, Singapore or South Korea. Benoît Arouff, however, who has been aware of EEC textile problems since the early 1970s, does not share that point of view. "We are fully respecting the ACP-EEC rules of origin and have strived for as much integration as possible in our textile complexes... In fact we cannot put all our eggs in one basket and bet on textiles, as we have to anticipate possible curtailment of our textile exports", he declared.

Commerce and industry minister Kader Bhayat felt there was more room for further textile integration — "there is room for a large spinning and weaving mill for cotton cloth and mixed fabrics as we consume up to 25 million m² per year". As far as the EEC is concerned, he declared Mauritius would "stick to its voluntary quotas in order not to disturb the local industries there too much".

Both CCI chairman Arouff and minister Bhayat are confident that Mauritius will soon be able to attract private investors again, using the many advantages offered by the EPZs and the Mauritian workforce. They hope to bring in capital and know-how, preferably in joint ventures with local entrepreneurs. Both also agree that much more could be done to help Mauritian products conquer new markets and to show its investment advantages.

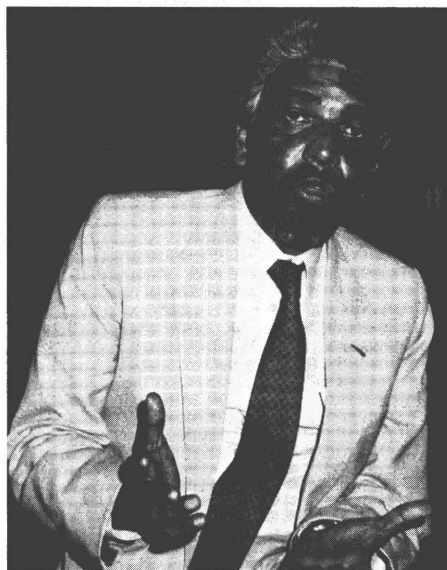
In view of Mauritius' commercial success so far, it is rather surprising that only one overseas office runs any form of export promotion, the Brussels-based CACIS representing the Chambers of Agriculture and Commerce and Industry as well as the Sugar Syndicate. Benoît Arouff will chair a newly created mixed commission on investments and export promotion.

Much hope put in regional cooperation

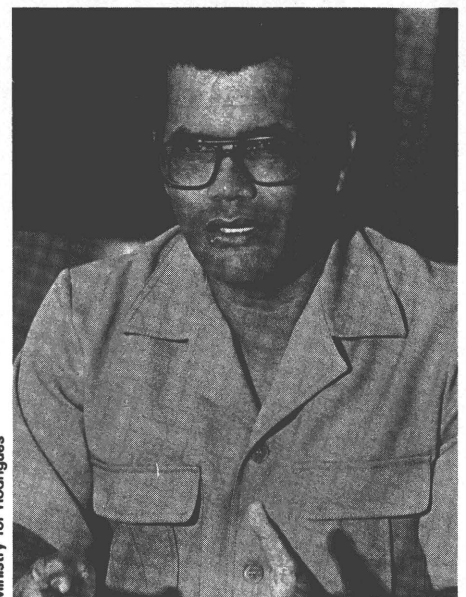
The government believes that regional cooperation could overcome some of the limitations of the small national market. The island's political

change has opened the road to close cooperation with the Seychelles and Madagascar. France has showed its interest in Reunion taking part in such cooperation and the Comoros have not rejected the idea. Much could be done in such fields as trade, communications and transport, survey and control of fish resources, cyclone warning systems and tourism.

External affairs minister Jean-Claude de L'Estrac has listed this regional cooperation as one of his top priorities. "For far too long we, the countries of the Mascarene region, have been considered as merely a subregion of Eastern Africa. Under the previous government relations with our neighbours were very cool but now the time has come to achieve a concerted development of the area of the south-western Indian Ocean". Together with its neighbours Mauritius will also try to push its peace concept for the Indian Ocean, directly linked to its Diego Garcia claim, which it feels has now become an international legal problem "We believe in authentic non-alignment and we want to escape the logic of choosing between the two great blocs. We will not let any choice, ideological, political or military, be forced on us as we feel such choices do not have to be made by us," the minister declared. Besides the country's stand with the African continent, in particular as regards southern Africa, ACP-EEC cooperation ranks high, and the Mascarene region will probably strive for greater recognition in this context.



External affairs and tourism minister
Jean-Claude de L'Estrac



Minister for Rodrigues, Serge Clair

A new impetus in tourism

Minister de L'Estrac is also in charge of tourism, which has become the country's third most important sector both as an export earner and in terms of employment. In 1981 over 15 000 people were directly or indirectly employed by this sector. There were about 4 500 beds available. The 121 260 tourists represented over Rs 425 million in foreign exchange revenue. They came mainly from Reunion, South Africa and the EEC. A tourism fair in August allowed the government to take the pulse of the tourist operators and show the population the role tourism plays. It left the tourist officials optimistic.

"Being a fragile industry with possible effects on the physical and socio-cultural environment—and we wouldn't like our own culture to be affected—we will consolidate and gradually extend our tourism. Despite the crisis, we have every reason to believe we will keep the confidence of the travel agents and, in the end, of the tourists themselves, Mr de L'Estrac felt. Europe will be target market number one but the present emphasis on Rome, Paris and London will be widened. Switzerland, the RFA and the Scandinavian countries still offer potential, as do Australia, India and Saudi Arabia. The 40% government-owned Air Mauritius company has already concluded an air traffic agreement to Saudi Arabia via Nairobi. In general, Mr de L'Estrac feels, "Air Mauritius should be even more integrated in our global strategy for tourist development". In a way Mauritius has no option but to aim for luxury tourism. Hotels have to attract people despite the steep rise in airline tariffs. Air Mauritius' director-general H. Tirvengad agreed his company had to further integrate into a tourist strategy but underlined "its principal role as a means of transport in view of the absence of any maritime passenger link to the island". Further nationalization of the airline would not be a handicap in his view, "as long as commercial management prevails".

More for Rodrigues by Rodrigues

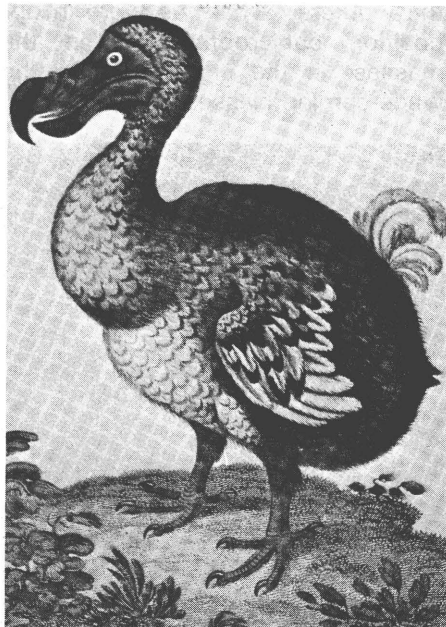
The smaller island of Rodrigues would like to get its share of tourist development, notably through its

Mauritius Government Tourist Office



A stall in Port Louis selling ready cures for almost every disease; the government will find it more difficult to cure the country's ills

handicrafts. Minister Serge Clair, who is in charge of Rodrigues and the outer islands, would like a fairer deal. "We no longer want to be a colony of the main island". A statement like this may sound surprising but is better understood when one realises that Mr Clair is only the first Rodrigues-born minister to represent his island's interests in the government. He feels Rodrigues could definitely contribute to the achievement of national self-reliance in food. "Too much land has been abandoned by our farmers, who have de-



The dodo is now extinct—Mauritius has no intention of following the example of its most famous bird

veloped a dependent mentality. Our human resources could be much better used and I am convinced that we could do better with even a smaller part of the national budget, provided we get people back to work", he stressed. Exporting vegetables and livestock to the main island, developing local fisheries and setting up small and medium-scale agro-industries all seem feasible to Mr Clair, who warmly welcomes EDF assistance in reorganizing local agriculture.

"Playing against time"

Much has happened in Mauritius since the MMM/PSM/OPR alliance took over. Priorities have been set (perhaps not in the order most wanted because of the IMF), policies have been streamlined, incentives have been given, studies have been launched and, perhaps most of all, people have been involved, informed and remotivated. Bringing the economy back to life will not be easy and may cause socio-political tensions. There has already been one major "marital" crisis in the alliance last October.

Opposition leader Sir Gaëtan Duval (3) agrees, without being over-optimistic, that "at least a serious attempt is being made to break the stagnation, as the first courageous budget of this government showed". In his view "unemployment is the problem number one, two and three". "We are playing against time, but the previous laissez-aller had to come to an end and Mauritians should roll up their sleeves again", he declared.

The new government promised in its first Queen's speech that it "will set the good example in getting the country back to work and will lead the way in the task of national reconstruction". Things are certainly happening now in Mauritius; the "Blue Penny- Paul et Virginie" country no longer seems dead as a dodo (4) in its fight against stagnation.

o R.D.B.
(3) Under the constitution the best-loser system is meant to assure minimal parliamentary representation of all ethnic groups to a maximum of 8 seats; the government decided after long deliberation to grant 4 seats to the best-loser party, the PMSD (Parti Mauricien Social-Democrate) lead by Sir Gaëtan Duval.

(4) The dodo, an exotic bird living on the island when the Dutch arrived, is now completely extinct.

"We must regain our economic independence"

An interview with finance minister Paul Bérenger

Paul Bérenger, 37-year old partisan of a policy of austerity to revive the island's economy, is generally considered to be the driving force of Mauritian socialism. For a while, some members of the press presented him as a Marxist revolutionary because he went to the barricades in Paris in May 1968 (they talked about the MMM-PSM election victory on 11 June 1982 in terms of "on your Marx"), but so far he has proved to be a pragmatic and realistic leader.

His knowledge of affairs and his long-term vision have given him a sound reputation in the government, in the party, among the opposition and in international financial circles.

Mr Bérenger is a founder member and general secretary of the MMM. He was a negotiator for the General Workers Federation and, as such, has a

sound grasp of what the workers want. The private sector, too, is counting on him to get Mauritius out of its economic depression.

But in spite of all this, taking on the job of finance minister at a time when the public debt, for example, is 45% of total state income, is no sinecure. Bérenger is in favour of an ongoing dialogue with the electorate and he is tireless in explaining to Mauritians the extent of the catastrophic economic heritage which, as things stand, is preventing legitimate claims from being granted.

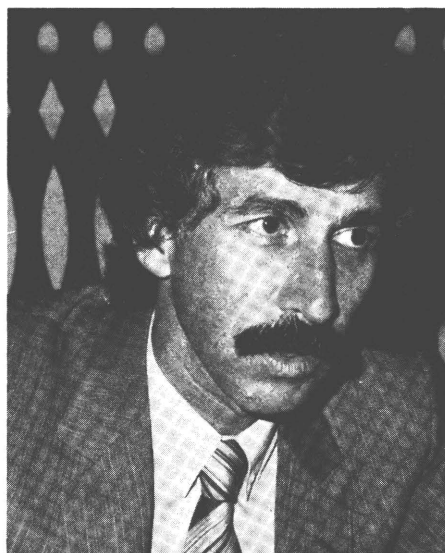
In this interview with the *Courier*, Paul Bérenger comments on the priorities of his first budget, which has something for everyone, describes the path his country must follow if it is to cease being an "IMF colony" and outlines the characteristics of Mauritian socialism.

A budget to get the economy off the ground

► *Mr Bérenger, how did people react to the new government's first budget?*

— We took up our posts on 16 June, the day the first council of ministers was held. Between 16 June and 30 July, when I presented the new government's first budget, we took stock of the economic situation we had inherited so as to present a budget that was primarily aimed at getting the economy off the ground again. But, when I presented the budget, I made it clear that the priorities were not our priorities but those forced upon us by the past and by phenomena outside our national frontiers. Since we inherited a catastrophic economic situation and we are, to put it bluntly, a colony of the International Monetary Fund, I had to present a budget which had three priorities. First, respecting the demands—I could say the conditions—of the IMF, about which we have no choice. Second, getting the economy off the ground again. And third—only, third that is—doing all we can to help the poorest people in Mauritius, those who get passed over, the unemployed, the poorly paid and all the rest of them. I am pleased to say that the budget went off very well,

as it was thoroughly prepared. Ours in a socialist, democratic government which fully intends to govern—and is already doing so—by using dialogue and by practising a policy of truth now and in the future. The budget no doubt went well primarily because of the policy of being truthful that we adopted when we came to power on 16 June. Naturally we have a considerable amount of support among the wage-earners and the workers. When we were in opposition our roots were in the masses, in the unions and in the wage-earning classes.



Finance minister Paul Bérenger

So we already have considerable support and this means we can work for the future. The surprising thing is that, after the elections, we also had and indeed still have maybe as much support from businessmen in the private sector. So we presented as good a budget as we could with little room for manoeuvre. The people, all of them, took the budget well and I personally think that the country is off to a good economic start. The task is a long one but, if all goes well, we should start to see light at the end of the economic tunnel in two or three years' time.

Mauritian socialism

► *Would it be overdoing it to say that both at home, in the private sector, say, and abroad, people had a lot of wrong ideas about the degree of socialism, not to say communism or even Trotskyism, as some reports put it? Weren't they surprised at the pragmatism and realism of the new government?*

— If the people you are talking about thought that, it's their problem. We went to a lot of trouble to explain what we wanted to do and we are doing what we promised to do and were elected to do. We were in opposition and now we are the government, and one which wants

to create a Mauritian style of socialism, that is to say a form of socialism that is resolutely non-aligned not only as far as the two super-powers are concerned but as far as all foreign powers are concerned. Although we are non-aligned, this does not exclude a real commitment to the peoples of the Third World wherever they are crushed, despised and exploited. Secondly, we want to build a kind of socialism in Mauritius that does not just respect freedom but extends it.

Thirdly, we also want to build the kind of socialism that is modern, that goes in for management; the kind of socialism that does not set out to teach everyone a lesson but which has learned something from nationalization and bureaucratization. Our socialism must be modern, it must manage in such a way as to increase our national assets and distribute them more fairly. I was pleased when the IMF and World Bank were extremely surprised to find themselves faced with a very dynamic team, one that has a great deal of imagination, is extremely serious and knows where it is going, and can distinguish between dreams and reality on the part of firms operating within the economy. That is why I said that we are off to a good start both at home and abroad.

The country with the third biggest IMF debt

► *Can we take the three priorities you mentioned one at a time? First, the IMF. You are about to leave for Toronto (1) for the meeting of finance ministers. Many developing countries have had very strained relations with the IMF precisely because of the conditions it imposes. Mauritius has large debts, but it seems to be on good terms with the IMF.*

— We had no choice. I couldn't argue with the IMF because my country didn't have the means of doing so — even if we had wanted to. We are, proportionately speaking, the country with the third biggest IMF debt. We couldn't do without the IMF, particularly in 1982-83, nor will we be able to do so for several



Telling it like it is: Mr Bérenger believes in keeping the man in the street fully informed about the real state of the Mauritian economy

years to come. Bearing in mind the balance of payments deficit we inherited, no friendly country, not even the best of friendly countries, could help us with the volume, the mass, the hundreds of millions of rupees we shall need in 1982-83 and beyond to make up our balance of payments deficit. So I had no choice but to get on with the IMF and the World Bank. The IMF doesn't give anything away and so the conditions it attached to presentation of the 1982-83 budget are as harsh as ever. We have made a considerable effort and we expect to continue with it.

What we are aiming at over the coming months is a new stand-by agreement with the IMF, a new structural adjustment loan with the World Bank and another meeting of the consultative group under the aegis of the IMF and the World Bank in Paris in February or March which the USA, the EEC, France, Germany, the UK, Japan, the Scandinavian countries, India, Algeria, Libya, Australia, Canada and others will be invited to attend. I am off to London now to the meeting of Commonwealth finance ministers and then I am going to Toronto to the IMF and to Washington, New York and Ottawa and then to Paris, Algiers and Tripoli.

Guy Penne, President Mitterrand's adviser on African affairs, came to Mauritius a few days after the election results came out, Jean-Pierre Cot is with us at the moment and I shall be seeing Jacques Delors in Toronto at the IMF conference. Mrs Gandhi has just been to see us as

well. So we have consolidated our relations with our friends as far as the consultative group is concerned. We fully intend to continue our drive to readjust the economy so as to become independent of the IMF. We do not much like the demands it makes, but we get on well with it — although that doesn't rule out our desire to be economically independent as soon as possible.

► *Would it be right to conclude that, in macro-economic terms, Mauritius really has begun economic decolonization?*

— We have been politically independent since May 1968, but, since the elections in 1976, we have lost our economic independence. Since 1976, we have gradually become an IMF colony and what we are aiming to do, as I said, is to regain our independence. It won't be easy. It is a long job and our small firms and our employees will feel the pinch; the whole country will. But we have no choice. We have to get our economic independence back.

► *Are you going to get this economic realism across in a dialogue with the population?*

— We already have. We are, I repeat, a government which is pro-dialogue and which implements a policy of truth, and we are going to keep it that way.

► *Foreign observers are very interested in this government's intentions as regards nationalization in the sugar sector, in industry and in the tourist trade.*

(1) This interview was recorded on 30 August 1982.

— There again we had a very precise programme before the elections. A certain amount of nationalization is planned. The scope of our programmes has been clearly defined and we shall not go beyond it.

► *But in your first budget speech, for example, you make no mention of any nationalization in the sugar sector. Is this because you are waiting for the results of the commission of enquiry?*

— Not necessarily. Our government programme is a five-year programme. The budget I presented and what we call the programme speech, the speech from the throne, presented a few weeks before, is a one-year programme. In this first year, we have decided against nationalization. We have chosen to put the accent on reorganizing the economy in general and one or two sectors in particular. We want to set up a number of new institutions and to take things step-by-step over the next five years. Our intention is to implement the programme but to do so within the framework of a dialogue, and within the framework of democracy, over the next five years.

“We believe in self-orientated development”

► *Which of Mauritius’ sectors are you expecting to get off the ground?*

— We shall not forget agriculture—I am not a recent convert of the World Bank and its report this

year which, as you know, stresses agriculture this time—we have always believed in it. We believe in self-reliance. We believe in self-orientated development. So we are putting as much emphasis as possible on agriculture, on agricultural diversification. We are not neglecting this sector at all—but when it comes to diversifying employment, it is industry we are counting on. Not just industrial free zones, but industrialization in general. And we are also counting on the tourist trade. Apart from new forms of energy, these are the sectors we are going to concentrate on.

“Without the sugar protocol, Mauritius would be heading for disaster”

► *You are fairly optimistic about the relaunching of the Mauritian economy in spite of the world recession?*

— It doesn’t help us, there is no doubt about that. But we intend to play our weak hand as best we can. We are aware that international competition is merciless and we are going to do our utmost to do better than those who are now competing with us. We have to catch them up and overtake them wherever we have to and wherever we can. We also hope there won’t be any more hurricanes, any more droughts and that world sugar prices won’t have any further effect on our campaign to relaunch the economy. Above all our economic drive will involve improv-

ing the balance of payments and we are going to do our utmost to preserve our advantages vis-à-vis the EEC. I am thinking quite naturally of the sugar protocol here and of the advantages that Mauritius gets from this.

► *How important do you think it is as far as the country’s income in general is concerned?*

— Mauritius would be heading for disaster without the sugar protocol. All our drive and all our effort would be worthless if the sugar protocol were brought into question. As far as we are concerned it is absolutely vital. It is a question of life and death, of the death of our economy itself. That shows just how much attention we pay to this and how closely we shall follow what happens to the sugar protocol.

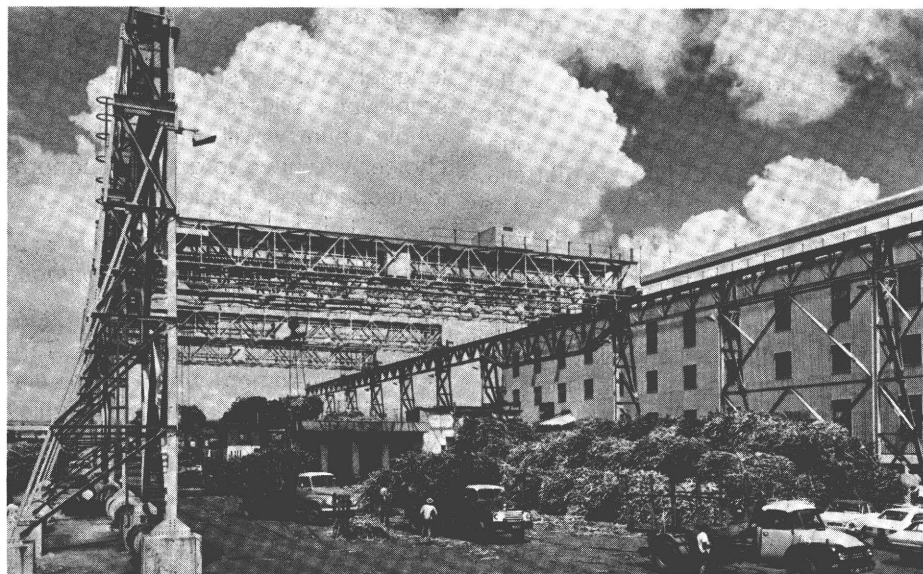
“Truth can move mountains”

► *Politically speaking, if you take a closer look at the third priority, the problem of the poorest people in the community, don’t you fear they will be disappointed at the government not being revolutionary enough for them, that things aren’t going fast enough and that you might get opposition at grass roots level?*

— This opposition will be manifested in the streets, at grass roots level, most certainly. It’s inevitable. But truth can move mountains. So we intend to go on practising this policy of truth and explaining why we want to do what we are doing and no more and why we shan’t be doing any less either. So far, we have succeeded with this policy. Obviously the government is still in a honeymoon period, you might say, but we think the unemployed, the unions, all those people that society has passed by, will understand if we make a constant effort to explain why we cannot do more. We think they will give us time to enable Mauritius to solve its problems and then to make a more practical job of tackling their problems.

“The sugar industry has to gear itself to today’s situation”

► *In that key sector, the sugar industry, how far is the government*



Unloading cane in a refinery: “Mauritius would be heading for disaster without the sugar protocol”

intending to rationalize, to go in for your style of socialist management?

— We and the World Bank are actively engaged in forming a commission of enquiry — not necessarily something punitive, but something that will shed light once and for all on the industry's financial situation as it really is and make recommendations. There will also be the knotty problem of the centralization of the sugar properties, which will come up in the commission and elsewhere. We have 21 sugar properties in Mauritius and the main question is what direction the industry should take, bearing in mind world sugar prices. When I get back, I intend to get the sugar industry to give itself a good shake. I don't want to terrorize anyone, of course, but there are retrograde attitudes that are outmoded. There is enormous capacity in the sugar industry, of course, and anyone who wants to work for the development of his country and for the development of the sugar industry will get every opportunity to do so. But what we want is to see the sugar industry gear itself to today's situation, to socialism in a modern socialist democracy, with modern industrial relations and with proper respect for the workers. Attitudes will have to change. I shall shout from the rooftops when I get back and we will find a Mauritian-style answer in the sugar industry.

Shaking up the public service

► *That's the private sector. But as far as the government sector is concerned, how can you capitalize better on the human potential of the public service?*

— There again, you know, we have done a huge amount of work over the past couple of months — and with no false modesty either. In the public sector we have taken the bull by the horns and I myself have appointed a committee of top officials to look into the central administration and all the para-state organizations to see where there are too many staff and under-exploited capacities—hidden unemployment, that is to say. The enquiry will be finished while I am away. We—and the commission—will be making recommendations to the government to ensure that all work done on Mauritius is



"In terms of job creation, we are counting particularly on industry"

productive, to ensure that every penny we spend goes to better the nation and is not wasted — as has happened so far, alas, in many sectors. There again we are trying, with the help of the World Bank once again, to move forward. We are appointing a team of experts and foreign consultants to make recommendations on the reorganization of our central administration and on the relations between our central administration and the semi-state organizations. These structures and relations date back to the colonial era and here again our aim is to shake everything up and to modernize within a well-planned democratic framework.

Problem number one — unemployment

► *More generally, the problem of unemployment seems to be taking on almost dramatic proportions. Are there any real possibilities of coping with it?*

— Unemployment was already problem number one before the elections. We are beyond the 15% of the working population mark and so naturally economic renewal is aimed first and foremost at creating productive capacity. The only answer to unemployment is to create productive jobs and that takes time. Meanwhile, we are going to introduce a system of very realistic unemployment benefits, something that is very well planned and supervised. We

have an outline plan produced with the help of British experts. We worked on it, a team of us, three ministers plus an official and here again we shall be trying to finalize things—but always via a dialogue—and to circulate a document for discussion to employers, heads of firms and unions. Everyone will have contributed something to the dialogue and to the financing of the unemployment benefit project.

Regional cooperation — "close to our hearts"

► *What do you think about the aid you get from the EEC?*

— We are not at all satisfied with the way the previous government went about using it. Or under-used it I should say. We are now reviewing the whole question of Mauritius and its relations with the EEC — and the matter of regional aid as well, as this was something that was always under-used in the past. As a first step, we and the people of Madagascar and the Seychelles shall be actively involved in making the best possible use of all the possibilities of EEC-Mauritius aid and of EEC aid in the south-western islands of the Indian Ocean too. This is something that is close to our hearts.

► *From a regional point of view, are things going more smoothly now...*

— You are right, there was no agreement at all before. There was a constant war of words between the Mauritian government and the governments of the Seychelles and Madagascar. Today, there is sound agreement, with mutual respect for our independence and individuality.

► *But there again you have to be realistic. The economy of some of these partners may be in a worse state than yours.*

— Well, it's up to them to define the state of their economy. We have to leave each nation to solve its own economic problems — but even if difficulties exist in Mauritius, Madagascar and the Seychelles, it does not rule out the idea of regional cooperation, which can, in fact, help each of the countries involved to solve its own problems. ◦

Interview by R.D.B.

EEC-Mauritius cooperation

Cooperation between Mauritius and the EEC began in 1972 when Mauritius became associated to the Community by acceding to Yaoundé II, the first and only member of the Commonwealth to do so. Apart from a relatively small amount of financial and technical cooperation, the major benefit Mauritius derived from this association was preferential treatment for its manufactures on the Community market, which provided essential support for the rapid development of its industrial potential. Cooperation continued under Lomé I and II; the new association led to greater financial and technical cooperation and also provided instruments that were particularly suited to the country's needs. In view of the economy's strong dependence on sugar production, the sugar protocol has become the cornerstone of cooperation between Mauritius and the EEC. Table I sums up this cooperation between 1972 and 1982.

Cooperation under Lomé I (4th EDF)

Negotiations for a further association agreement between the enlarged Community and the ACP group began in 1973 and culminated, on 28 February 1975, in the signing of Lomé I in the capital of Togo. This marked a new era in co-operation between Europe and the 'associated' states, not just because more money became available for financial and technical cooperation but also—and this was most important—because more instruments were introduced, while those available under Yaoundé II were improved. Those parts of the new Convention that were of particular interest to Mauritius were:

- the sugar protocol, which enabled a large percentage of the country's sugar production to be sold on the Community market at a guaranteed price;
- the provisions on commercial and industrial cooperation, which continued to provide Mauritius with free access to Community markets for its manufactures, but abandoned the principle of reciprocity, which had still held good under Yaoundé II;
- the provisions on financial and technical cooperation, whereby more substantial amounts were released for the financing of the country's economic and development plans.

Implementation of the sugar protocol

Under the Commonwealth sugar agreement (CSA), which was negotiated in 1968, Mauritius was able to export 386 000 tons of raw sugar to the UK at guaranteed prices every year. This quantity was later increased to 435 000 t raw sugar.

With the inclusion of protocol n° 3 in Lomé I the Community undertook, for an indeterminate period, to purchase and import, at guaranteed prices, the quantities of raw and white cane sugar laid down in the protocol that 13 ACP countries undertook to supply. Mauritius has a guarantee that the Community will



Sugar, the "cornerstone" of cooperation between the Community and Mauritius

buy 487 200 t of white sugar (529 500 t raw sugar) every year. Because of the country's strong dependence on sugar exports (accounting for more than 70 % of its foreign exchange earnings) and the price slump on the world market, the protocol has become the main means of stabilizing Mauritius's foreign exchange earnings. It is therefore vital to the harmonious development of the country's economy as a whole.

Commercial and industrial cooperation

As was already the case under Yaoundé II, Lomé I guaranteed free access, with neither quantitative nor tariff restrictions, for Mauritian manufactures to the Community market. Combined with a campaign to promote European investments in the country and increasingly regular Mauritian displays at trade fairs in Europe, this arrangement continued to have an encouraging effect on the development of industrial production by firms in the Export Processing Zone throughout the period of the Convention. The number of firms increased constantly, reaching a total of 100 in late 1980 and creating almost 21 400 jobs.

However, the success of Mauritius' industrial production and the marketing of its products on the Community markets, particularly in the textile sector, an increasingly difficult field for European industry, led to France imposing quotas on imports of Mauritian woollen goods in 1977 and the United Kingdom following suit later. These two countries invoked the safeguard clause which the Convention provides for cases of serious perturbation in economic sectors in the countries of the Community. However, negotiations led to the fixing of a quota which, although restrictive, did in fact leave a reasonable market for existing Mauritian industrial output.

Another problem was the free export to Europe of Mauritian-canned tuna from third countries. One (at least partial) solution was reached by introducing a derogation from the rules of origin for 1000 t of this fish p.a.

Table I

EEC-Mauritius cooperation, 1972-1982

Resources available (ECU '000)

1. Cooperation 1972-1975	
a) Yaoundé II	
• Financial and technical cooperation	5 061
b) Extra-convention cooperation	
• Food aid	4 000
Total 1	9 061
2. Cooperation 1976-1980	
a) Lomé I	
• Indicative programme	15 300
• EIB	14 760
• Exceptional aid, article 59	4 850
• CID	65
	34 975
TE: — Regional cooperation: Mauritius involved in four projects totalling ECU 8 491 000	
— Sugar protocol: agreed quantity of 487 200 t.p.a.	
b) Extra-convention cooperation	
• Food aid	6 810
• NGO co-financing	781
	7 591
Total 2	42 566
3. Cooperation 1981-1985 (situation as of September 1982)	
a) Lomé II	
• Indicative programme	18 500
• EIB	5 250
• Emergency aid, article 137	35
	23 785
TE: — Regional cooperation: ECU 20 million	
— Sugar protocol: agreed quantity of 487 200 t.p.a.	
b) Extra-convention cooperation	
• Food aid	3 066
Total 3	26 831
Grand total (1, 2 & 3)	78 478



One of the main Lomé II projects: the agricultural development of Rodrigues

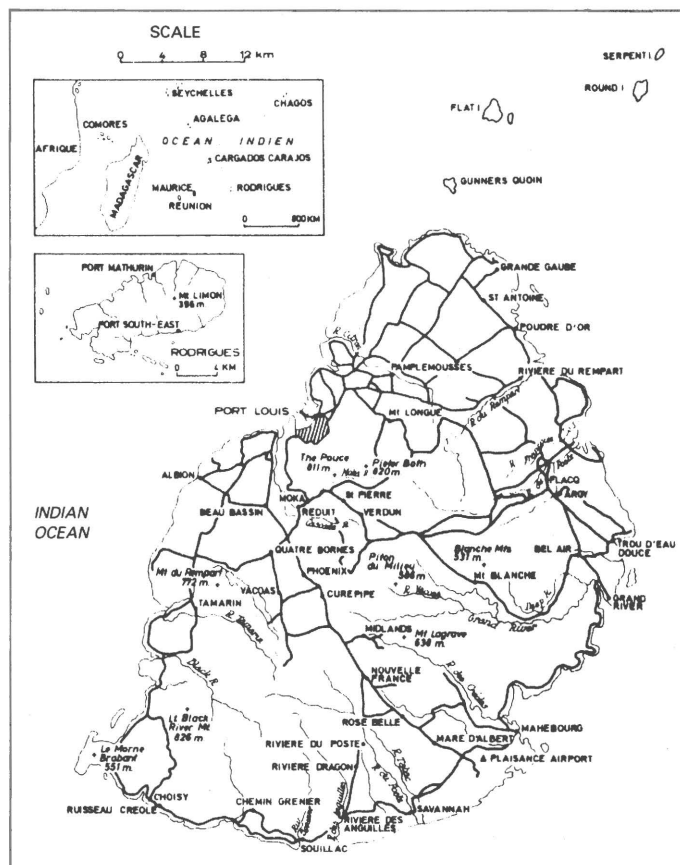


Table II

5th EDF indicative programme (Lomé II)

(ECU '000)

Sectors & projets	Forecast		Commitments as of 31.10.82
	%	Amount (1)	
1. Agriculture	38.3	7 100	3 000
• agricultural development on Rodrigues — (study) — (project)			
• storage of food products (study)			50
2. Economic infrastructure (roads) & social infrastructure (health)	29.6	5 400	3 150
• improvements to public health infrastructure			
3. Economic diversification	8.7	1 600	1 610
• investment promotion & trade promotion			
4. Micro-projects	5.2	1 000	417 (2)
• first micro-project programme			
• second micro-project programme			1 037 (2)
5. Technical assistance and training	5.2	1 000	
6. Reserve fund	13	2 400	40
Total	100	18 500	9 334

(1) This is the minimum amount of the allocation, which is between ECU 18.5 m and 21.5 m.

(2) Commitments in excess of forecasts will be covered by the remainder of the 3rd EDF.

Financial and technical cooperation (4th EDF)

The indicative programme, finalized during a programming mission in May 1976 and involving a total of ECU 15.3 million, earmarked most of the funds for rural development, economic and social infrastructure and for training, technical assistance and industrial and commercial promotion. All the projects provided for in the indicative programme have been or are being completed, with the single exception of a west coast irrigation project.

A technical study (following a feasibility study carried out with 3rd EDF financing) showed that after the oil price increase, the profitability of the project, which depended considerably on energy to pump the water, could no longer be guaranteed. So the Mauritian authorities asked for the project to be dropped and the funds thus released were earmarked for a programme involving medical supplies and the purchase of spare parts and light equipment for the sugar industry. The first stage of this is being implemented. Since a line of credit to the Development Bank of Mauritius has been opened by the European Investment Bank and the sugar industry will also be able to benefit from this in the form of soft loans, the second phase of the programme will not now need to be implemented. The funds not yet committed (ECU 2 968 000) are available to finance schemes in those fields the new government feels should have priority. It has already announced its intention of using this money co-financing the Phoenix - la Vigie road, but the final decision is yet to be taken.

Disaster aid

Yaoundé II already provided the possibility of helping associated countries struck by natural disaster. The provisions on exceptional aid reappeared in Lomé I and Mauritius received three grants during the 1975-80 period, following hurricane Gervase (1976), Celine II (1979) and Claudette (1980), for a total amount of ECU 4 850 000.

The EIB committed ECU 12 535 000 under Lomé I, 12.5 m of it as loans from own resources (Cen-

tral Electricity Board I and II and the Development Bank of Mauritius) and ECU 35 000 as risk capital (study on ethanol production). Interest rebates worth ECU 2 225 000 were granted on EIB loans on normal terms.

A total sum of ECU 8 536 000 went to regional cooperation among the states of the Indian Ocean under Lomé I and this enabled projects in the fields of training, fisheries and sea transport to be financed. Mauritius was involved in four such projects worth a total ECU 8 491 000.

Cooperation under Lomé II (5th EDF)

Negotiations for the Lomé II Convention began in 1978, when the first signs of the world economic recession were becoming apparent. The crisis had already hit the EEC countries and protectionist tendencies had gained ground, but in spite of the unfavourable conditions, the negotiations ended in a new agreement which fully maintained ACP achievements and even offered certain improvements over Lomé I. For Mauritius, it was vital for the sugar protocol to reappear as it stood and for the new Convention to continue to guarantee the same treatment for manufactures as the previous one did.

The 5th EDF indicative programme for financial and technical cooperation was drafted during a programming mission in April 1980. Mauritius will be getting between ECU 18.5 m and 21.5 m, the final amount to be fixed later. Most of it will be made available in the form of grants, but ECU 5.7 m will be special loans.

Unlike indicative programmes in previous conventions, which were established on the basis of definite projects, 5th EDF programming does no more than allocate the funds to particular sectors. In Mauritius' case, these sectors are:

- agriculture, which gets nearly 40 % of available credit for the diversification of production;
- economic infrastructure (roads) and social infrastructure (public health services);
- economic diversification: industrial and commercial promotion;
- micro-projects of direct benefit to

urban and rural communities;
- training and technical assistance.

Forecasts for the 5th EDF indicative programme and commitments and payments to 31 October 1982 are set out in table II.

Between ECU 15 m and 20 m will be channelled into regional projects over and above the amounts in the indicative programme.

The EIB will be looking into providing ECU 10 m (own resources and/or risk capital) for productive investment projects, in industry and the tourist trade in particular. ECU 5 250 000 (including interest rebates) has already been made available through a line of credit opened with the Development Bank of Mauritius.

After the hurricane that hit Rodrigues in 1981, emergency aid worth ECU 35 000 was granted in accordance with article 137 of Lomé II.

Cooperation outside the association agreements

Mauritius has also received food aid on a number of occasions for a total amount of about ECU 13.9 m (internal Community prices).

A Community contribution of ECU 781 000 has been channelled into the co-financing of NGO schemes.

Conclusion

Mauritius' association with the Community brings it advantages which make a substantial contribution to the economic and social development of the country. They are particularly evident in the sugar protocol, the free access to the European market and the financial and technical cooperation funded from the indicative programme resources and the EIB. Food aid and emergency aid complete the range of cooperation activities.

The effect of association on the Mauritian economy has led the MMM/PSM alliance to make an explicit reference to consolidation of the country's achievements vis-à-vis the EEC as one of the aims of its economic and political programme. o

GERHARD HILD
Directorate general
for development,
EEC Commission

ACP students and migrant workers in the EEC

Interview with Amédée Turner^(*)

In September 1981 the ACP-EEC Consultative Assembly, meeting in Luxembourg, approved a recommendation of its Joint Committee that a joint working party be entrusted with the task of monitoring progress made, within the context of the Lomé Convention, in ACP-EEC cultural cooperation. The specific question of ACP students and migrant workers in the EEC was added later at the request of the ACP Council of Ministers. One of the prime movers behind these decisions was the Mauritian ambassador to Brussels, Raymond Chasle. He drew up the original report on cultural cooperation (see *Courier* no. 67, May 1981, pp. 82-86) which was presented to the ACP-EEC Joint Committee in Freetown in February 1981. As rapporteur for the present working group, he prepared a report on progress, in June 1982, for the Consultative Assembly in Rome. The chairman of the working group is Amédée Turner, a British member of the European Democratic group in the European Parliament, and it was to him that the *Courier* turned to discuss the question of ACP students and workers in the EEC.

► *Can we start by asking you why the problem of ACP students and migrant workers was included in the overall discussions on cultural cooperation by the working party of the ACP-EEC Joint Committee?*

— This working party is a fairly recent creation, and it came about because cultural matters had never been given any specific attention in the past. Both sides, the ACP and the Europeans, felt that when a new convention was agreed to continue cooperation between the ACP and the European states, there ought to be consideration of cultural problems created by application of the new convention. For instance, if one has a project for technology training one ought consciously to consider, at the outset, whether or not any cultural or social problems might be created by such a project. That was our main objective in the working party.

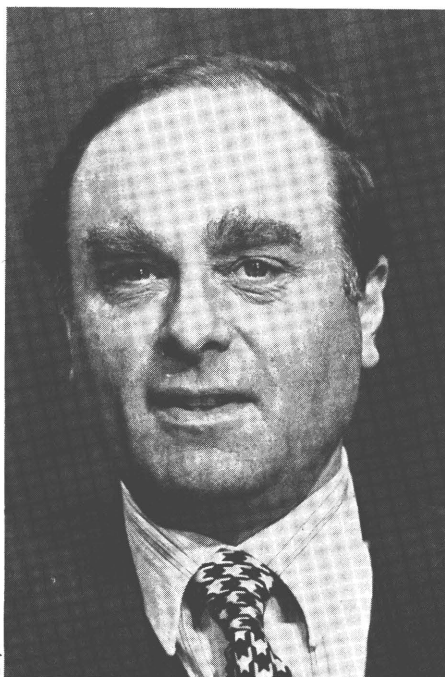
Preparations for a new convention

We want to make quite sure that when the negotiations start the ACP

(*) Mr Turner is a member of the European Democratic Group (UK) of the European Parliament and chairman of the ACP-EEC Joint Committee's working party on cultural cooperation.

side, the European side, and the Commission, all realize that at every step they must make sure that cultural and socio-cultural aspects of all our proposals are given prime attention. It largely concerns the impact of development assistance and food supplies.

We also consider the role of European universities in building up education in the ACP and, of course, the



Amédée Turner

question of works of art, which means making sure that they are available to all those who are interested in them throughout the ACP world, as well as amongst the Europeans. It is important to show Europeans ACP cultures. Having done all that, we turned to specific matters. One was the position of women which is very often affected, in ways one doesn't expect, by projects and policies in the present Lomé Convention. And then of course we got onto the question of students and migrant workers coming to Europe.

► *Most of what you said concerns the impact, in the cultural sphere, of what Europe does in the ACP. But clearly the question of students and migrant workers works the other way round, since these people are in Europe. In what context can they really be included in cultural cooperation?*

— First of all you're quite right that the presence of students in Europe is creating problems, but the presence of these students in Europe is very important because of their effect on their fellow-students. That is extremely valuable. I personally feel that the most important thing about the exchange of students is that you do get people of different countries getting together and understanding each other. It's one reason why the younger generation is much more tolerant of other cultures. So I do agree that the cultural impact of the ACP students on the European countries is vital. The working party is concerned with the practicabilities of ACP students being able to continue coming in large numbers to the European universities. We were also, of course, concerned with any damage they might suffer when here, if they received treatment which was not helpful to their education.

► *What do you mean by damage?*

— I'm thinking of the possibility that they might not be made to feel welcome. They might feel that they were being discriminated against, or it might be that the expense of living here was a worry to them. Any form of possible damage to a student would be very much a matter which

the working party would be concerned with.

Barriers to foreign students

► *You mentioned the importance of such students getting to Europe in the first place and you indicated there were problems. Are these primarily financial problems, or are there others?*

— There is the problem of economic conditions in Europe at the present time, with greatly increasing unemployment and the need for all the governments to retrench in order to prevent inflation running riot. There has been, in all spheres of government in Europe, an attempt to cut down expenditure, and in some countries we have received complaints that overseas students are being unfairly treated.

I understand that in the case of Britain, for instance, the government had believed that when they put more of the cost of educating foreign students on the students themselves, that would cover all students, American, European and everybody. It turns out that it cannot cover students from other EEC countries, because that would be contrary to the Treaty of Rome. It therefore turns out that there is an unintended and rather serious financial discrimination against non-EEC overseas students in Britain. I understand that there are also problems in Belgium. In Britain, at any rate, a committee has been considering this and hopes to produce proposals early in 1983. I very much hope, of course, that those proposals will be satisfactory.

So far as the working party is concerned, we have taken note of various complaints reported to us by ACP representatives at the recent meeting of the ACP-EEC Joint Committee and Consultative Assembly in Rome. We are taking those up with the governments concerned and shall be reporting to the meeting of the Joint Committee in Jamaica next February. It is a unique body, in fact, and a very valuable one, and, of course, it is exactly the place where such matters should be brought up. All matters of interest to the ACP states and the EEC member states are its business. Problems like this could also, of course, be brought up in the national parliaments and insofar as any particular country is con-



J. Schubert

The meeting of three cultures in a Belgian market. Migration over the last 40 years has changed the social mix of several EEC countries

cerned, I have no doubt that the members of the European Parliament from that country do indeed take the matter up at home with their own parliamentarians and governments.

► *You were talking about the cost an ACP student faces when he comes to Europe to study. Do you personally think that this can best be dealt with by providing subsidies to the academic institutions which he might attend or by providing the student himself with a more generous scholarship?*

— I quite honestly don't know what would be best in any particular country. The financial systems in different countries vary greatly: I would have thought that so long as the student is free from the worry of having to pay more than he can afford personally, how it is done is an administrative matter. It's certainly not a matter which the EEC itself should go into in detail. It would merely lay down a principal.

► *How serious is the problem of students, once they've completed their studies, not returning to the developing country they came from?*

— That was raised on a number of occasions in Rome, by speakers on both sides. And also by the commissioner as far as I can remember. A high number of ACP students do not return and this is very alarming. It is a complete negation of the object of training. It would be quite wrong

to compel a student to take any course of action after he leaves his full-time education, but certainly the countries who have students in European universities ought to do all they can to make it attractive to the student, when he is qualified, to go back to his own country where his skills are needed. We are certainly going to look into this and see what can be done, and see if there are any specific reasons why students stay abroad. It may be that they do not stay abroad for a particularly long time, or that they don't go back immediately to their country, because they are carrying on some ancillary study meanwhile.

ACP migrant workers

► *Can we turn now to the question of migrant workers where we are talking of far greater numbers?*

— Well, I couldn't talk about migrant workers who do not come from ACP countries, because that's not really at all relevant to the Joint Committee or its working party. We're only concerned with migrant workers who come from ACP countries, and, of course, these are only a very small proportion of migrant workers who exist in the EEC.

► *Is it really realistic, then, to be discussing the question of ACP migrant workers as a separate issue when the overwhelming majority of such workers are from developing*

countries in North Africa and Asia or from such countries as Turkey?

— Well, if there are specific problems which concern ACP migrant workers rather than the others, or concern them more seriously, then of course we should take it up. We haven't in fact had anything specific put to us yet in the working party. But we may very well come across specific problems which should be taken up. At the moment I believe that although we talk about students and migrant workers under one heading, we are really primarily thinking of students.

► You mentioned earlier the question of unemployment. Could we come back to that, briefly, in the context of migrant workers? Is it realistic to expect any initiatives which would improve access, for example, when all the European countries face severe problems of unemployment?

— No, it isn't. And the number of migrant workers has gone down enormously in the past few years and no doubt will continue to reduce. I don't think it is a matter which is a live issue in the ACP at all.

► Do you think anything can be done at European level to guarantee the migrant workers their rights and protect them from discrimination?

— They are getting guarantees through the ordinary development of European law for migrant workers in general, without any specific refer-

ence to those who have come from the ACP.

There has been no discussion in the working party of immigrants who have permanently settled in one of the EEC countries and who have become citizens of that country. They have all the rights of a citizen and I assume that that is the view of my working party. However, we haven't discussed this yet, so I can't say definitely that that will be the case.

A charter of rights

► The second Lomé Convention had an annex covering the question of migrant workers and students. Do you think there is a need for the next convention to go much further than a simple annex?

— I see no harm at all in there being a kind of charter of rights for students and migrant workers. I don't know what the working party will decide on this because we haven't discussed it yet. But if it seemed to us that we were dealing with problems that might arise in the future, or existing ones that might arise again, then we might well decide that some kind of simple charter in the convention, or an annex to it, would be a good idea.

► Can you see any legal and other problems developing from that since, in many European countries, there are large migrant worker populations who are not from the ACP? One would, in fact, be discriminating between the two groups.

— Yes, when I gave my answer I must confess I was thinking of students, and I can see there could be legal problems. That is why I would imagine any such charter would take the form of recommendations to the member states. It would then be the duty of the EEC Commission to be the watchdog with, of course, the assistance of the ACP-EEC Consultative Assembly carrying out its proper role as a parliamentary representative body.

► Do you think that a separate fund might be necessary to deal with problems of migrants and students? It has been suggested in some quarters.

— Well, I hope that any financial problems that exist at the present time or might in the future, such as the cost of living and education for students, would be dealt with by the national governments. Another cost, incidentally, which has been brought up, I believe in Belgium, is that the children of students are now subject, in some cases, to high educational fees. But that sort of thing should be a matter for national governments provided we and the Commission keep an eye on what is going on.

► Can I ask you about the future work of your working party? What is your timescale, and what sort of recommendations, at what level and directed to whom, are you trying to formulate?

— Well, we've written two reports so far. The first was on basic principals by Mr Chasle. The second one was a follow-up report on the progress made so far. What we are concerned with in 1983 is to go through every aspect of our cooperation where we think there should be a cultural content in the new convention. We shall decide where these are, and we shall also decide what we think the cultural content should be. And at the moment I rather take the view, and this is only my own opinion and is quite informal, but appears to be fairly acceptable, that there should be a general statement on culture. That is important I feel. And then there should be, throughout the new convention, a socio-cultural paragraph wherever there is an impact on social and cultural life. ○

Interview by IAN PIPER



Unemployment in Europe has grown steadily since the mid-1970s, affecting migrant as well as non-migrant workers

Books about Europe

L'Art des origines de l'Europe (Early European art) — Editions Elsevier Séquoia, 1, rue du 29 juillet, 75001, Paris, France and 142, av. Louise, bte 8, 1050, Brussels, Belgium — 523 pages — 1979

"This book deals with the very origins of our civilization. It goes back to the first ages of artistic creation in Europe, from prehistoric times to halfway through the Middle Ages, around the year 1000.

If we are to appreciate the art and craft of prehistory, we need to understand why they emerged. Generally speaking, primitive peoples, our prehistoric ancestors, were not seeking aesthetic effects and their forms of expression were means of communication with the outside world. Prehistoric art implies a certain level of consciousness. It depends on time and on place and often has magical or religious significance — look at the cave paintings of Lascaux and Altamira, the druid stones of Carnac and Stonehenge, the menhirs of Filitosa (Corsica) and all the everyday objects (the jewelry, the tools, the vases and the statuettes) artistically decorated with what are often esoteric symbols.

Prehistoric Europe was influenced by more advanced civilizations in the Middle East and Around the Aegean Sea — but did it in turn influence artistic creation in mediaeval Europe? Very little. Only the Celtic style survived, almost intact, to inspire the art of certain isolated regions, such as Brittany, on the fringe of Europe.

Mediaeval art has its roots more in classical antiquity, in the Greeks and Romans and in Christianity. And it has also been influenced by the art of the invaders, the Ostrogoths in Italy, the Visigoths in Spain and the Normans in France.

In the West, during the Carolingian period, architecture (Aix and Tournus, for example), gold-crafting and miniatures reached their first peak; in the East, the wonderful art of Byzantium (the mosaics of Saint Sophia in Constantinople and Ravenna) and Mozarabic art (Cordoba and Grenada) flourished. The 500 illustrations in this book, which emphasizes the

image rather than the word, cover all these works, presenting them simply. We invite the reader to appreciate and admire them as he turns the pages". (Extract from the preface by Max-Pol Fouchet).

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Jean-Hervé LORENZI, Olivier PASTRE & Joëlle TOLEDANO — **La crise du XX^e siècle (The crisis of the Twentieth Century)** — Editions Economica, 49, rue Héricart, 75015, Paris, France — 387 pages — 1980

The first real crisis of the twentieth century is on us now. The 1929 crisis was the inertia of the previous century, the last tremors of an outmoded fashion; an era in which there would be no depression, a time of balanced growth, was due to start. But at the end of the 1960, the world changed profoundly for four reasons: the kinds of consumption prevalent since the post-war years ran out of steam, a large number of tertiary activities developed rapidly, state expenditure grew enormously and productivity increases collapsed.

The crisis is not due to a whole series of misfortunes but to these four phenomena alone. This is why it is so serious. It should give rise to a new mode of consumption and production and a new hierarchy of economic powers, which will mean that the crisis has again taken on its status as a regulator in the developed capitalist world.

This book does not just describe the consequences of all this. For the first time it gives us a detailed explanation of the crisis in France.

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Adrien RIES — **L'ABC du Marché commun agricole (ABC of the agricultural Common Market)** — Preface by Edith Cresson — Second edition, revised and updated — Editions Labor, Bruxelles — 205 pages — Bfrs 350 — 1981

French agriculture minister Edith Cresson writes: The first edition of this work was a bedside book for anyone interested in the way Eu-

rope's agriculture is organized. It owes its success to its clear and easily-understandable description of the simple principles and complex machinery of the common agricultural policy. But Mr Ries does more than just describe it. He presents the problems as they arose over the years, says why particular solutions were adopted and points out the defects and oversights of the system.

This new edition is well-timed, as the common agricultural policy is faced with growing difficulties which are interfering with the vital and difficult job of unifying Europe.

So it is reasonable for the author to give us, alongside his factual details on the CAP, a thorough description of the worsening problems which make reform essential. And he does it, as he did in the first edition, clearly, enthusiastically and with the sort of humour that is suited to such a serious topic.

The work has the advantage of pointing out one or two basic truths that tend to be forgotten. First and foremost, Ries says the European Community as a whole cannot meet its agricultural produce requirements. I think that if the European forestry deficit were added to the European agricultural deficit, we would be far beyond the already negative agricultural balance of FF 130 000 million. Forestry production is not included in the CAP and Mr Ries will forgive me if I say he has not emphasized this important fact at a time when we are faced with the problem of energy-generating crops.

The surpluses, a theme the author mentions time and time again, should always be seen against the objective reality of a Europe which is short of 10 million ha of agricultural land. As production techniques now stand, Europe is destined to stay the biggest importer on the world market...

So obviously these very well-documented surpluses are not generated by over-large production capacity that needs to be cut. They come from a failure to channel production properly, something which creates problems here and surpluses there,

the direct consequence of the drawbacks and inadequacies of the economic preference which leaves some important sectors (oil, protein, tobacco, timber and Mediterranean products as a whole) without protection, while others are organized and protected in a proper manner.

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Yearbook of the European Community and the other European Organizations — Published under the direction of G. Francis Seingry — Editions Delta, 92-94 Square Plasky, B-1040 Brussels — 5th edition in English and French — 600 pages — Bfrs 1500 (+ post and packing) — 1982-83

The fifth edition of the EEC yearbook contains information updated to 15 June 1982.

Like the previous editions, this major work of reference contains chapters on the following organizations (giving the relevant names, structures, addresses and functions):

— institutions of the European Communities (the European Parliament, Council, Commission, Court of Justice and Court of Auditors, the European Investment Bank, the Economic and Social Committee and the consultative committees);

— 22 other major European organizations dealing with political, economic, scientific, technical and military affairs (Eurocontrol, CERN, the Western European Union, the Patent Office, etc.);

— professional associations within the EEC;

— establishment offering European studies at university level;

— the diplomatic corps accredited to the European communities;

— four indexes (names, abbreviations, analysis and publications).

The section on movements, institutes, foundations and other associations and awards has been considerably expanded in this edition.

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Ivor STANBROOK — **British nationality, the new law** — Clement (publishers) Ltd, Chequers, Sharrington Constable, Norfolk — 213 pages — BF 917 — 1982

One of the promises of the present UK Conservative government before it came into office in 1979 was to bring order to the chaotic British immigration policies that have seen in recent years an influx into Britain of immigrants, mainly from the new Commonwealth.

Described by some as racist and others as common sense, the Conservative government succeeded in passing through the UK parliament a bill on the issue in 1981. It was known as the British Nationality Act 1981. The Act left many British citizens and subjects abroad confused over their status and the future of their children. This book will be of immense help not only to them, but also to teachers and students of law on immigration and to all those called upon to advise others on the issue.

With quotations from the Act, Ivor Stanbrook explains the qualifications required for British citizenship, British dependent territories citizenship and British overseas citizenship, as well as details of the transitional arrangements made for other categories of citizens that do not fall within those three groups. The book contains a number of questions and answers that help clarify specific situations.

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Peter OLIVER — **Free movement of goods in the EEC** — European Law Centre Ltd, 4 Bloomsbury Square, London WC1A 2RL — 278 pages — 34 £ — 1982

The customs union is at the very heart of the EEC, Mr Oliver recalls in the introduction to his book, which examines a part of title 1 of the Treaty of Rome regarding the free circulation of goods: articles 30 to 36 which refer to the elimination of quantitative restrictions between member states. Using as a basis these general provisions, the Court of Justice of the EEC has drawn up a series of detailed rules for importers and exporters. Mr Oliver, who is a barrister-at-law, has been involved in many of these cases as counsel for the Commission. The book analyses the meaning and application of the principles of "quantitative restrictions" and "measures of equivalent effect" and the implications of the leading case of Cassis de Dijon,

mainly in the conclusion that all the details desired have not yet been provided by the Court under articles 30 to 36.

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S. BONO and A. TRAMONTANA — **Italia e Paesi Arabi nell'Economia Internazionale (Italy, the Arab countries and the international economy)** — Franco Angeli Editore (Casella Postale 17130, 20100 Milano) — 169 pages — 10 000 lira — 1982

This work contains the texts of reports presented during a seminar organised during the academic year 1977-78 by the University of Perugia on economic and technical relations between Italy and the Arab countries. They refer both to historic developments and to the present situation (report by Paolo Galli) and relations with certain countries (Saudi Arabia, Kuwait, Algeria). A final chapter by Roberto Aliboni places Italian relations in the larger category of those of the European Community with Maghreb.

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Henri BRUGMANS — **L'Europe Vécue (Europe re-lived)** — Casterman S.A. Tournai — 204 pages — 425 FB — 1979

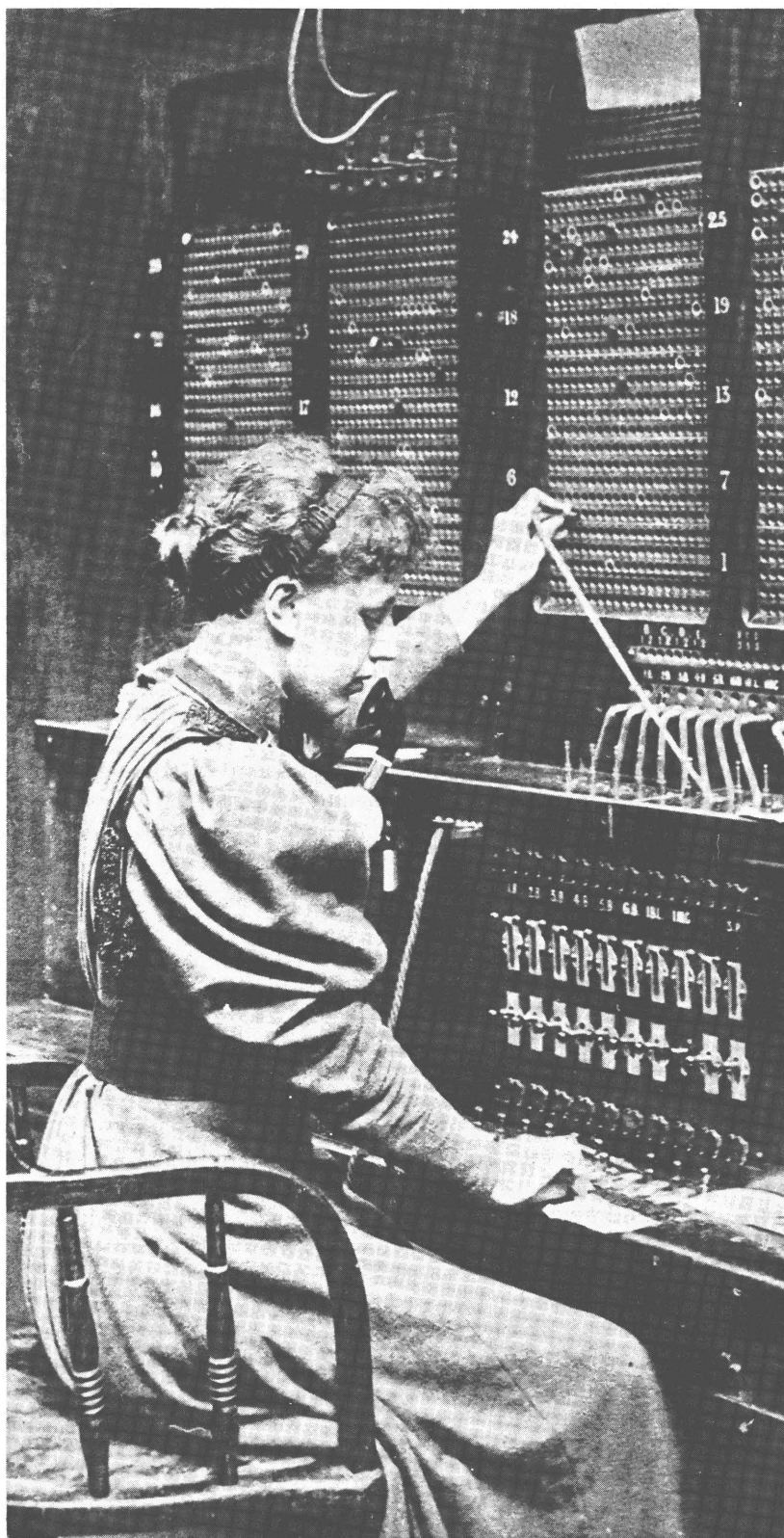
Written in a style to which only an expert in literature can pretend, this book is an account of some of the major events of the past 40 years that, in the author's view, marked the evolution of European politics.

It begins with the first rumours of the impending fate of Czechoslovakia in the hands of Nazi Germany, and ends with the historic agreement of the late '70s by EEC member states to hold direct elections to the European Parliament — a decision that raises both hope and anxiety in the author's mind.

For Henri Brugmans, this book is a walk across history. With two anonymous companions, he discusses the events as they unfold and thereby gives the reader the impression of going through a novel. Mr Brugmans was professor of language and French literature at the Institute of Worker's Education in the Netherlands. He is currently professor of cultural history at the Catholic University of Leuven.

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Telecomm



This copy of the *Courier* has taken days, even weeks, to reach you. Yet it could literally have been sent in a flash. Instead of being printed on some 10 million separate pages, packaged, posted and delivered to thousands of addresses, the information contained in this issue could theoretically be transmitted directly to each reader in a matter of seconds. The reader, at home, work or elsewhere, could read the information in print or on a screen.

The machinery that would make this possible is not in place, but it exists. In less than a century since the discovery of electromagnetic waves, the parallel development of telecommunications and computers has brought the world to the brink of an information revolution that could have greater consequences than the industrial revolution.

The industrial revolution, powered by steam, took families out of their villages and into the cities, centralizing the processes of manufacturing for better and for worse. To stay at home was often to be left behind, out of touch with the people and knowledge that offered a better life. The information revolution, powered by electromagnetism, could put anyone in the world in touch not only with anyone else, but with a choice of services and information no one city can offer. Such a world-wide decentralization might be a means of harmonizing our disordered planet.

Yet how are the majority of people in the developing countries, those who have scarcely gone through the equivalent of the industrial revolution, to be brought into such a push-button society? What are the effects of telecommunications on traditional ways of life? One thing is sure: there will be no lack of salesmen from the industrialized countries promoting their electronic wares around the Third World. As the present recession continues, Western governments are hoping that information technology will be a boom industry. The telecommunications market is expected to more than double in volume over the next 10 years, and developing countries will be the principal buyers. Three-quarters of the world's telephones alone are presently concentrated in only eight countries.

Telecommunications systems are expensive; how can developing countries be confi-

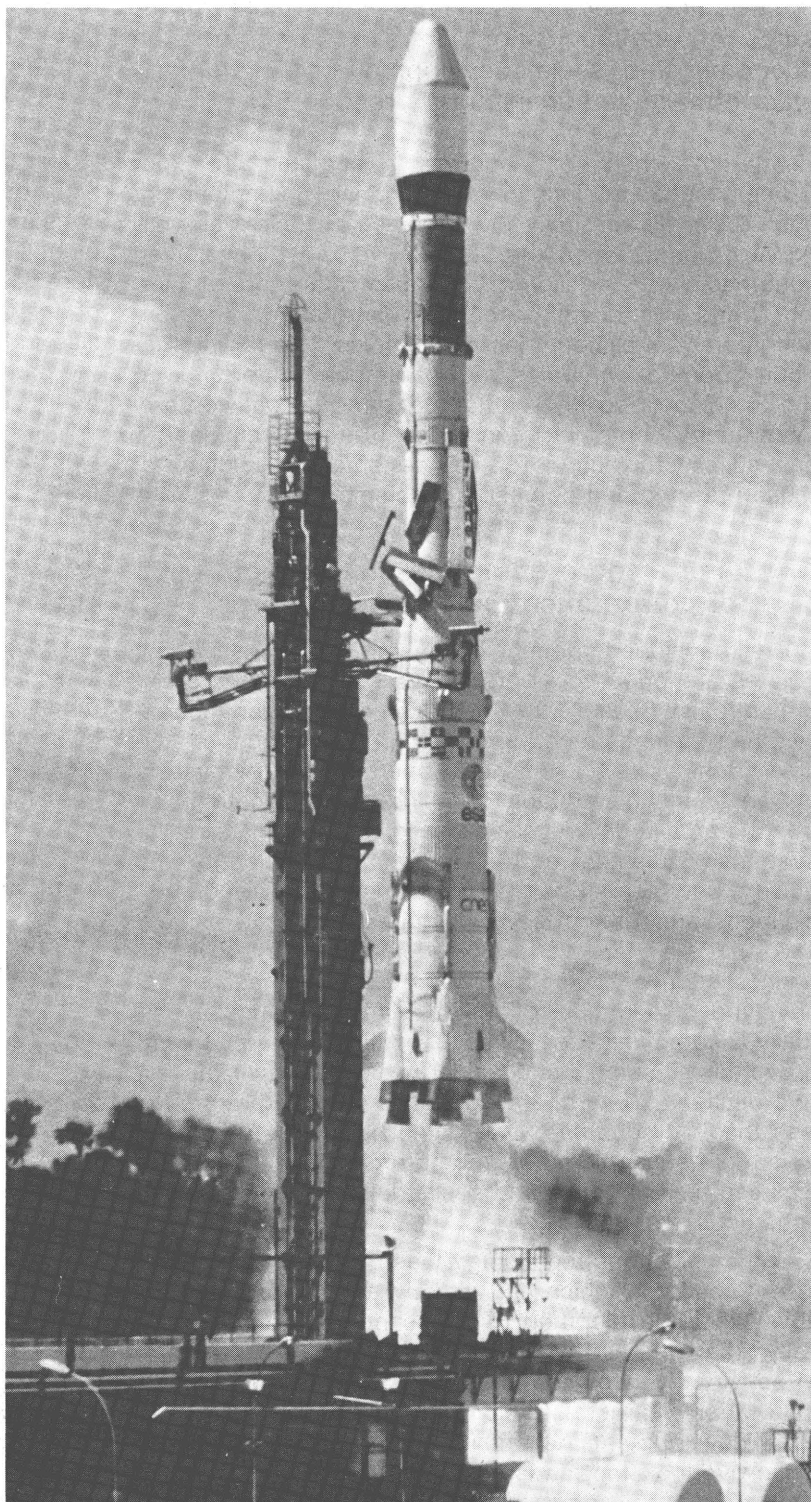
unications

dent of choosing the right equipment? The array of gadgetry is already bewildering and technological advances, such as digital switching and optical fibres, make many administrations hesitate for fear of buying technology that will be rapidly outdated. Moreover, the potential role of telecommunications in development is not always understood. So long as communications services are expected to pay for themselves directly, they are likely to remain an urban luxury in the Third World, widening rather than bridging the gap between town and country. Yet adequate telecommunications, despite their high cost in capital investment and training, are one of the fundamental differences between developed and developing societies: their indirect economic and social benefits, according to a recent study, may be worth 100 times what they cost to run.

To help developing countries get plugged into the age of telecommunications, 1983 has been declared World Communications Year (WCY 83) by the United Nations. It comes halfway through the UN's transport and communications decade and is being coordinated by the oldest UN agency, the International Telecommunication Union. The main aim of WCY 83 is to enable all countries to make a thorough analysis of their communications policies with a view to the development of this sector on a national basis. Regional and international coordination will follow.

Starting at the national level might seem odd in view of the international nature of telecommunications, which can 'put a girdle round the Earth' from the sea bed to thousands of kilometres up into space. Yet the world-wide harmonization of telecommunications is, to a large extent, ensured by the simple fact that without legal and technical compatibility, the equipment cannot work. Using the technology for economic and social development depends on national perceptions of the role of telecommunications in overall development policy. World Communications Year should help each country clarify that role.

This dossier may also help clarify some aspects of a highly technical subject — even if, like the earliest messages, it is finally delivered to you by hand. ○



In the space of one lifetime, communications technology has advanced from the switchboard (photographed left in 1895) to satellite launchers such as Europe's Ariane rocket, pictured blasting off from Guiana

World Communications Year 1983

by Mohamed MILI (*)

On 19 November 1981, the United Nations General Assembly proclaimed 1983 World Communications Year: Development of Communications Infrastructures. For the first time, the critical importance of communications infrastructures for the economic and social development of all nations was formally and unanimously recognized.

At a time when most countries are continuing to experience stagnation, inflation and soaring unemployment and face a distressingly low increase in their gross national product, when the situation of most developing countries shows no sign of any significant improvement, in a world of intricately interdependent nations, the very self-interest of all countries and peoples calls for international cooperation, which is of paramount importance to the future of a healthy world economy. In that context, international communications constitute a key element to any successful action for the satisfactory solution of these pressing and pervasive problems.

For a more equitable distribution of communications infrastructures

Well developed communications are indispensable not only as a support to all productive sectors of the economy but also because they create an environment conducive to new investment, and thus growth through a suitable framework for business operations. However, a glance at the distribution of world communications infrastructures today reveals wide disparities in terms of systems, equipment and services in both quantity and quality, between as well as within nations. Telecommunications penetration is very significant in that respect. Two-thirds of the world is inadequately served and a large section of its population is literally unreached by any type of communications infrastructure and left virtually incommunicado! Despite a determination to improve this situation and considerable efforts over the last two decades, 75 % of all telephones are concentrated in less than 10 countries. Only if the balance is redressed by a more equitable distribution of communications facilities can the economic and social development needs of all nations be met.

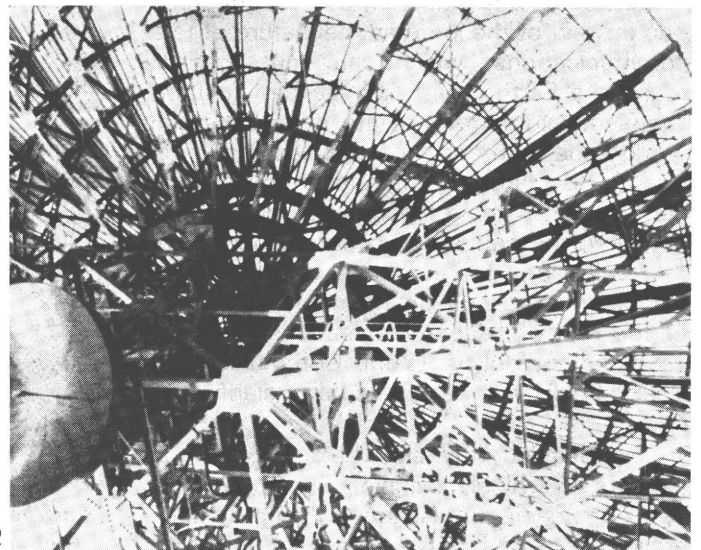
Communications technology was born and nurtured in a few countries which had already attained a considerable level of development. This technology evolved gradually, keeping pace with the growth of all other sectors of activity. In these countries, the development of communications infrastructures followed naturally upon national development. As a result, there has been a tendency to overlook the fundamental role of communications

in triggering, facilitating and sustaining development. In many countries, communications policies are not integrated to global development strategies; resource allocations to the postal and telecommunications sectors have been largely based on direct financial returns rather than the optimum economic and social benefits that result from the interplay of communications in the national economy.

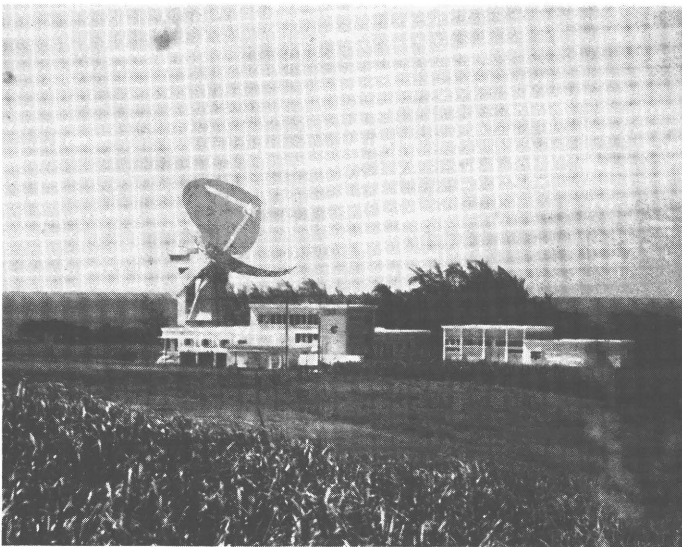
This attitude, reinforced by an acute capital scarcity, has often led, quite arbitrarily, to under-investment and consequently inhibited a rapid and harmonious development. This is borne out by the fact that industry, business, banking, transport and government represent 90 % of telephone subscribers in developing countries. This also indicates the need for infrastructure to respond to the requirements of these productive sectors of activity. It becomes obvious that a higher priority needs to be given to this pivotal sector if it is to expand and improve. One of the aims of World Communications Year is to focus policy-makers' attention on the urgent need to build up and develop effective and reliable communications infrastructures in every country, with the ultimate objective of arriving at a fully integrated international network.

The problem of the shortage of investment funds in less developed countries is compounded by the wide range of communications systems and products which keep expanding at a bewildering pace and become increasingly sophisticated. In addition, in all countries, regardless of their economic or technical level of development, demand for communications services constantly increases, and users' needs and requirements become more specialized and diversified.

"Well developed communications are indispensable not only as a support to all productive sectors of the economy but also because they create an environment suitable to new investment"



(*) Mr Mili has been secretary-general of the International Telecommunication Union for 18 years. His successor, from 1/1/83, is Mr Richard Butler. Article published in the magazine *Communicate* (London).



Congo Bay ground station, Barbados

Decision-makers are confronted with dilemmas which can only find solutions in a concerted effort of planning and coordination. It is of the utmost importance that an open dialogue be established, on a permanent basis, between users, suppliers, regulators and operators, to ensure that technological and investment choices are based on present and future needs, possibilities and prevailing conditions in the light of mutual benefits. Only if action is taken at the national level can international coordination become meaningful. WCY 83 will provide this opportunity.

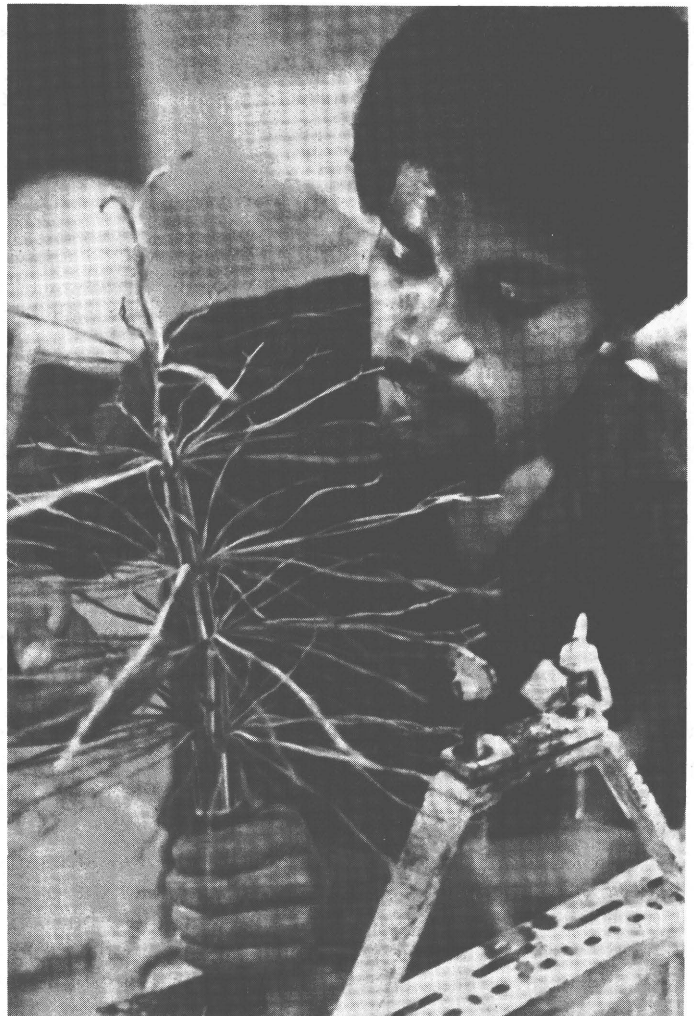
It will be an occasion for unprecedented consultations and strengthened collaboration between policy-makers, economists, planners, operating agencies, manufacturers and users of communications to harmonize, at the national level, across-the-board needs and requirements with the future development of communications technology and policies. It will also provide an ideal framework to identify the obstacles which impede a balanced development of communications infrastructures, to highlight the tremendous achievements in the field of communications, to identify and understand the proven and anticipated benefits of the myriad of options among the wealth of modern technology available for the growth and development of every sector of activity, to determine how to optimize the use of the new technological advances and explore ways and means to translate the decisions taken into reality.

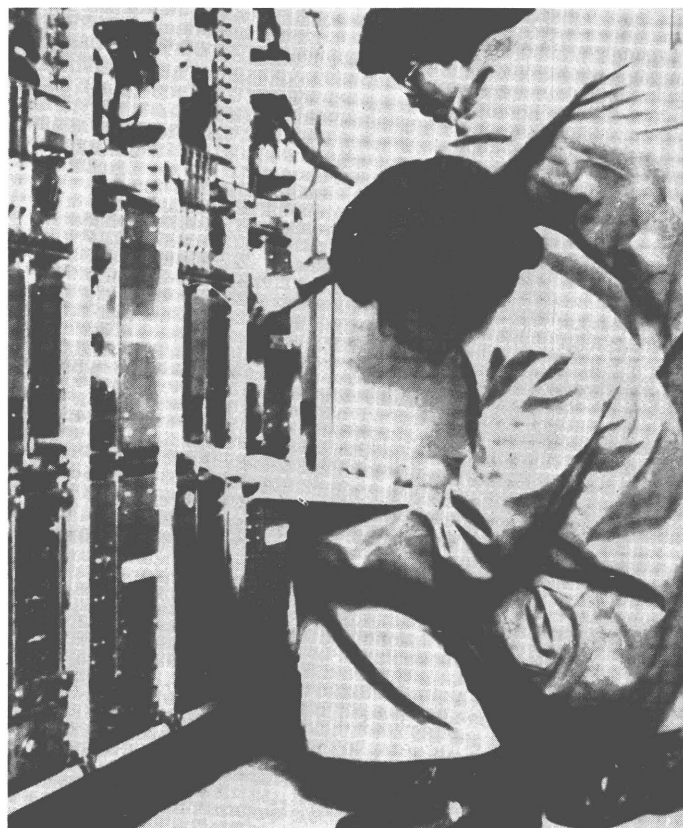
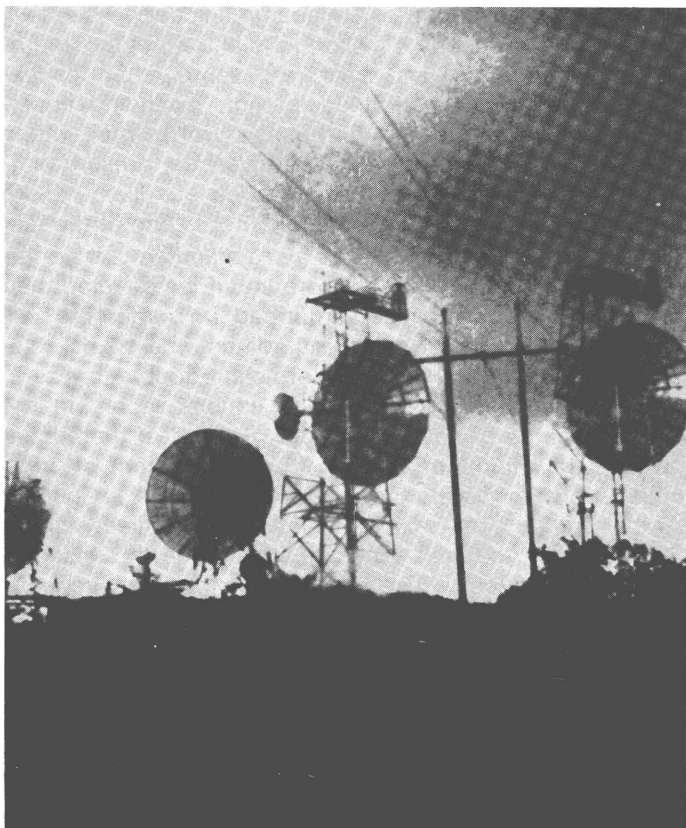
Efficient communications, particularly international communications, are vital for developed nations as they constitute the backbone of their international trade efforts. The interest of more advanced countries in strengthening and improving the communications infrastructures of developing countries is therefore twofold. As business expands on a worldwide scale in constant search of new markets, and as business operations are spread over every continent to get closer to the markets they serve, adequate national postal and telecommunication services are required for the sound and cost-effective management and control of these huge assets. Second, the communications industry represents a sizeable part of the national economy of most developed countries and an increasing share of their exports. In seven

major European countries, telecommunications services alone represent nearly a million jobs and a net income of close to \$7000 m; last year, the same countries exported telecommunication equipment, excluding equipment used for military purposes, worth more than \$8000 m, which is not negligible given the present economic constraints. And these figures are likely to increase as the telecommunication sector is one of the fastest-growing industries. But as more manufacturers compete in home countries, and more countries develop their manufacturing capabilities, untapped new markets will become necessary. It is estimated that the world telecommunications market will more than double in size in the next decade, and developing nations represent the primary source of new customers. Several of them have given high national priority to the development of communications infrastructures. Countries of the League of Arab States, for example, plan to invest some \$20 000 m in the next 10 years to upgrade the telecommunications sector. The Asia-Pacific region is equally keen to develop its infrastructures and has devoted increased efforts and resources to that end; by the end of 1990, it should represent almost one third of the world market.

As more businesses compete in new environments, production, distribution, marketing techniques and in-

WCY 83 aims at "sharing the experience acquired in all fields of communications": an instructor in Fiji demonstrates the intricacies of cable assembly





“The world telecommunications market will more than double in the next decade and developing nations represent the primary source of new customers”

vestment policies will need to be reviewed and adapted to new situations. This will require a complete re-assessment and re-orientation of corporate policies, as well as the formulation of new strategies.

WCY 83: action-oriented

The purpose of World Communications Year is therefore to enable *all* countries to undertake an in-depth review and analysis of their communications policies with a view to:

- increasing the mobilization of national resources for the accelerated development of communications infrastructures, particularly in under-privileged regions;
- coordinating the development of infrastructures in line with the development of other sectors;
- enabling decision-makers to make rational choices, based on users' requirements, suppliers' possibilities, regulators' concerns and national development needs, priorities and strategies;
- promoting the exchange of information and goods between regions of a country and among countries to increase trade and development;
- sharing the experience acquired in all fields of communications and taking advantage of the worldwide knowledge that has been accumulated, for the benefit of all.

One of the main principles of WCY 83 is that stress is laid on activities at the national level, because the problems and issues differ from one country to the other. The field of infrastructures is one which calls for consultation and action on a national basis. Regional and international coordination take place afterwards. In order to provide a

national forum for the exchange of ideas and the coordination of plans and activities undertaken in the framework of the year, national coordination committees are being set up in each country and all sectors of activity are invited to be represented at the highest level. These committees will bring together not only government representatives but also non-governmental organizations, manufacturers, users and service organizations. The entire programme of WCY activities is to be financed by voluntary contributions. A number of industrialized and developing countries have already pledged funds and other resources and/or have announced their intention to carry out pilot projects. Pilot projects are prototype projects which will act as catalysts to stimulate other similar projects in the future on the basis of the experience acquired and the lessons drawn. Following the publication of a first list of proposed pilot projects, telecommunications administrations, communications manufacturers and other groups involved in communications have pledged contributions in cash or in kind, including equipment, network development assistance and lecturers. In addition to these projects, several conferences, seminars and information activities with the focus on the national level will take place in various countries to further the objectives of WCY 83.

World Communications Year will help to create the necessary atmosphere for mobilizing the entire world community to develop and upgrade communications infrastructures for better communication, and will enable the representatives of all sectors concerned to assess past communications policies, examine future possibilities and formulate guidelines for the development of tomorrow's communications. ○ M.M.

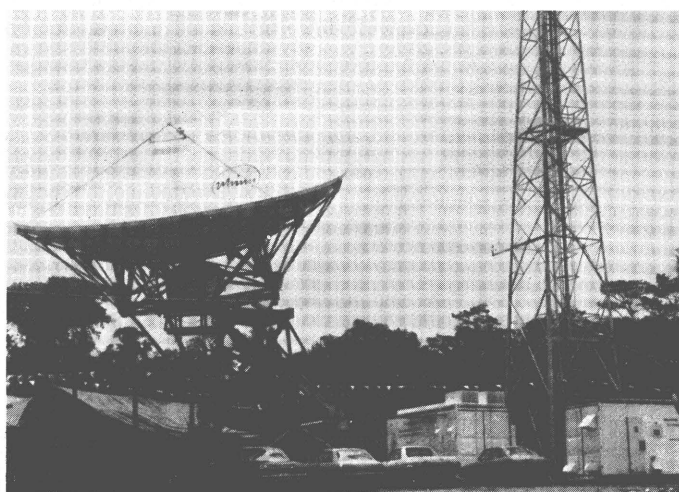
"There is a very urgent need to develop telecommunications"

Interview with Mohamed Mili

► *Telecommunications are part of one of the biggest growth industries in the developed world, information technology. What prospects are there of the developing countries joining in this industry, rather than simply being its customers?*

— Communication is an inexhaustible resource, an ever-growing technology which can greatly enhance the use of all the Earth's resources, natural, human and economic. Through a vast array of communication techniques, mankind is able to accumulate, organize and transmit information on a world-wide scale. The phenomenal developments that are taking place at present, such as optical fibres, computer communications, integrated services and digital networks, open up new vistas to fulfil man's innate yearning to communicate. Forecasts by world financial institutions of investments totalling US \$1 200 billion in the telecommunications sector over the next 20 years, therefore, do not seem to be an over-estimation. In their attempt to conquer the markets for the development of communication infrastructure in the Third World countries, manufacturers in industrialized countries will sooner or later find themselves competing with the developing countries. There is no doubt that

Medina telephone exchange (Senegal): a national industry may be viable if the domestic market can absorb 40 000 new telephone lines a year



Intelsat ground station in Western Samoa

more and more peripheral equipment and some basic parts can be manufactured and assembled in developing countries. This would improve the present low industrialization of such countries and increase employment. However, it is interesting to note that the *ITU Handbook of Economic Studies* recommends the minimum volume of output that the domestic market must be able to absorb to justify national production. It corresponds roughly to that needed to employ at least 400 people, or roughly an annual output of telephone switching equipment for 40 000 to 50 000 lines.

► *Can one really talk of a transfer of technology between rich and poor countries when, as in the case of telecommunications, the technology is so sophisticated?*

— The existing inequalities between peoples and the injustice prevailing in international relations have caused the developing countries to exercise an unrelenting pressure on world opinion which has resulted in the adoption of remedial measures at international level. Thus the United Nations countries solemnly proclaimed in 1974 the establishment of a new international economic order (NIEO). All human activity is affected by the establishment of the NIEO, and this is especially true of telecommunications. Industrialized countries possess a know-how which they should attempt to harness for use beyond the boundaries of their respective countries. The areas in which these skills are of paramount importance are planning, professional training, management and maintenance.

The first question which arises concerns, of course, the manner in which this transfer of technology should be carried out. Here I sincerely believe that the International Telecommunication Union (ITU), established over 117 years ago to facilitate the regulation, planning, coordination and standardization of international telecommunications, acts as the ideal catalyst. Attentive as we are to the views of all states in all continents, I can tell you that we are conscious of this thirst for knowledge and transfer of technology. The answer, of course, is not simply to make a carbon copy over there of what is done in

other countries, but to adapt proven solutions to meet the situations in which problems arise. That is why I feel that it is increasingly urgent to reinforce the dialogue between industrialized and developing countries during World Communications Year 1983, to establish practical rules for the transfer of communications technology.

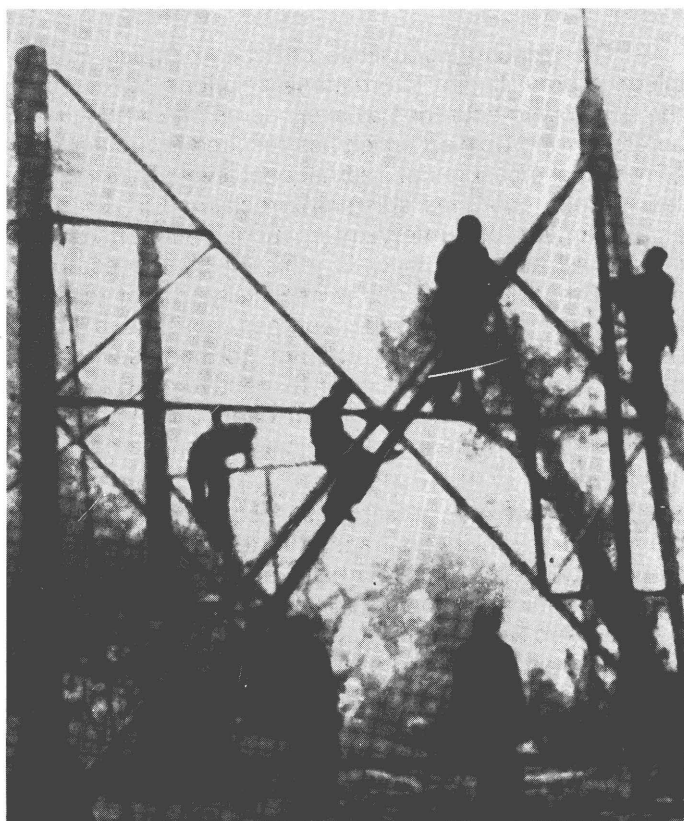
► *Telecommunications can bring the world into every home. Is this necessarily a good thing, in that it may raise expectations in developing countries that cannot be satisfied?*

— We are all obliged to live together on our planet Earth, which may be compared to a vessel navigating through space... or, at the other extreme, to a world "village" whose inhabitants wish to live in peace with each other. In both cases, it must be recognized that telecommunications have an irreplaceable role to play. However, of the world's some 550 million telephones, 75% are in only eight countries. There is a very urgent need to develop telecommunications for rural and remote areas of the planet. Reliable public communications for these areas would help create jobs and stop the rural exodus, a phenomenon observed all over the world. Unexplored remote areas of the world may be opened to agriculture, industry, commerce, tourism, mining and education through telecommunications. Therefore I am convinced that bringing the world into every home through telecommunications is a good thing.

► *How important are rural telecommunications to development?*

— Improving communications in rural areas is essential to any development. Telecommunication networks in rural and remote areas are part of the world telecommu-

Putting up radio antennae in East Africa



ITU

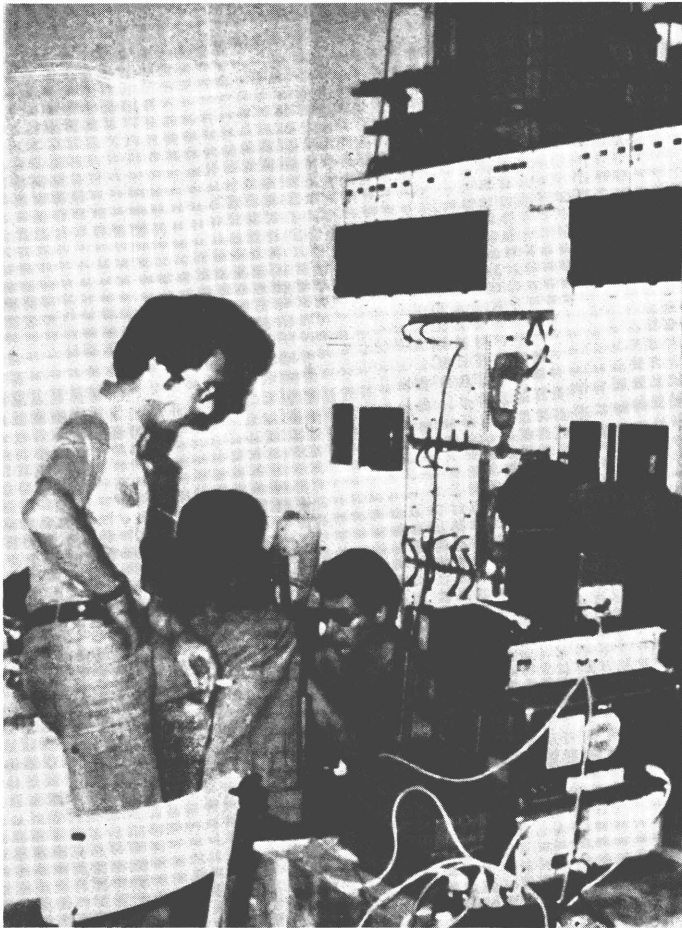
nications network. Technical advances enable telecommunication administrations and private operating agencies to install, organize and operate modern telephone networks and other telecommunications systems even in the most isolated areas of the world, long before these are provided with electrical energy or roads connecting them to urban centres. Telecommunications can thus have a considerable influence on living conditions in rural areas. Alaska is a case in point: in this state, the Inter-Alaska telecommunication system connects villages and settlements with less than 25 inhabitants with the North American continent. Admittedly, the profits that may be expected from such penetration of telecommunications and servicing of the isolated and underpopulated rural areas of the world are bound to be small, but telecommunications nonetheless represent an important factor of the infrastructure and their very presence offers the users possibilities of economic and social expansion.

► *Information technology has been seen in Europe as a threat to jobs. Is this the case in the developing world?*

— Development of human resources, communications know-how and manufacturing ability are one way of keeping up in the international economic race. Unlike the industrialized countries, which built up their telecommunications networks over a period of a hundred years and had no other choice but to use the technology which was available at the time, developing countries today are faced with a wide range of technological possibilities, ranging from the traditional and well proven labour-intensive equipment still manufactured by a large number of suppliers, to highly sophisticated electronic equipment, which may be more expensive to install but which offers better prospects for future growth. In practice, most countries are likely to proceed with a rather wide mix of technologies. The extensive use of highly sophisticated technologies which require less manpower ultimately results in a higher growth rate for the whole network and hence in the total number of people employed in the operation of the telecommunications system. At the same time, these sophisticated technologies contribute to a better quality of the network as a whole and pave the way to the development of entirely new types of services. There are good reasons to believe that in the years to come, a very significant proportion of new jobs in telecommunications manufacturing and operations will be created in the developing countries.

► *How will the expansion of telecommunications improve regional cooperation in the ACP countries?*

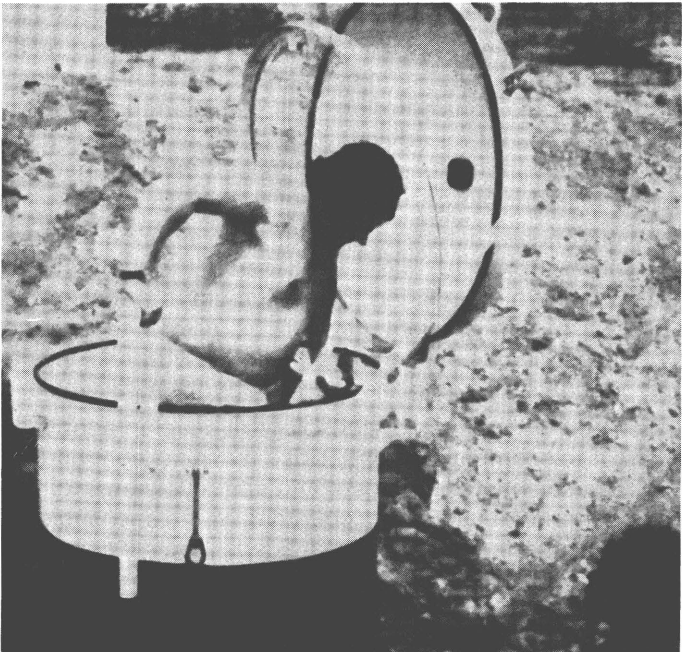
— Although two decades of space activities have drawn public attention to the intensive use of telecommunications—for the success of every space mission largely depends on the development of a real "display" of telecommunications—there are still regions in the world where making a telephone call is an achievement in itself. For more than 20 years the ITU has been assisting ACP countries through its technical cooperation programme in developing human resources, through the establishment of national and regional telecommunication training centres, and of national and regional networks. ITU experts, in cooperation with the governments of the



Senegalese and French engineers testing microwave equipment in northern Senegal

respective region, have carried out pre-investment study projects in Asia, Africa, in the Middle East and the Mediterranean basin and in Latin America. This expansion of telecommunications and ITU's close contacts with re-

Constructing a buried microwave repeater station (Senegal)



gional telecommunication organizations have considerably contributed to improved cooperation in the ACP countries.

► *What, in your opinion, are currently the most important telecommunications projects in the ACP countries?*

— This question complements the previous one in so far as some ITU/UNDP-assisted projects are the result of the successful cooperation with the ACP countries. A few examples I would like to mention are the Pan-African Telecommunication Network (Panafitel) and Medarabtel, which stands for the latest of ITU's pre-investment study projects in the Middle East and the Mediterranean basin.

► *Why have the developing countries been relatively unsuccessful so far in using international media networks to project their own image?*

— During the last decade Third World countries complained that they would be to a large extent dependent on foreign media networks. Developing countries charged that the Western press only reports the Third World's crises, coups and disasters, whilst ignoring its success stories and development efforts, and they demand a "more balanced, two-way flow" of information. The fact remains, however, that the development of media networks, which requires communications hardware, lags behind in a number of Third World countries. World Communications Year 1983 will offer an excellent opportunity to continue the dialogue between the representatives of international media networks and their colleagues of Third World countries. Improved communications infrastructure—also for the international media networks—will help developing countries to project their own image better.

► *What can the ITU do to protect the developing countries from becoming captive markets for particular Japanese, American and European electronics suppliers?*

— In the provision of telecommunication services, no country can decide in isolation on which services should be provided or which technical standards are to be adopted. National investments in telecommunications continue to increase annually, and in this capital-intensive sector of the economy it is necessary to protect the huge expenditure by ensuring an adequate working life for the equipment and systems placed in service. Government and private investment in telecommunication equipment and services call for sound economic judgment. Therefore, government and private operating agencies, manufacturers and user organizations are cooperating in the ITU and in particular in its International Consultative Committees, CCIR and CCITT, as partners in progress. They bring their experience and capabilities in all fields of telecommunications to the attention of the 157 ITU countries and ensure that their national interests are well presented. Thanks to the international standardization of telecommunication systems and services and the impartial advice of ITU experts, developing countries are in a position to choose or produce the telecommunication equipment which they need to run their telecommunication networks and services.

► *Is there a conflict between regional and international standardization in telecommunications? If so, how can it be resolved?*

— International standards are not imposed by regulatory provisions. However, CCIR and CCITT standards generally are respected internationally because the experts of ITU members' administrations and operating organizations, who are responsible for their formulation, are also responsible for their implementation and for assuring compatibility with existing and future systems. Regional standards had complicated international communications in the past. In a competitive world they will no longer be of importance. The user who has to accommodate multiple standards has to pay more to satisfy his particular communications requirements. Ultimately, it is the user who supports the cost of complications in telecommunications networks resulting from the adoption of several differing standards. The task of industry in the detailed design and manufacture of telecommunication equipment is facilitated if specifications are based on internationally accepted standards.

► *The developing countries are as yet little affected by the dizzying possibilities of information technology. This gives them the advantage of being able to invest in the hardware that really suits their needs. How are they to make the right choices from a range of products that seems to be rapidly moving into the realms of science fiction?*

An evening TV transmission by satellite, part of an educational scheme in India



UNESCO - Lloyd Sommerland



FE

Fault-finding: a trainee checks a cable terminal in Western Samoa

— In fact, today's college graduates and modern telecommunications are almost the same age. Only about 20 years have passed since the marriage of communications and computer technologies. Modern telecommunications are their offspring. Among the great number of internationally compatible telecommunications systems, the developing countries have to choose the appropriate technology that fully meets the actual needs, quite regardless of any prestige considerations. All administrations which approach the ITU for advice receive an answer based on criteria of economy and effectiveness, having regard to all the relevant factors.

I would hope that all equipment suppliers might adopt the same approach. This would serve the interests of both the country acquiring the equipment and that of the supplier, for an efficient network is bound to expand whereas an inefficient or unworkable network will inevitably stagnate affecting the world network as a whole.

To cope with the rapid technological development in all fields of telecommunications, close technical cooperation between scientists, engineers and communicators of developing and industrialized countries is indispensable to strengthening the technical, managerial, logistical and research capabilities crucial for sustained and self-reliant progress. ◦

Interview by B.T.

Telecommunications: the changing techniques

I.J. BRAMSON (*)

The vital role played by telecommunications in developing the economy of countries in the ACP (Africa, Caribbean, Pacific) grouping should not be underestimated. In view of the many advantages which telecommunications contribute to the infrastructure, it could be argued that the ACP states should seriously consider giving a higher priority to telecommunications projects when drawing up indicative programmes for financing by the European Development Fund. At present, funds destined for the telecommunications sector are a very low percentage of the recipient ACP states' total aid from the European Community.

In the already developed world and in some developing countries a first class telecommunications system is recognised as a prerequisite to a thriving economy. Vast sums are being invested in installing the latest terminals, exchanges and networks. This article sets out to describe and put into perspective the development of telecommunications from the earliest days to the present — and beyond.

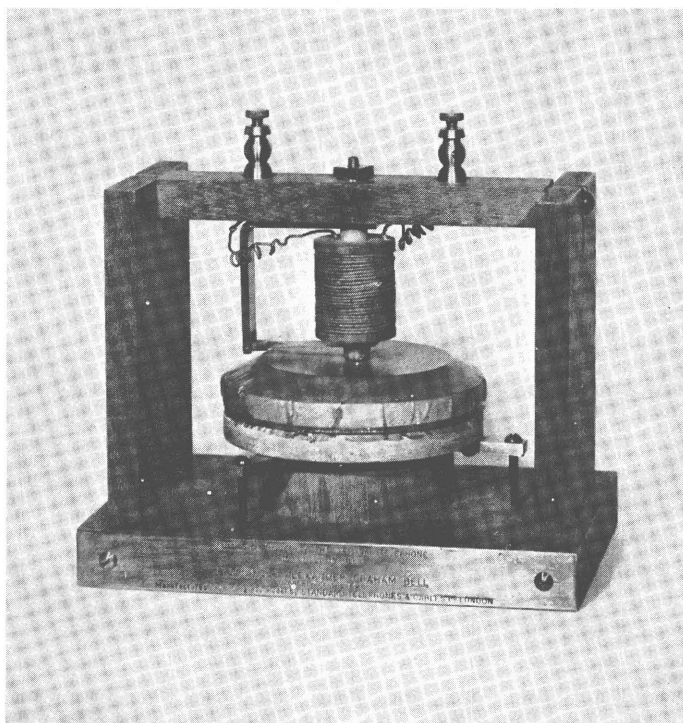
The telephone

The first example of remote speech communication was probably the speaking tube. While reasonably effective, it could be used only over a short distance and between fixed points. Although electrical communication by various forms of telegraph had been in use for some years, it was only the invention of the electric telephone by Alexander Graham Bell in 1876 which made possible the communication of speech over (theoretically) any distance and between any two suitably equipped parties.

In fact, Bell's 1876 telephone was little better in practical terms than the speaking tube. Both this experimental model and the 1877 one, redesigned to make it easier to hold, were connected between fixed points and used the same instrument, held in turn at ear and mouth, for both listening and speaking. This instrument was similar in principle to the present day receiver (earphone) and, while it performed well in this mode, it was much less effective as a transmitter (microphone).

This shortcoming was overcome by Thomas Alva Edison's invention, later in 1877, of the carbon transmitter which, combined with Bell's receiver, produced a telephone which worked well. Although detail improvements have been made, the same electrical design has been employed basically unchanged to the present day. It is

(*) Irving Bramson is news and technical information editor for Standard Telephones and Cables (STC).



The world's first telephone — a model of the original invented by Alexander Graham Bell in 1876. Below, a new electronic telephone developed by STC



only now that units making use of different principles are being introduced to give improved speech quality.

Manual exchanges

The next need was for a means to interconnect subscribers and by 1880 nearly 1000 manual exchanges were in existence. The manual exchange, in effect, was no more than a place where each subscriber's line for a particular area was terminated in a socket, so that any line could be plugged into by the operator to find out who wanted whom, and then connected to the required destination's socket by plugging in a link between the two. The areas extended just a few miles and were

mostly of overhead, galvanized iron wire routes. Some of these were of single wire type, the return being via the earth. Also, at that time, ringing the exchange was achieved by cranking a magneto on the telephone and speech power was provided by a battery on the subscriber's premises.

Manual exchanges continued to be improved and one milestone was the common battery system, in which subscriber batteries were supplanted by a large battery at the exchange to provide speech power for all subscribers. This also led to modifications to the telephones themselves.

Automatic exchanges

World Communications Year 1983 comes approximately 100 years after the date when various types of automatic exchange were being developed. (Coincidentally, it is also the centenary of the founding of Standard Telephones and Cables). Several different principles were suggested, including a semi-automatic one where an operator was told the required number and then worked the equipment.

However, the first practical automatic system is attributed to Almon B. Strowger, a Kansas City undertaker whose business calls, he thought, were being manually routed to his rivals. Strowger's system employed banks of rotary switches in which a switch was electrically driven to one of its contacts, according to the digit dialled. This method of connection is still in very wide use and, indeed, is almost universally known as the Strowger or step-by-step electromechanical system.

A more recent electromechanical system, which has been installed concurrently with Strowger equipment, is known as the crossbar system. Here, a frame contains

Racks of Strowger equipment — Kansas City undertaker Almon Strowger's invention was the first practical automatic telephone exchange



British Telecom



Modern telephone exchanges may use this terminal repeater unit which translates coded telephone calls by laser into infra-red pulses for transmission down an optical fibre

two sets of contact carrying bars, one set vertical and the other horizontal. When a digit is dialled, a horizontal and vertical bar rock in towards each other and make contact. They are operated by a common control system which receives and stores the number, the horizontal bar corresponding to the digit dialled, and the vertical one to the first available free outlet to the next frame of cross-bars.

When the vertical bar rocks in, one of its contacts latches onto a corresponding one on the operated horizontal bar. The control circuit then allows the horizontal bar to drop away to deal with other incoming calls, although the contacts remain latched to allow the current call to proceed. At the end of the call the vertical bar falls back, releasing the contacts. This system allows call routing to take place with fewer moving parts than on the Strowger system.

Both of the electromechanical systems described above continue to give service. However, as with any mechanical equipment, they are subject to wear. To overcome the 'oilcan, spanner and file' approach to telecommunications, development of an electronic telephone exchange was started in the 1960s, at a time when few people believed that electromechanical exchanges, in use in the UK for more than 40 years, could be superseded by electronics.

Nevertheless, the UK Post Office (now British Telecom) and STC, one of the UK's principal manufacturers of telecommunications equipment, cooperated in the design of TXE4, an analogue electronic telephone exchange, the first of which went into public service on a field trial in London. Following successful trials and engineering for production, the first production model was installed in Birmingham by STC in 1973, and entered public service in 1976.

THE CONVENTION AT WORK

30th session of the ACP Council of Ministers

"It is important that more ministers attend sessions of the ACP Council of Ministers to give us precise directions to guide us in our work". This statement by ambassador Monyake of Lesotho was prompted by the fact that only some 15 ministers came to Brussels for the ACP Council. The end-of-year meeting is traditionally the budgetary session of the Council, and although a study of the ACP group's accounts is an essential task, it is not exactly of great political importance. However, parallel with the examination of the ACP group's budget, the final meeting of the year is also a chance to look back and review the various aspects of cooperation within the ACP group and with the Community. It must also be said that the proximity of the negotiations on a new convention, which must start next September, also added to the importance of the meeting and justified a greater ministerial presence.

Events also added a new concern. A member state, Lesotho, had been the victim of South African aggression just a few days before, threatening its security, and causing loss of life and important material damage. The situation in southern Africa is a constant theme of ACP-EEC meetings, but this time the anger of the delegates reached a new pitch. The president in office of the ACP Council, Desmond Cartey, trade and industry minister of Trinidad and Tobago, could not find words harsh enough to condemn the raid against "that hospitable capital" which only a year before had welcomed the ACP Council of Ministers. The debate stressed the responsibility of the member states of the Community which, by their behaviour, encouraged the Pretoria regime. The delegates were told that the EEC plans to sign an agreement with South Africa, and the group therefore demanded that the idea should be rejected. Furthermore, the Council suggested that, in line with Consultative Assembly resolutions, working groups should be set up on the application of the code of conduct drawn up by

the EEC for European firms established in South Africa, and the effect of economic sanctions on the economies of ACP and EEC member states.

An austerity budget

Apart from the question of southern Africa, the agenda for the 30th meeting of the ACP Council included two major points; an examination of the accounts of the ACP Secretariat and the budget proposals for 1983, and the future of relations with the EEC. Consideration of the first point brought severe criticism of the way the Secretariat works, especially its inability to provide discussion documents for the ACP committee of ambassadors in time.

The Council was concerned that this state of affairs would prove a great handicap once negotiations began on a new convention. After considering sending the budget to the ACP committee of ambassadors for examination and adoption, the Council finally decided to freeze the budget for 1983 at the 1982 level, which, taking account of inflation, means a reduction in real terms. It will be up to the committee of ambassadors to distribute this austerity budget between the various headings. The total budget of BF 118 065 621 comes partly from national contributions by the ACP states (BF 74 403 760) and partly from EDF regional funds (BF 43 661 861).

As for the other major theme—relations with the European Community—there were a large number of contributions which dominated a major part of the last day and were responsible for the very late ending of the Council in the early hours of 16 December. The discussions centred on the serious economic crisis which is affecting the world as a whole, but especially the ACP countries, the impasse in the North-South dialogue and the EEC's memorandum on Community development policy. The discussion led to suggestions which will be taken up at a special session of the ACP Council of Minis-

Also in the yellow pages

The Convention at work

- III. Addis Ababa: ACP conference on air transport
- V. EDF financing decisions
- VII. EIB loans
- X. Rwanda: President Habyarimana in Brussels
- XI. Edgard Pisani in West Africa

General information

- XI. GATT ministerial conference
- XIII. Aid to non-associated developing countries

European Community

- XIV. European Council in Copenhagen
- XVII. European Parliament: development committee

ters in March or April 1983. Before then each country is to send to the Secretariat in Brussels its views on future relations with the Community. Some countries, such as Ethiopia, have already set up a technical committee to consider this question. Tanzania's economic and planning minister, K.A. Malima, asked that the positions adopted by the ACP group take account of similar studies such as the Lagos plan of action, the Brandt report, the UN's new substantial programme of action and the World Bank's report on economic development in Africa south of the Sahara (the Berg report). Mauritius' agriculture minister, Mr Deerpalsingh, believed that a future agreement with Europe should take account of the objectives of economic revival in the ACP states. After calling for a substantial increase in EDF funds (a call repeated by Nigeria and Kenya, who believed the proposals in the EEC memorandum were insufficient), Mr Deerpalsingh outlined a number of priorities in their cooperation with the EEC, namely integrated rural development; food self-sufficiency plans at national, sub-regional and regional level; fishing; adjustments to the common agricultural policy (CAP) to take account of ACP production, and the opening of the Community market for all ACP raw material and manufactured exports.

This last point was taken up by Nigeria's federal planning minister, Mrs Egun Oyagbola, who was concerned at the rapid deterioration of the ACP countries' position in the EEC market. She said that from a level of 8% of total EEC imports, the ACP share had fallen to 7% in 1979 and to 5.5% today. She believed that all the obstacles to ACP trade in the rules of origin and tariff regulations should be removed. She also proposed the cancellation of developing countries' debts, emphasis on industrial cooperation, the acceleration of transfers of technology, a greater use of ACP manpower in the application of the Convention and a code of conduct which would avoid the transfer of outmoded technology to the ACP countries.

Rather than insisting on a now longstanding demand from the ACP that there should be totally free access to the Community market, certain delegates suggested that the ACP group explore the possibilities of obtaining guaranteed prices for their exports (Ivory Coast and Kenya). When the question of the length of the next convention was raised, many delegations said they could not accept one of indefinite duration, even if there were a whole series of protocols on its application. The ACP group is only at the beginning of its deliberations on a new convention, but it is aware that it needs to move quickly and adopt a common strategy. The committee of ambassadors will endeavour to meet the deadline of the end of March or beginning of April when the special Council devoted to the negotiations will be held.

A point of disagreement

An ACP Council of Ministers is an occasion to consider all aspects of cooperation with the EEC, and the 30th session was no exception. On Stabex the ministers expressed their concern that they had not been able to agree a date with their European partners for a special ACP-EEC Council of Ministers to discuss the crisis in the system's mechanism. They asked the committee of ambassadors to pursue the point with a view to holding the special session as soon as possible.

As for sugar, the discussion centred on various aspects of the protocol. The ACP group believes that although the protocol should not

be altered, its application should be improved. They will press for a speeding up of the review process. Once again the Council said that when considering the price paid for ACP sugar, account should be taken of the cost of transport. The ministers also complained of the non-reallocation of quotas which had led to a reduction in the total amount of ACP sugar exported to the Community, and reaffirmed their support for the inclusion of the Ivory Coast in the sugar protocol, with a proper quota related to its production capacity. They also took note of the demands by Congo and Kenya that their quotas be restored.

The ministers heard a report from ambassador Wilmot of Ghana, who is chairman of the ACP sub-committee on intra-ACP cooperation, on the progress made by the committee so far. He regretted the conditions under which the air transport meeting in Addis Ababa had had to work (see page III), and asked the ACP governments to inform the Secretariat of the difficulties they encountered.

The Council adopted a report on cultural cooperation between the ACP states and the Community, drawn up by ambassador Chasle of Mauritius. It insists that the ACP memorandum on the negotiations with the EEC "should take account of the cultural dimension of development, particularly research, information and communication, cultural exchanges, the development of tourism, the role of women in development, intra-ACP cooperation and the situation of ACP students and migrant workers residing in the EEC member states."

The problem of ACP nationals in Europe caused an incident during the 14th meeting of the ACP-EEC committee of ambassadors a few days prior to the ACP Council.

The ACP asked for the inclusion of this item on the agenda in order to examine this question. The Community was formally opposed to the inclusion of the question of students and nationals of ACP in the EEC. This attitude did not allow the committee to adopt the agenda and as a result, it had to be adjourned *sine die* after three hours of tough discussions.

Since the ACP objected to raising this question under the item "any other business" as proposed by the Community, they asked, by way of compromise, for the inscription of a specific item formulated as follows:

"Communication of the two co-chairmen on the mandate given to them by the Council of Ministers in Libreville to examine the situation of ACP students and nationals". The Community, objecting to any specific reference to the situation of ACP students and nationals, then made a counterproposal reading as follows: "communication of the two co-chairmen on item 11 of the agenda of the committee of ambassadors".

The ACP expressed their disagreement by observing that the refusal by the Community was unjustified since the ACP-EEC Council of Ministers, the supreme body of the Lomé Convention, had agreed to put this item on its agenda and had given a specific mandate to the co-chairmen of the committee of ambassadors.

To justify its position, the Community argued throughout the discussions that the question of ACP students and nationals did not fall within its competence and that it had pointed this out when this problem was raised in Libreville.

In the opinion of the ACP, "the question of competence had not been mentioned by the Community, which had put forward the argument that in view of the lack of adequate notice it had not had the time to study this problem and was therefore not in a position to take a stand."

The ACP side think this is a matter for the ACP-EEC institutions to discuss, particularly in view of the two Consultative Assembly resolutions which support their position. They have insisted on the inclusion of these resolutions in the agenda of the next ACP-EEC Council of Ministers meeting.

Only the ACP Council, however, can deal with the question of how its chairman should be chosen, under a rotating system. There is general agreement that this is a delicate problem. The African countries favour the adoption of the formula used by the ACP committee of ambassadors, the 'AACAAP' system, which alternately puts one Caribbean and one Pacific chairman in after every two African chairmen. This would allow more African countries to preside over the highest ACP body than the present one for one, 'ACP' rotation among the three regions. The Caribbean and Pacific countries prefer to maintain the status quo, but are open to some degree of negotiation. The Africans do not want to

hold a vote which would naturally be tilted in their favour. The question remains under discussion.

The ACP Council elected its officers for the 1 February to 31 July 1983 period. The chairman, not yet

nominated, will be from the Pacific. Others will be from Barbados for the Caribbean, Ethiopia (East Africa), Zimbabwe (southern Africa) and Sao Tomé and Príncipe (Central Africa). The West African representative will be known shortly. ○ A.T.

which was not accepted with much enthusiasm. As one delegate jokingly put it, if in a football match one of the teams doesn't turn up, the other stays off the pitch.

In the event, it did go onto the pitch, and stayed there for the duration, but only because of a great deal of tact and diplomacy from the chair. It was also necessary to change the name of the conference from a meeting of ACP air transport operators into a meeting on ACP air services.

INTRA-ACP COOPERATION

Conference in Addis Ababa on ACP air transport services

Not since the ACP group came into existence has a meeting been so uncertain as the air transport conference which took place in Addis Ababa from 6 to 9 December. It was called as a result of the recommendations of the intra-ACP transport and communications conference in Bangui in 1978, but suffered from token participation from the Caribbean — only Jamaica's ambassador to Ethiopia was present—and no representation at all from the Pacific. As a result it was difficult to discuss intra-ACP cooperation in air transport, and even more so since the technical documents available were from the African Civil Aviation Commission (AFCAC) and dealt only with the African continent.

Nothing could mask the fact that two regions were all but absent, neither the telegramme from the Fijian ambassador in Brussels, Mr Cavalevu, assuring the conference of the

Pacific's interest in the results of the discussions in view of the forthcoming study on transport in the South Pacific, nor the distribution as a reference document of part of the *Courier's* transport dossier on the Pacific and Caribbean (No 67) by the ACP Secretariat.

There was also another problem. From 29 November until 3 December, in the same Africa Hall as the ACP conference was held, representatives of the African states had held a seminar on African air services under the aegis of the AFCAC. The organizers of the ACP conference had hoped to profit from this to ensure strong participation from Africa at their own conference. In this they succeeded, but it proved a somewhat hollow success. Without experts from the Caribbean or Pacific, the African delegations found themselves condemned to repeat their work of the previous week, a fact

Air transport "no luxury"

The delegates decided that the meeting should go ahead in order to avoid a setback in the efforts to create a dialogue between the ACP states in the field of air transport, a crucial area in the view of J.B. Wilmot, Ghana's ambassador to the EEC and chairman of the sub-committee on intra-ACP cooperation.

For him, air transport, far from being a luxury for developing countries and the ACP in particular, was in fact essential to political, economic and human integration. Air transport, in his view, can promote integration at far less cost than the construction of road and rail links, which are poorly developed in ACP states. The global strategy for the UN transport and communications decade in Africa also speaks of air transport being an economic short cut to better coordi-



Abebe Asrat (3rd from the right), director-general of Ethiopia's civil aviation body, giving the opening speech. With him, from left to right, are Mr Lomboulou, AFCAC secretary-general, Edwin Carrington, deputy secretary-general of the ACP group, J.B. Wilmot, Ghana's ambassador to the EEC, Mr Manirakiza, assistant executive secretary of the ECA and Mr Tibazarwa, an ACP expert

nation and management of development.

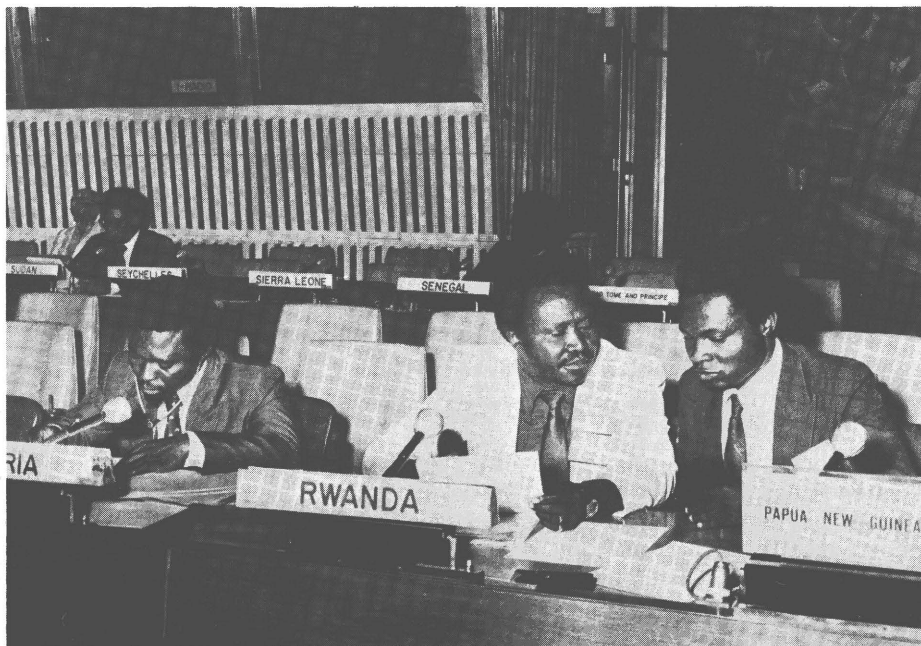
A bizarre situation

The importance that transport plays in development and cooperation between the ACP countries has been clear since the ACP ministerial meeting in Suva, Fiji, in April 1977, when it was made one of the six priority areas for cooperation. A year later, at the Bangui conference, it was recommended that for air transport each region in the ACP group should pool its resources in the fields of training, infrastructure, equipment and services. The conference also called on each region to increase their efforts to provide as many air links as possible within and between the different regions as soon as possible.

As a number of delegates pointed out in Addis Ababa, bizarre situations are still common. Too often, the fastest way to get from one ACP country to another is to go via Europe. Ambassador Wilmot pointed out that many ACP delegates had spent less money to get to Maseru in December 1981 to attend an ACP ministerial meeting than they had the year before to get to Nairobi, a distance considerably less. Edwin Carrington, the deputy secretary-general of the ACP group, revealed that a minister from a Pacific country, who was participating in the ACP Council of Ministers meeting in Luxembourg in 1981, had had to change planes no less than eight times.

Economic realities

But there would be no point in setting up air links for political reasons alone if they were not justified by the traffic in passengers, freight and mail. As a representative of the ICAO (International Civil Aviation Organization) put it, only an awareness of economic realities will lead to results, however good an idea cooperation may seem to the various governments concerned. For the ICAO, the first requirement is an immediate feasibility study on opening air routes between the three regions of the ACP group, which it would be prepared to carry out at the request of the ACP secretary-general. The Jamaican delegate told the meeting his country would be willing to establish air links with West Africa. Mr Carrington had previously outlined the discussions between Barbados



The conference in session

and Nigeria on achieving what he called "a dream"—linking West Africa and the Caribbean—a dream that seems realistic enough in that a Caribbean-Dakar flight would take four hours as against the present eight hours to London.

Areas of cooperation

AFCAC documents on Africa contain a number of points relevant to the Caribbean and the Pacific. One is the problem of replacement and modernization: the cost of aircraft, high interest rates and lack of credit facilities all point to a multinational approach. Several multinational airlines have been launched: SAS for Scandinavia, Air Afrique and the ill-fated East African Airways are examples, considered of interest by the Jamaican delegate, who pointed out that no less than five national airlines share the limited market provided by six million people in the Caribbean—which is no doubt one reason for their present difficulties.

Training is another area for cooperation. AFCAC has two multinational training centres in Africa, one in Mvengué (Gabon) for French-speaking countries and the other in Addis Ababa (Ethiopia) for English-speakers. A similar centre exists in the Caribbean, the Caribbean Air Transport Institute (CATI). It should be possible to coordinate their activities, through exchanges of students and institutions and the like, especially if training grants for pilots and technicians can be provided, as AF-

CAC secretary-general E. Lomboulou pointed out. Moreover the ICAO has put together training curricula which are in use in Trinidad and Tobago and Addis Ababa. Mvengué will shortly adopt them, so progress here is already being made. Other areas of cooperation worth examining include price-fixing for air tariffs and carrier licensing.

Need for a further meeting

All these points gave the Addis Ababa meeting grounds for a final recommendation which calls on the ACP Secretariat to arrange a meeting as soon as possible under the mandate approved at the Bangui conference. This meeting should bring together civil aviation and airline representatives from air transport authorities in all three ACP regions, plus the relevant international, regional and sub-regional authorities, to consider what technical papers should be drawn up on each of the regions.

The meeting is enthusiastically awaited: meanwhile, the Addis delegates decided to send the Caribbean and Pacific authorities copies of the work done by the African Civil Aviation Commission on the experiences of the African AFCAC countries "for information, examination and comment". These papers, presented to the meeting by the ACAC secretariat, may be topped up with any further useful information by the member states and compiled by the ACP Secretariat. ○ A.T.

EDF

Following a favourable opinion delivered by the EDF Committee (172nd and 173rd meetings), the Commission has approved financing in respect of the following projects:

Togo

Road maintenance and construction of Avepozo-Hillakondji link

Fifth EDF

Grant: ECU 12 000 000

Loan on special terms:

ECU 2 330 000

The project provides for the maintenance of the south-north and west-east road links financed by the first, second and third EDFs. It also provides for the construction of a new section between Avepozo and Hillakondji. The project's aim is to safeguard the essential road infrastructure, thus maintaining the technical and economic conditions essential for efficient road transport in the country.

Chad

Agricultural programme in the sudanic area

Fifth EDF

Grant: ECU 7 000 000

The project is the Community's contribution to the financing of agricultural activities over the 1983/84 farm year in the sudanic area of the country, where operations conducted under the fourth EDF are nearing completion. It involves the supply of inputs and is geared to a new programme of aid, while making it possible to maintain for the present the yields attained for food and cash crops, which make a major contribution to food supplies and the economy of the region and the country as a whole.

Central African Republic

Rural development in the coffee-growing area

Fifth EDF

Grant: ECU 5 000 000

Loan on special terms:

ECU 4 700 000

Good results have been obtained in recent years from coffee-growing projects financed under the fourth EDF. This project is designed not

only to help consolidate the results achieved, but also to start a broader rural development process in a pilot area in the prefectures of M'bomou and Basse-Kotto. In pursuit of these aims the project involves:

- (i) support for the Agence Centrafricaine pour le Développement de la Zone Caféière (ADECAF);
- (ii) intensification of food production via training and agricultural extension schemes;
- (iii) improvement of rural infrastructure.

Zambia

Production of vaccines

Fifth EDF

Grant: ECU 1 000 000

Loan on special terms:

ECU 2 000 000

The aim of the project is to enable Zambia to undertake local production of various animal vaccines. The loan will be used for building and equipping a laboratory and technical assistance will be financed from the grant.

Mali

Trade promotion programme

Fifth EDF

Grant: ECU 397 000

The aim of the project is to finance the programme which the Mali government has decided to implement to encourage the diversification of production and the expansion of trade at both regional and international levels. The programme covers assistance in the following field:

- (i) production (identification and adaptation of possible export products);
- (ii) marketing (search for foreign outlets and trade partners);
- (iii) training (specialized training for supervisory staff in management and marketing techniques).

Swaziland

Water supply in rural areas

Fifth EDF

Grant: ECU 2 456 000

Swaziland has committed itself officially to meeting the targets of the International Drinking Water Supply and Sanitation Decade (1981-90), which seeks to ensure that drinking water is made available to all by 1990. It is estimated that 35% of the population is currently supplied

with piped drinking water and that at least 140 additional systems will be needed to ensure that the whole rural population is supplied by 1990. The project will help to achieve this by making funds available for the design and construction of twelve rural water supply systems.

Benin

Multiannual training programme 1981-84

Fifth EDF

Grant: ECU 2 150 000

The programme provides mainly for the granting of study and training awards in the spheres of rural development, health and education.

Barbados

Trade promotion

Fifth EDF

Grant: ECU 175 000

The project provides for:

- (i) technical assistance in organization, planning and marketing;
- (ii) help for trade promotion, covering participation in trade missions, fairs and related activities;
- (iii) training for staff of the Barbados Export Promotion Corporation;
- (iv) studies of existing markets and new outlets.

Saint Vincent and the Grenadines

Supplementary financing for the health project in Saint Vincent

Fifth EDF

Grant: ECU 600 000

The aim of this project is to provide supplementary financing for the construction of a hospital in Kingstown and a clinic on the island of Union. The sum in question is necessary for satisfactory completion of the project approved in 1981, for which 2 000 000 ECU was granted.

Kenya and Tanzania

Regional health service improvement programme

Fifth EDF — Regional project

Grant: ECU 1 600 000

The project will enable the two countries to strengthen and improve their rural health services and training capability and pool their experiences, particularly regarding primary health care. The project has three components:

- (i) construction of offices, training centres, workshops and enlarged storage facilities in Nairobi;
- (ii) construction of offices and staff housing in Dar es Salaam and purchase of vehicles;
- (iii) technical cooperation to support the development of the programme.

Comoros

Fomboni water supply
Fifth EDF
Grant: ECU 700 000

The purpose of the project is to develop the water distribution network of the town of Fomboni, chief town of the island of Moheli, in order to bring water within easy reach of the various users via a communal means of supply (standpipes) or individual mains connections, the latter against payment of a charge.

Guyana

Rehabilitation of the Georgetown sewerage system
Fifth EDF
Grant: ECU 1 600 000

The aim of the project is to rehabilitate the Georgetown sewerage system, which is now more than 50 years old. The project involves the supply and installation of pipes and other items for the replacement of the old ring main and the execution of associated works.

Sierra Leone

Njala University College water supply
Fifth EDF
Grant: ECU 950 000

The purpose of the project is to improve and extend the drinking water supply to Njala University College (NUC), which has already received a Community grant under the fourth EDF, mainly for electricity supply, as part of a selective programme of support for existing educational institutions in Sierra Leone.

The project involves modifying and equipping the existing raw water intake facilities, constructing and equipping a treatment plant, rehabilitating an existing storage plant and extending the distribution network. It also includes works supervision and training for local staff.

Mali

Rural water engineering
Fifth EDF
Grant: ECU 600 000

As part of Mali's efforts and plans to resolve the problem of water supply, particularly in rural areas, the project seeks to equip six existing boreholes, located in the second region (Nara), with solar pumps. To this end pumps will be supplied and installed and ancillary equipment (reservoirs, watering troughs, etc.) provided.

Botswana

Trade promotion
Fifth EDF
Grant: ECU 1 100 000

The project seeks to ensure the continuation of the trade promotion scheme undertaken within the Ministry of Commerce and Industry. It is concerned with relevant aspects of import procurement, internal trade and export development.

The components of the project will comprise:

- (i) technical assistance
- (ii) consultancy services
- (iii) specialized training for local staff in Europe and Botswana
- (iv) trade missions, participation in fairs and trade information services.

Nigeria, Kenya, Netherlands Antilles, Antigua, Belize, Solomon Islands and Fiji

Provisional overall amount for the financing of study and training awards
Fifth EDF
Grant: ECU 1 400 000

This is a provisional sum intended to pay for priority training in the countries concerned so as to prevent any break in the continuity of training courses financed under Lomé II.

Jamaica

Multiannual training programme
Fifth EDF
Grant: ECU 4 550 000

The objective of the proposed multiannual training programme is to assist the Jamaican government in carrying out its responsibilities in the development and improvement of public administration, through programmes designed to improve the

performance of public sector managerial staff.

The programme provides for awards in various fields, local training courses and training programmes in the relevant departments.

Gabon

Multiannual training programme 1981-85
Fourth EDF ECU 500 000
Fifth EDF ECU 500 000
Grants

The purpose of the project is to set up in Gabon a multiannual training programme for the period 1981-85 within the framework of the objectives of the Interim Plan for Economic and Social Development. The programme is designed to increase the number of middle-grade and senior administrative staff and to train technical staff in various economic sectors, as follows:

- (i) basic and advanced training for middle-grade and senior government officials;
- (ii) training for harbour officials of Gabon's Office des Ports et Rades;
- (iii) financing of infrastructure for the electronics section of Libreville's Ecole Nationale Supérieure des Ingénieurs;
- (iv) training of instructors in the public works sector;
- (v) programme of various awards and seminars.

Caricom member states

Training for environmental and allied health personnel in the Caribbean region
Fifth EDF
Grant: ECU 1 150 000

The project seeks to provide follow-up to a regional training programme for medical and health personnel which has been undertaken in previous years, having been initiated in 1975. The proposed programme is essential to cover the continuing needs of the LLDCs (least developed countries) as regards public health sector staff. No less than 135 LLDC nationals will be trained over the period 1982-86.

The principal resources to be deployed will be as follows:

- (i) staff and physical resources for five regional centres of medical and health training in the Bahamas, Barbados, Guyana, Jamaica and Trinidad and Tobago;

(ii) field and institutional training units at which learning experiences are organized;

(iii) staff and physical resources for the regional health project's implementation unit within the PAHO-WHO Caribbean Programmes Coordination Office in Barbados.

Upper Volta

Multiannual training programme 1981-85

Fifth EDF

Grant: ECU 1 425 000

This proposal is concerned with the financing of a multiannual training programme for Upper Volta over the period 1981-85. The programme provides for locally-organized specific training schemes and also for training via study and training awards.

Benin, Burundi, Cameroon, Central African Republic, Chad, Congo, Gabon, Guinea, Ivory Coast, Madagascar, Mali, Mauritania, Mauritius, Niger, Rwanda, Senegal, Togo, Upper Volta and Zaïre

Inter-African Centre for the Development of Vocational Training (CIADFOR)

Fifth EDF

Grant: ECU 1 450 000

The project is consistent with inter-African cooperation objectives in the vocational training field and is included in the programme of action of the Centre Interafricain pour le Développement de la Formation Professionnelle (Ciadfor), which comprises the following 19 member states: Benin, Burundi, Cameroon, Central African Republic, Chad, Congo, Gabon, Guinea, Ivory Coast, Madagascar, Mali, Mauritania, Mauritius, Niger, Rwanda, Senegal, Togo, Upper Volta and Zaïre.

The project pursues two of the priorities which have emerged from current discussions on the Community's development policy, namely training and regional cooperation, and its aim is to meet clearly perceived needs at regional level through the training of technical staff and the production of teaching materials.

The operations planned relate to:

(i) the production of teaching materi-

als entitled "Collections de Base du Ciadfor" (CBC) in the priority technical fields; these will be made available to vocational training establishments in the Ciadfor member countries;

(ii) basic and advanced training for offset printing specialists for the countries concerned and the supply of technical equipment for implementation of the project, together with suitable technical assistance;

(iii) training of instructors for all the member countries, through provision for specialized seminars and training awards in specialized establishments in Africa.

Upper Volta

Training young farmers

Fifth EDF

Grant: ECU 2 880 000

This project aims to improve the training of young farmers in four of the 11 departments of the country and is an extension of Community aid provided during the first four EDFs to the tune of some ECU 5 million. The planned improvements in the training system include:

- extra support for the training service,
- the equipment and reequipment of training centres,
- the upgrading of 54 centres, the rebuilding of 10 centres and the building of 10 new centres,
- technical assistance for both the training side and the construction side of the project.

Kenya, Sudan and Zambia

Field research in the fight against the tse-tse fly and cattle ticks

Grant: ECU 1 500 000

The project will assist research into two of the major diseases that afflict animals in East Africa, trypanosomiasis and tick-borne diseases, in particular East coast fever.

The International Centre for Insect Psychology and Ecology, which works in this field, will receive an annual grant over a four-year period, to allow the purchase of veterinary equipment and transport.

The project should help advance knowledge of diseases transmitted by the tse-tse fly and cattle tick, and the benefits will be felt not only in the three countries directly involved in the project, but in all African countries where such diseases are a problem.

All ACP states

The committee also approved a sum of ECU 855 000 to finance the *ACP-EEC Courier* for 1983. ◦

EIB

Loan for tourist hotel in Senegal

The European Investment Bank, the European Community's bank for long-term finance, has lent the equivalent of ECU 1.85 million (more than CFAF 600 million), under the second Lomé Convention, towards construction of a 100-room tourist hotel on the Petite Côte, 80 km south of Dakar, in Senegal.

The funds have been made available in the form of a subordinated loan (repaid only after settlement of all other borrowings concluded to finance the project) for 15 years and is being funded from the risk capital resources provided for by the Convention and managed by the EIB.

The borrower is the Société Financière Sénégalaise pour le Développement de l'Industrie et du Tourisme (Sofisedit), an institution specializing in long-term finance. In addition to the Senegalese government, the Central Bank of the West African states and the commercial banks in Senegal, its many shareholders include the International Finance Corporation (part of the World Bank), the Deutsche Entwicklungsgesellschaft (DEG), the Caisse Centrale de Coopération Economique (CCCE-France) and the West African Development Bank.

Sofisedit will on-lend the funds to the Société Hôtelière de Sali (SHS), the promoter of the project. The hotel, costed at some CFAF 1.5 billion, will be managed by Novotel, a shareholder in SHS. It will increase hotel capacity in an area where, with the financial support of the World Bank seeking to assist in diversifying the country's economic resources, much has been done in recent years to develop tourist facilities.

Loan for small and medium-scale ventures in Vanuatu

This is the first financing operation mounted by the EIB in this ACP state which acceded to the Lomé Conven-

tion in 1981. It takes the form of a global loan of ECU 1 million to the Development Bank of Vanuatu (DBV), a wholly state-owned institution created in 1979. The global loan is essentially a line of credit which DBV will draw upon to finance equity participations and loans in favour of ventures selected in agreement with the EIB. This is also a "conditional loan", which means that its rate of interest, term, and repayment conditions are tailored to these different uses.

Mauritius: two EIB loans to help small and medium-sized enterprises

The EIB has granted two loans to the Development Bank of Mauritius totalling the equivalent of ECU 4.5 million to support small and medium-sized industrial, agro-industrial and tourism ventures. The funds are being made available as follows:

- ECU 4 million from the EIB's own resources, i.e. derived essentially from the Bank's borrowings on the capital markets; this loan will be for 12 years at 8%, after deducting an interest subsidy met from the European Development Fund, and will be used to provide loan finance for capital investments.

- ECU 500 000 from risk capital resources provided for under the Convention and managed by the EIB; this is a conditional loan which will be used to finance feasibility studies and to take equity participations (the interest rate is 2% with the term and repayment conditions adjusted according to the precise use of the funds).

The operation will take the form of two global loans, i.e. basically lines of credit, which DBM will draw upon to support a range of small and medium-scale ventures selected in agreement with the EIB.

The Development Bank of Mauritius was established in 1964 with the government as principal shareholder. DBM's role is to foster development of the country's industrial and tourism sectors and diversify economic activity by providing long-term finance.

Power station in Botswana

The Bank has lent the equivalent of ECU 15 million towards financing construction of a 90 MW coal-fired power station in Botswana; this will

raise the country's installed generating capacity to over 200 MW.

The funds have been advanced for 15 years to the Botswana Power Corporation, a public utility responsible for electricity generation, transmission and distribution. The interest rate is 8%, after allowing for an interest subsidy to be met from the Community's European Development Fund.

Construction of the power station, located at Morupule in the north of the country, will cost some ECU 250 million. It will comprise three 30 MW units, together with the necessary auxiliary services. Fired with locally produced coal, the power station will enable the country to cope with increasing demand, particularly from the mining industry. The project also provides for installation of some 350 km of power lines and interconnection of the country's northern and southern grids. The power station is due to come on stream in stages during 1986.

The World Bank, the African Development Bank, the Arab Bank for Economic Development in Africa, the Commonwealth Development Corporation, the Kreditanstalt für Wiederaufbau, the Kuwait Fund, the Saudi Fund and the Abu Dhabi Fund are also helping to finance the project.

Help to set up development bank in Jamaica

The European Investment Bank has also announced a loan for the equivalent of ECU 5 million, under the second Lomé Convention, to help establish a development bank in Jamaica.

The first EIB operation in this Caribbean ACP state takes the form of a conditional loan to the Jamaican government, at 2% for up to 25 years, towards financing half of the initial share capital of the wholly state-owned National Development Bank of Jamaica (NDBJ). The government will cover the rest of its stake from its own budget. The conditional loan is being drawn from risk capital resources provided for under the Convention and managed by the EIB.

Destined to become the country's principal institution for financing investment in industry, agricultural processing and tourism, the NDBJ

will also enjoy lines of credit from the World Bank and the Caribbean Development Bank.

Loan for small and medium-scale industrial ventures in Kenya

The EIB has granted the Development Finance Company of Kenya Ltd (DFCK) a loan of ECU 8 million to help finance small and medium-scale industrial, agricultural processing and tourism ventures in Kenya.

The loan is for a term of 12 years at a rate which is effectively 8%, after deduction of an interest subsidy from the EDF.

DFCK was set up in 1963 and its shareholders are the Industrial and Commercial Development Corporation (ICDC), which is controlled by the Kenyan government, and three development finance institutions from Community member countries: the Commonwealth Development Corporation (CDC) in the United Kingdom, the Deutsche Entwicklungsgesellschaft (DEG) in Germany and the Nederlandse Financieringsmaatschappij voor Ontwikkelingslanden N.V. (FMO) in the Netherlands.

The EIB finance takes the form of a global loan (basically a line of credit). DFCK will on-lend the funds to help finance small and medium-scale investment projects selected in agreement with the EIB. It has already contracted two global loans with the EIB totalling ECU 7 million, in 1976 and 1979; these were used to help finance investment projects, mainly in the chemicals, paper pulp and packaging and agricultural processing sectors, which together created some 1 850 new jobs.

Industrial development in Dominica

The EIB has also announced two loans totalling the equivalent of one million ECU towards financing an increase in the share capital of a development bank and construction of a mineral water bottling plant in Dominica.

This dual aid package, the first EIB operation in this Caribbean country, is being advanced in the form of two conditional loans financed from risk capital resources provided for under the second Lomé Convention and managed by the Bank.

ECU 300 000 has been made available to the Dominican government for up to 25 years at 1%. The funds will help to finance its share in the Dominica Agricultural, Industrial and Development (AID) Bank's capital increase. This publicly-owned, long-term credit institution has already received assistance from the Caribbean Development Bank, but requires further resources to cope with the recent rapid expansion in its activities in support of smallscale industrial, agricultural processing and tourism ventures.

ECU 700 000 has been made available directly to the AID Bank, for 12 years at 7%, for on-lending to Carib Spring Limited, a privately-owned company, towards financing construction of a plant to tap and bottle mineral water. Virtually all the plant's output, estimated at 3.7 million bottles per annum, is intended for export. The project, which should be completed by the end of 1983, will cost at nearly one million ECU.

Loan for smaller industries and tourism in Trinidad and Tobago

The EIB has advanced a global loan for ECU 8 million, under the second Lomé Convention, to Trinidad and Tobago Development Finance Company Ltd (TTDFC) to assist in financing smaller scale industrial and tourism ventures in the country.

The loan has been granted for 12 years at 8%, after deducting an interest subsidy financed from European Development Fund resources. Global loans are basically lines of credit made available to banks or finance institutions which on-lend the proceeds in the form of sub-loans for more modest individual amounts to fund smaller scale ventures selected in agreement with the EIB.

The role of TTDFC, set up in 1970, is to promote the country's economic development by fostering the establishment and expansion of undertakings in the industrial, agricultural processing, tourism, commercial and services sectors. The bulk of its capital is held by the state, with the balance in the hands of commercial banks, insurance companies and private industry.

In 1978 and 1980, under the first Lomé Convention, TTDFC received two global loans, each for ECU 5 million, which helped to finance a total of 26 ventures creating more than

800 jobs and covering a broad range of industrial and tourism activities throughout the country. ○

MALI

Drought relief

The Commission has decided to provide ECU 300 000 in aid to Mali under article 137 of the second Lomé Convention. Drought has seriously affected the country and, in particular, the cattle farmers and their families who depend on their herds for their survival. Community aid will form part of a Mali government programme to purchase and transport feedstuffs to the herds. ○

LESOTHO

Emergency aid

The Commission has also decided to provide emergency aid on article 137 to Lesotho for up to ECU 75 000. The money will finance a programme to help the victims of the fighting in Maseru when the South African army attacked the town on 9 December. ○

ACP COMMITTEE OF AMBASSADORS

Condemnation of South African attack as Lesotho

During its meeting held on 8 December, the ACP committee of ambassador expressed its grave concern at the "unjustified attack launched against Maseru, the capital of Lesotho."

The committee also strongly condemned the violation of the United Nations Charter and the sovereignty of Lesotho, and extended its sympathy for the unjustifiable loss of life and the material damage caused by the South African attack.

The committee considered the attack by the racist regime would undermine the national development programme of Lesotho and as a result ACP-EEC cooperation in the country.

Finally the committee reaffirmed its support for, and solidarity with,

the people and government of Lesotho, and the African National Congress. ○

INDUSTRIAL COOPERATION

West Africa Industrial Forum in Dakar

A meeting between European manufacturers and businessmen from 16 West African countries took place in Dakar from 24 to 27 November.

This forum was organized by the Economic Community of West African States (ECOWAS), with assistance from the Commission of the European Communities, the United Nations Industrial Development Organization (UNIDO) and the Centre for Industrial Development (CID).

The purpose of this industrial forum was to give those European and African businessmen intending to collaborate on industrial projects in West Africa an ideal opportunity to meet one another. Projects put forward by African and European undertakings for which technical, financial, commercial or management collaboration is proposed were presented by their promoters in the course of individual meetings during the four days of the forum. ○

(See pink pages)

RWANDA

Visit of President Habyarimana to the EEC Commission

The president of Rwanda, Major General Juvenal Habyarimana, was received at the European Commission on 19 November. He had, first of all, a meeting with Edgard Pisani, commissioner responsible for development and, after a meeting of experts, another meeting with Commission President Gaston Thorn. Several subjects were discussed: aid to Ugandan refugees; regional cooperation, as Rwanda is landlocked (this cooperation would involve transport and energy); food strategy (Rwanda is already included among recipients of EEC aid for this strategy); and finally, financial transfers under Stabex.



EEC

Development commissioner Edgard Pisani receives President Habyarimana of Rwanda at the EEC Commission

Aid to refugees

The Commission decided earlier in the month to allocate ECU 2 million in aid under article 137 of the second Lomé Convention to the UNHCR's relief programme for refugees in Rwanda. According to the Rwanda government, approximately 40 000 people, with their livestock, have fled Uganda since the beginning of October and are seeking refuge in the country. Many of them are Rwandese who had themselves fled to Uganda 20 years ago. Their plight is now aggravated by torrential rain.

UNHCR has mounted an ECU 8 million relief programme to help the refugees over the next six months by providing them with food, domestic utensils, tents, medical supplies, and logistical and administrative support.

ECONOMIC AND SOCIAL COMMITTEE

Pisani presents the Commission's memorandum

At the plenary session which the Economic and Social Committee held at the end of November, Edgard Pisani, commissioner in charge of development cooperation, presented the European Commission memorandum on Community development policy. The Committee feels it will be

able to give an opinion on this memorandum at its plenary session next April.

In his address, Mr Pisani emphasised the move from a "project" approach to a "policy" approach. He pointed out that certain spectacular projects carried out, notably in Africa, did not always give the expected results and there is inadequate utilization of installations such as hydro-electric dams or sanitary equipment, or else a poor maintenance of infrastructures such as the highway system. Often these big projects had no real connection with the population's real needs. The approach to be chosen must make the society's needs the main concern, and notably education (including literacy) and teaching of specific know-how for the rural population.

As regards agriculture, Africa was self-sufficient 20 years ago; at present it is forced to import increasingly large quantities of food products. Encouraging agriculture must prevent desertification, improve cattle, and redirect research towards local produce.

A mining and industrial strategy was needed because Africa had about 30% of the world mineral reserves and only 9% of prospecting expenditure. Difficulties must therefore be overcome by creating joint ventures, for instance for the prospecting of resources, mine development and establishment of the necessary infrastructures. In the field of energy, it will be necessary to lay more emphasis on developing dif-fused energy sources than building big dams. As regards industrializa-

tion, it would be necessary above all to promote industrialisation parallel with agriculture, notably by developing SMEs.

In the field of social relations, EEC intervention must not encourage centralization, but rather promote the emergence of rural communities and cooperatives, and trade unions and contractors' organizations, Mr Pisani said. ◊

VISITS

Pisani visits Togo, Benin and the Ivory Coast

Development commissioner Edgard Pisani has made a further series of visits to ACP states, where he outlined both to the national authorities and to the ambassadors from the EEC member states the main themes of his memorandum on guidelines for EEC development policy. In the Ivory Coast, where he held talks, among others, with the minister for finance, Mr Pisani raised the question of the Ivory Coast's request to accede to the sugar protocol.

In Togo he was one of the participants in a colloquium on the Lomé Convention. At this international event, which brought together professors from many African universities, Mr Pisani expressed the opinion that the suggestion made by the vice-chancellor of the university of Togo, namely that an ACP/EEC university should be created, was worthy of consideration. At Lomé Mr Pisani met several ministers, among them the ministers of planning, rural devel-



Development commissioner Edgard Pisani and Togolese planning minister Koffi Walla sign a financing agreement for just over ECU 14.3 million for a road project (see page V) during the commissioner's visit to Lomé

opment, industry, and public works, with whom he discussed, among other things, the rural development schemes under way in the country (he visited the land development project at Kara). Among the problems raised in this connection were those of stock-raising and village water systems. The authorities also expressed the wish to complete the geological inventory of their country and to develop mining prospection, the main natural resource of the country being phosphates. Finally, in view of the fairly serious problems of management and training which arise in Togo, Mr Pisani wondered whether it might not be a good idea, alongside the "food strategies", to launch a series of "training strategies".

During his visit to Benin, Mr Pisani had the opportunity to take part in an Ecowas ministerial meeting, in the course of which he explained his memorandum. In his conversations with the Benin authorities, he heard accounts of the new development plan, which is to give a higher priority than in the past to agricultural development. Mr Pisani also visited a fish farming venture, this being a sector which offers important potential for development, fulfilling the dual purpose of increasing protein production and providing jobs for the local population. Among the principal weaknesses of the economy of Benin, Mr Pisani noted its extreme dependence on Nigeria, with which virtually all its trade is conducted.

should be drawn up by the GATT Council for adoption by the contracting parties not later than their 1983 session.

GATT rules and activities relating to developing countries. The participants notably emphasise that there must be more effective implementation of the rules concerning differential and more favourable treatment, and that the technical cooperation programme must be strengthened.

Dispute settlement. The rules of the Tokyo Round currently in force must not undergo major change, but the existing mechanisms must be better used and specific improvements are possible. These improvements are studied in about ten paragraphs which give details of the procedure to be followed, on the understanding that the consensus is the traditional method for settling disputes. At the same time, any obstruction to the dispute settlement procedures must be prevented.

Trade in agriculture. This chapter is the subject of a global Community reservation. The problem will be studied, with a view to presenting appropriate recommendations: the examination will, among other things, deal with subsidies and other forms of aid. In this examination, account will be taken of the particular characteristics of the agriculture sector and of the specific needs of developing countries. A unified notification system will be introduced in order to ensure greater transparency, and a committee on trade in agriculture will be set up to put forward (at the 1984 November session at the latest) appropriate recommendations.

Tropical products. Proposals will be put forward to reduce barriers to trade in these products by November 1984 (the EEC states that it will not enter into new obligations).

Quantitative restrictions and other non-tariff measures. A working group was set up: it will also have to report by November 1984 on the abolition of restrictions which do not comply with GATT.

Tariffs. The problem of escalation on certain products must be examined. The adoption of a common system for classification of products is desirable.

Multilateral trade agreements. The participants will review the dif-

GENERAL INFORMATION

General agreement on tariffs and trade Ministerial conference in Geneva

The GATT ministerial conference in November ended with the adoption of a certain number of texts, namely, a ministerial declaration and texts on safeguards, agriculture, the developing countries, settlement of disputes, and services. To these must be added remarks by the EEC on several points and a reservation on the section devoted to trade in agricultural produce. As far as agriculture is concerned, the EEC commissioner Mr Haferkamp asked that the letter he had sent on 27 November to the chairman of the conference, Allan MacEachan, should be included in the record of the meeting. This indicates both the Community's overall agreement on the text and its desire to clarify its position.

The conclusions of the conference

The texts which have been adopted are as follows:

Ministerial declaration. After noting that the international trade system is currently threatened and that the countries sometimes have differing interpretations of the duties and obligations under GATT, the participating countries undertake to reduce trade friction, to resist pro-

tectionist pressure, to refrain from using export subsidies which are not compatible with Article 16 of GATT and to promote expansion and liberalization of trade. In order to achieve these goals, it is of imperative importance that GATT should remain a forum for negotiation and consultation. In preparing their programme and their priorities for the 1980s, the participants make a certain number of undertakings as follows: — to make determined effort to ensure that trade policies and measures are consistent with GATT principles; — to refrain from adopting restrictive trade measures; — to offer special treatment to developing countries; to provide for better insertion of agricultural products in the multilateral trading system; to ensure greater transparency of trade measures, better solution of disputes and greater consensus on safeguards.

Safeguards. A more efficient system is needed in this area. A comprehensive understanding should be based, *inter alia*, on the following elements: transparency, coverage, objective criteria for action, temporary nature; degressivity and structural adjustment, notification, consultation, multilateral surveillance and dispute settlement. This understanding

ferent agreements and arrangements in this area.

Structural adjustment. Work in this field must continue: conclusions will be presented at the 1983 session.

Counterfeits. The arrangements for common action in GATT will be examined.

Export of domestically prohibited goods for reasons of health or safety. The effectiveness of the notification procedure must be checked.

Export credits for capital goods. The contracting parties, taking the needs of the developing countries particularly into account, recommend that, when this type of agreement is being reviewed, credit provisions should be taken into account in order to facilitate the importing of capital goods by the developing countries.

Textiles and clothing. The elaboration of a study in this area is a priority: the arrangements for greater liberalization should be the subject of recommendations by the 1984 session.

Trade in certain natural resource products. (non-ferrous metals and minerals, forestry products, fish and fisheries products). Appropriate solutions must be examined for the problems posed by each of these sectors.

Exchange rate fluctuations. The IMF's managing director must be consulted in this connection: the GATT Council must receive a report on the effects of these fluctuations on trade.

Dual pricing and rules of origin. Studies are requested in this field also.

Services. Each party with an interest in this area must undertake, as far as is possible, national examination of the issues in this sector. The information thus obtained must be exchanged, inter alia, through organizations such as GATT and the results of these exchanges of information must be examined at the 1984 session.

Declaration by the EEC

The following text was published on behalf of the EEC by commissioner Haferkamp:

"We welcome the commitment in the ministerial declaration to overcome protectionist pressures, as

well as the clear reaffirmation of the resolve to support and improve the GATT trading system. These were the basic objectives of the Conference; we are determined in the Community to devote maximum efforts to these objectives.

In view of the importance of the range of issues in the ministerial declaration, on which it has been possible to reach agreement, and in view of the critical importance, at this time of crisis in the world economy, of maintaining solidarity between the trading nations of the world, the Community is prepared to accept the Declaration in its final version, as submitted to us by our chairman.

But we need to make the Communities' position absolutely clear on certain points.

As regards the undertaking in paragraph 7(i) to refrain from taking or maintaining any measures inconsistent with GATT, the Community considers this undertaking to mean that its best efforts will be deployed to avoid taking or maintaining such measures.

We reaffirm the points made in my letter of 27 November to you, Mr Chairman regarding agricultural issues. We would like the relevant passages in this letter to be recorded in the proces verbal of this Conference. We recognize that only some of our proposed amendments are taken account of in the new text.

Therefore, while we accept and fully support a major work programme on agriculture, which will examine all measures on the same basis, we underline that this acceptance is on the understanding that this is not a commitment to any new negotiation or obligation in relation to agricultural products. This is also the position as regards those tropical products which are subject to rules for the common organization of the market within the Community.

We welcome also the fact that it has been possible to reach agreement on the means to improve dispute settlement procedures. The strengthening of the conciliation procedures should be of value. We further agree that without prejudice to the provisions on decision making in the General Agreement, consensus will continue to be the traditional method of resolving disputes. However, obstruction in the process of dispute settlement shall be avoided.

As regards the work programme

on quantitative restrictions and other non-tariff measures, the Community is willing to participate fully in the review established by the contracting parties, in order to achieve elimination where possible. We would envisage in this context giving priority to measures in favour of developing countries. However, we recall that there is a long historical background to the few residual measures which still exist within the Community; and that, if we are to achieve further liberalization, this will have to take account of the fact that there is an imbalance in the level of commitments which contracting parties have accepted.

The Community accepts a decision of principle on a study on fisheries products, on the understanding that this study will take account of the structural effects on trade of the introduction of exclusive economic zones. The Community will insist that the terms of reference of the study cover this point."

Developing countries

There was agreement on measures to help the developing countries under part IV (review and surveillance procedures). They also agreed to:

- "— further improve GSP or MFN treatment for products of particular export interest to least-developed countries, with the objective of providing fullest possible duty-free access to such products;
- use, upon request and where feasible, of more flexible requirements for rules of origin for products of particular export interest to least-developed countries;
- eliminate or reduce non-tariff measures affecting products of particular export interest to least-developed countries;
- facilitate the participation of least-developed countries in MTN agreements and arrangements;
- strengthen the technical assistance facilities of the GATT secretariat targeted to the special requirements of least-developed countries;
- strengthen trade promotion activities, through the ITC and other initiatives, such as by encouraging the establishment of import promotion offices in importing countries;
- give more emphasis to the discussion and examination of policy issues of interest to least-developed countries in the context of further efforts to liberalize trade."

Finally the also decided to strengthen the technical co-operation programme of the GATT with a

view to facilitating the more effective participation of developing countries in the GATT trading system. o

Aid for non-associated developing countries

The Commission has decided on the following projects under the 1982 programme for non-associated developing countries:

Thailand: ECU 3 300 000 oilseeds

The programme is designed to improve, by means of applied research in agriculture and economics, the quality and range of oilseed varieties available to Thai farmers; the aim is not solely to widen the choice for farmers, but also to improve the quality of human resources in agriculture-related areas.

Junta of the Cartagena Agreement (Andean Pact) ECU 500 000 energy cooperation

The project, to be carried out over two years by the Junta for the benefit, and with the cooperation, of the five member countries which have signed the Andean Pact (Cartagena Agreement), comprises an analysis of the energy situation in the Andean sub-region, the identification of operations which could be conducted jointly, and the elaboration of detailed plans to be proposed to the member countries. This work, carried out by experts from the sub-region with back-up from European experts, will be combined with meetings and training courses at sub-regional level focussing on planning and energy models.

This project follows on from an earlier short-term operation—financed in 1981 at the request of the Junta—in which European experts provided consultancy services in the field of energy programming.

India

Further assistance is being provided to India from the reserve in the non-associated aid programme for catastrophes.

The first part of this aid will be used to build 200 shelters against cyclones along the coast of Andhra Pradesh to improve the protection of the inhabitants and the essential be-

longings before, during and immediately after cyclones along the coast. ECU 3 000 000 has been allocated.

A further ECU 1 000 000 will also be used to build similar shelters, 30 in all, on the coast of Tamil Nadu state. Part of the funds will also be used for equipment to improve the early warning system and telecommunications so that the local population gets sufficient warning of the advent of a cyclone.

These two projects complete the programmes started in 1978 under which India has received in all some ECU 10.9 million.

ECU 35 million for refugees

In its June communication to the Council on a special programme to combat hunger in the world, the Commission proposed among other measures emergency action to help victims of internal and external conflicts, i.e. refugees and displaced persons, the continuous flow of which is a result of events in Afghanistan, south-east Asia, central America and southern Africa.

After the appropriations had been released, a meeting was held in Geneva to coordinate Community emergency aid; it was attended by non-governmental organizations and the United Nations High Commissioner for Refugees, the International Committee of the Red Cross and the League of Red Cross Societies.

After examining the applications, the Commission has recently decided on the regional allocation and which NGOs will be responsible for implementing the aid. These are as follows:

South-east Asia	(in ECU)
UNHCR	9 200 000
ICRC	800 000
Total	10 000 000

Afghan refugees in Pakistan

UNHCR	9 000 000
AICF	250 000
ICRC	500 000
LICROSS	250 000
Total	10 000 000

Angola	(in ECU)
UNHCR	1 800 000
ICRC	2 400 000
CEBEMO	210 000
MEMISA	120 000
Caritas Neerlandica	20 000
Caritas Germanica	150 000
War on Want	175 000
Trocaire	20 000
Oxfam Belgium	20 000
Fonds pour la coopération au développement	20 000
Komitee Zuidelijk Afrika	20 000
DAPP	45 000
Total	5 000 000

Central America

UNHCR	7 500 000
ICRC	750 000
CEBEMO	720 000
Trocaire	60 000
Oxfam Belgium	140 000
Solidarité Socialiste	40 000
Médecins du Monde	320 000
War on Want	40 000
Oxfam UK	330 000
Christian Aid	60 000
Cafod	40 000
Total	ECU 10 000 000

UNCTAD VI

Community preparations

The European Commission has adopted its communication to the Council on the preparations for UNCTAD VI which is to be held in Belgrade from 6 June to 1 July. The provisional agenda for this conference was adopted in July 1982.

The Commission communication indicates the guidelines for the Community position with a view to the debate which will take place in Group B (industrialized countries) and subsequently in the UNCTAD preparatory committees. It hopes that the Community will adopt a position in time for it to be known at the ministerial meeting of the "Group of 77" in March 1983 in Buenos Aires. o

TUNISIA

Emergency aid

The Commission has approved an emergency aid allocation of ECU 200 000 for Tunisia.

This sum is a contribution to the emergency programme instituted by

the League of Red Cross Societies to assist victims of the recent floods, 20 000 of whom were left homeless. ○

EEC-ASEAN

Third meeting of the cooperation committee

The third meeting of the joint cooperation committee (JCC), under the ASEAN-EEC cooperation agreement was held in Pattaya, Thailand on 2-4 November 1982. The two previous meetings of the JCC were held in Manila and Brussels in 1980 and 1981 respectively.

The meeting was jointly chaired by Mr. Thep Devakula, ambassador, head of the mission of Thailand to the European Communities, and ASEAN coordinator for ASEAN-EEC relations, and Jos Loeff, deputy director-general for external relations of the EEC Commission. The meeting was attended by senior officials of ASEAN member countries, the secretary-general of the ASEAN secretariat, as well as officials of the Commission and representatives of the European Community's ten member states.

The meeting held a discussion on a wide range of subjects covering, among others, commercial, economic and development cooperation. The meeting also exchanged views on the perspective economic situations and prospects for future cooperation between the two regions.

The meeting noted the progress made on the work of the JCC since the last meeting.

On the subject of trade, the meeting discussed in particular, the GATT ministerial meeting, commodity issues, global negotiations, and the Common Fund.

The meeting agreed on the importance of ASEAN-EEC cooperation in working towards the effective operation of international commodity agreements.

On specific ASEAN-EEC trade cooperation, the meeting noted with satisfaction the progress of activities under the ASEAN-EEC trade promotion programme for 1982 and that a programme of trade promotion activities for 1983 had been established. The meeting also noted that an ASEAN-EEC seminar on the general-

ized scheme of preferences (GSP) is scheduled to be held in Jakarta in early 1983.

Preparations for the ASEAN-EEC industrial conference to be held in Kuala Lumpur on 28 February-2 March 1983 were proceeding well. The Conference will cover the industrial sectors of machine tools, agricultural machinery and processing machinery. The meeting agreed on a follow-up to the conference in the form of a programme of specific and practical investment seminars and missions focussing on medium and small-scale industries.

The meeting re-emphasized the important role of the EEC-ASEAN business council (EABC) has to play in encouraging cooperation between the business communities of the two regions and expressed the hope that the first full session of the council could take place as soon as possible. The meeting also expressed the hope that project discussed at the meeting of the ASEAN finance corporation (AFC) committee could soon be the basis for concrete cooperation between the two bodies.

The meeting discussed cooperation activities in the field of science and technology and reiterated the

importance it attached to continued and effective cooperation in this field.

The meeting welcomed the intensification of development cooperation activities in the past year and the fact that this was likely to continue in the future, and agreed on the importance of the development of human resources for ASEAN through training.

With regard to insurance, the meeting stressed the importance of cooperation in this field and welcomed the rapid development in the past year. It noted that agreement had already been reached on a provisional programme of technical exchanges and training for 1983-1984.

In the field of cooperation in mining, the meeting emphasized the continued importance and mutual interest in this area and agreed that consultations should be held between ASEAN and EEC experts on minerals.

The Community has made available financial resources specifically to facilitate the implementation of activities in the context of the ASEAN-EEC cooperation agreement. ○

EUROPEAN COMMUNITY

European Council meets in Copenhagen

On 3 and 4 December leaders of the 10 EEC states met in the Danish capital, Copenhagen, under the chairmanship of Poul Schlütter, the Danish Prime Minister. The presidency's conclusions covered both internal and external problems.

The economic and social situation

The European Council welcomed the report from its general affairs Council on the implementation, so far, of the economic strategy that it had itself laid down in March and June. In particular, it re-affirmed the detailed conclusions from the joint Council of 16 November 1982 and the Council (economic and financial affairs) of 15 November 1982.

The European Council fully endorsed the need for a comprehensive strategy for achieving a marked im-

provement in employment through the creation of durable new jobs. The implementation of this strategy must be continued comprising a broad range of interlinked and mutually supportive economic and social policies both at Community and national level.

To this end the European Council agreed on the following priority goals:

- reestablishing economic stability,
- taking into account the degree of stability achieved, encouraging productive activity, and contributing to economic recovery and structural improvement, particularly through continued reduction of interest rates and through support for productive investments, especially in innovative sectors,
- creating more employment opportunities and professional training



Danish Prime Minister Poul Schlüter welcomes the press during a break in the Copenhagen European Council. With him are (right to left) Gaston Thorn, President of the Commission, German Chancellor Helmut Kohl, British Prime Minister Margaret Thatcher and, far left, President Mitterrand of France

possibilities for young people to permit a fulfilment of their justified aspirations. In this connection it is important that they are given a chance to take advantage of the opportunities of tomorrow's high technology industries,

- exploring carefully the possibilities for greater flexibility offered by the reorganization of working time and mobility of labour

- strengthening the common market and intensifying action to eliminate practices and measures which restrict trade and distort competition

- pursuing a vigorous energy policy with a view to saving energy and diversifying supply

- strengthening the European monetary Systems (EMS); increasing international cooperation and concertation in the field of monetary and financial policy and trade policy.

The European Council also agreed that a time-scale for specific actions at Community level should be established to complement the parallel efforts being undertaken nationally by each member state. It therefore instructed the Council:

- to decide, before the end of March 1983, on the priority measures proposed by the Commission to reinforce the internal market,
- to speed up the adoption of the Commission's current and forthcoming proposals in the field of research, innovation and energy,

- to agree rapidly and before the next European Council on the Commission's proposal to expand the NCI by a further ECU 3 billion,

- to give urgent consideration at the next Council (social affairs) to the Commission's proposals for ways and means to ensure young people professional training or a first work experience, and on the reorganization of working time.

The Council (general affairs) will report to the European Council in March on the implementation of this work-programme.

Enlargement

The European Council reaffirmed its political commitment to the enlargement of the Community with Spain and Portugal. It asked the Council (general affairs) to press ahead with the negotiations with both countries as rapidly as possible.

The European Council welcomed the inventory presented by the Commission which in its view constituted a new impulse to the enlargement process.

The European Council stressed the importance of rapid progress within the Community on a number of important issues in order to facilitate a harmonious enlargement of the Community. In particular, the European Council asked the Council (agriculture) to complete urgently and before

March 1983 the revision of existing rules for certain Mediterranean agricultural products on the basis of Commission proposals.

The European Council invited the Commission to explore with the two candidate countries the introduction of certain measures in these countries before accession in order to prepare their economy for accession in particularly sensitive sectors.

The European Council also asked the Council (general affairs) to examine the issues set out in the Commission's inventory with a view to balanced decisions. A report on progress will be submitted for its next session.

Relations with third countries

The European Council stressed that the overriding priority for the Community's economic and commercial relations with other industrialized countries will be a strengthening of international co-operation in all major areas to counteract recession, with particular emphasis on a return to a stable monetary, financial and trade situation.

The European Council stated the readiness of member states to work for a substantial increase of IMF quotas and their determination to contribute to an early decision to this effect.

The European Council welcomed the outcome of the GATT ministerial meeting and confirmed the Community's readiness to take part constructively in the continuing work within the GATT.

It recalled its conclusion of June that a genuine and effective dialogue should take place between the United States and the Community in areas of possible dispute. The European Community is determined to pursue a constructive dialogue in the appropriate forums with a view to ensuring solid and confident relations between the Community and the United States.

It noted with satisfaction the EC-US arrangement on steel and the lifting of United States sanctions related to the Siberian pipeline.

With regard to relations with Japan the European Council was informed on the work already done by the Commission, and it expects the Council (general affairs) at its session in December to take decisions on the

various ways and means of improving commercial relations between Japan and the Community.

The Community has successfully remained united in the face of difficult problems over recent months. The European Council is convinced that unified and coherent Community positions are more than ever indispensable to achieving the objectives set out above.

The Third World

The leaders welcomed the work undertaken within the Council on the recent important Commission initiative in the field of the Community's relations with developing countries. It stresses the importance of proceeding from this stage towards proposals to be followed up by Council decisions on priority questions such as the negotiations for the new ACP-EEC Convention.

There is agreement on the urgent need to bring about an improvement of developing countries' ability to cope with their economic and financial problems. This will be an important factor in favour of international economic recovery.

Common fisheries policy

The Council noted the progress made in the negotiations on a common fisheries policy. It emphasized the need for agreement at the meeting of the Council of fisheries ministers on 21 December.

East-West relations

The European Council then reviewed recent development in East-West relations.

Following the change of leadership in the Soviet Union, the governments of the Ten emphasized that their relations with that country will continue to be based on the same principles of firmness and dialogue. They called upon the Soviet Union to make the necessary contributions to improve confidence in international affairs. The Ten said they are ready to respond positively to such efforts and to work together with the Soviet Union and the countries of eastern Europe for a more constructive East-West relationship.

They expressed the hope that all participating states in the CSCE-

meeting in Madrid would take the necessary decisions to permit the meeting to arrive at an early and positive conclusion.

With this in mind, the Ten confirmed their commitment to real progress in Madrid by negotiating a substantial and balanced concluding document which will contain a precise mandate for a conference on disarmament in Europe as well as further progress within the human dimension of the Helsinki Final Act. In doing so they will cooperate with other allied and friendly states including the neutral and non-aligned participating states.

Poland

The European Council discussed recent developments in Poland and noted with regret that a large number of persons remain in detention, that martial law continues, and that the free trade union, Solidarity, has been dissolved.

It also noted, however, that the recent release of some internees, including the leader of Solidarity, might constitute a step towards the fulfilment of the appeal made by the Ten on 4 January 1982.

The Ten will continue to follow developments in Poland closely and, in particular, study the implications of the possible lifting of martial law, including the conditions under which this will take place.

Afghanistan

The European Council expressed the view that the new Soviet leadership could make an important contribution to the improvement of international relations in general and of East-West relations in particular by reassessing its position on the question of Afghanistan. It endorsed the verdict of the international community on the situation in Afghanistan, embodied in the fourth successive vote of the General Assembly of the United Nations. The people of Afghanistan should be permitted to regain their national sovereignty and independence and the status of a non-aligned state.

It expressed its readiness to support any realistic efforts to achieve a political solution and recalled the European Council's proposal of 30

June 1981, for a comprehensive settlement of the conflict.

The situation in the Middle East, including Lebanon

Following a report by the Danish presidency on recent contacts, the European Council discussed events in the Middle East where two aspects in particular continue to cause deep concern.

First, as regards the Arab-Israeli conflict, the European Council expressed its disappointment at the delay in grasping the political opportunity created by the initiative contained in President Reagan's speech on 1 September 1982, and the will to peace expressed in the declaration of Arab heads of state meeting at Fez on 9 September 1982.

It called upon each of the parties to assume its international responsibilities without further hesitations. It expects each of the parties to cease to ignore the United Nations Security Council resolutions and explicitly make known their approval of these resolutions.

Secondly, the European Council continued to view the situation in Lebanon with the greatest concern. It particularly noted that, in spite of the various efforts made by the negotiators on the spot, no significant progress had been achieved towards the withdrawal of the Israeli, Syrian, and other foreign forces.

The persistence of this situation would constitute a threat to the integrity and unity of Lebanon, carrying serious dangers for the whole region.

The withdrawal of foreign forces could be of a progressive nature, but should take place within a fixed and short period of time and under conditions which would permit the Lebanese authorities to exercise fully their rights of sovereignty over all of Lebanon.

The Ten have already demonstrated their willingness to contribute to the solution of the problems, especially by giving their support to the UN forces and UN observers established by the Security Council as well as the multinational force in Beirut to which two of their number contribute. The Ten and the Community are equally prepared to continue to contribute to the reconstruction of Lebanon. ○

EUROPEAN PARLIAMENT

Committee on development and cooperation

ACP sugar

In a first discussion on the 24 November the committee reviewed a draft report on the medium and long-term problems of the Community's sugar policy in relation to the ACP-EEC sugar protocol (rapporteur: Mr Sablé - Fr. Lib.).

This important new initiative results from an awareness by the committee of the increasing threats to ACP sugar from sugar beet and iso-glucose. Following the various positions it had adopted in the form of opinions for the committee on agriculture and after exchanges of views with ACP representatives, notably in the context of ACP-EEC Joint Committee, the committee on development decided in November 1981 to take up once more the whole question of ACP sugar with a view to identifying the medium and long-term difficulties and trying to find solutions.

The report believes that the accession of the Community to the future international sugar agreement "is a political and moral obligation which the Community must respect if it wishes to retain its credibility vis-à-vis its trading partners and more particularly, in the eyes of the developing countries".

Whilst the report admits the weaknesses and deficiencies of the present international sugar agreement it suggests that these shortcomings result at least in part from the Community's failure to participate in the agreement.

Urging the Community to reduce its beet sugar production the rapporteur suggests other measures to aid the ACP countries such as:

- providing the ACP countries with technological and financial assistance in order to help them make full use of sugar cane by increasing value added on the spot (energy products, fodder etc.);
- promoting alternative crops;
- promoting the establishment of new industries.

Moreover, the report points out that if an ACP state which has acceded to the protocol adopts a poli-

cy of diversification, the Community should enter into specific and firm commitments:

- of a financial nature to support a policy of diversification;
- of a commercial nature to guarantee the country concerned access to its market;
- in these circumstances the safeguard clause should not be applied.

Also during the meeting first exchanges of views were held on Community aid to Vietnam (rapporteur Mr Deniau, EPD Fr.) and the opinion for the committee on external (economic) relations on the impact of the CAP on international trade relations (rapporteur: Mr Vitale, Com It.).

Second resolution on baby-food

The committee on development and Cooperation has also adopted a second resolution on the much-debated subject of breast-milk substitutes. The purpose of this measure (rapporteur: Luciana Castellina (Tech. cord. It.), together with the proposed resolution by Ken Collins (UK Soc.), chairman of the environment committee to which it is linked, is to urge the Commission to give teeth to the implementation of the international code of marketing adopted by the 34th session of the World Health Organization (WHO).

At present the WHO code (which some of the main industries in the babyfood sector helped to draft) has been adopted by the Commission in the form of a recommendation and is therefore not binding on the member states. The first Castellina resolution of 15 October 1981 stressed the need for a directive to make the code effective throughout the Ten. Another point raised by the report is the question of the Commission's failure to fulfil the undertaking it gave to Parliament.

Commissioner Karl-Heinz Narjes pointed out that the Commission was adopting a two-pronged approach; firstly proceeding with a draft directive on labelling and preparation of the various breast-milk substitute products, and secondly continuing with a recommendation on the implementation of the WHO code. Explaining, commissioner Narjes stated that before a legal act could be considered all the constitutional, legislative and social circumstances must be taken into consideration. In any case the Commissioner

hopes to submit a comprehensive statement during the first half of 1983.

Rapporteur Enright takes tough line on budget

In discussing tactics for the second reading of the Community's draft budget for 1983 as relating to development, budget rapporteur Derek Enright (UK Soc.) said that all items reduced by the Council since the first reading must be restored. He described the Council's interim alterations as "scandalous" given Community development priorities for 1983 and the increased commitment to non-associated countries.

Other reports adopted

Other reports adopted during the meeting which was the last of the committee in 1982, included one on the agreement between Guinea and the EEC on fishing rights off the Guinea coast (rapporteur Derek Enright (UK. Soc.) and Tullia Careton Romagnoli's (It. Com.), a report on the general guideline for 1983 concerning financial and technical aid to non-associated developing countries as well as Maria Luisa Cassanmagnago Cerretti's (It. EPP) report on the outcome of the recent ACP-EEC meeting in Rome. ◊

Tribute to Victor Michel

During the development committee meeting, the chairman, Michel Poniatowski, paid tribute to Victor Michel, one of the committee's



Victor Michel

members, who had died suddenly in Brussels on his return from the Consultative Assembly in Rome.

"Fate has taken him," said Mr Poniatowski in the middle of what he believed to be his duty—to pursue effective, dependable and generous policies in favour of the least well-off.

"This commitment was with him throughout his life, from his beginnings in the trade unions, which led to his leadership of the Christian labour movement, to his election to the European Parliament where he chose to serve on this committee devoted to cooperation with the developing countries.

"His work in our committee was marked by three major reports which demonstrated not only his competence, but his commitment to a certain ideal. His work on control over development policy, on world hunger, and, most recently, on new policies in favour of the countries of central America, all have the same imprint.

"Victor Michel was for us more than a committee colleague. By his personality and generosity, he became, for us all, a friend." ○

DAC

British official aid

The Development Assistance Committee (DAC) of the OECD, which has reviewed the development assistance efforts and policies of the United Kingdom, has stated that net disbursements of official development assistance (ODA) by the UK, which had declined from 0.53 % of GNP in 1979 to 0.35 % in 1980, increased by 36 % in terms of national currency in 1981 to a total equivalent to 0.44 % of GNP. These sharp fluctuations were largely attributable to the timing of note issues to the International Development Association (IDA).

However, the committee noted that over the period 1979-1981, aid had declined as a share of the national budget and aid disbursements had fallen significantly in real terms. The DAC/OECD expressed deep concern that planned aid disbursements for the current fiscal year 1982/83 would be significantly lower in real terms than those for 1981/82. However, it welcomed the fact that, un-

der the present plan, the programme would increase in cash terms after 1982/83 at a rate which would probably maintain its real value and perhaps increase it slightly.

Target maintained

The British delegation stated that the United Kingdom remains committed to the target of raising ODA to 0.7 % of GNP. It explained that the proportion of the aid budget being spent on multilateral programmes had increased to about 40 %, making it more difficult to maintain the bilateral programmes. Moreover, a major share of the bilateral programme (22 % of net funds in 1981) goes to the less developed countries and that the percentage of aid going to other low income countries rose from 39 % in 1980 to 45 % in 1981.

High degree of concessionality

The committee welcomed the continuing high degree of concessionality in the United Kingdom aid programme and particularly the fact that ODA, extended to the least-developed countries and to other poor countries, is provided entirely in grant form. In recognizing the important role of non-concessional flows in the development process, the committee noted that the UK is one of the largest suppliers of such resources. In 1981, these flows from the UK to the developing countries amounted to almost 8 billion dollars or 1.57 % of GNP; combined official and private flows were 2.01 % of GNP. ○

GAS PIPELINE

Commission statement

The Commission has given a warm welcome to the US decision to lift sanctions on firms involved in the construction of the pipeline to bring gas supplies from Siberia to Europe. Mr Thorn was informed of the decision in a letter from President Reagan, the Commission having taken part with the Council presidency in the Washington talks.

The US decision constitutes an important step towards the stabilization of relations between the Community and the United States, and is

in line with the approach which the Community has constantly advocated, demonstrating once again that even the most complex issues dividing the Community and the USA can be resolved if the two sides are willing to consult each other and establish a genuine dialogue.

With reference to the recent talks in Washington on East-West relations, the Commission has taken careful note of the general reservation entered by the Greek government, and the positions expressed by other member states' governments. These make it all the more important that in subsequent talks the Commission should suggest ways in which the Community, on matters within its competence, might adopt the common positions needed to attain its common objectives. ○

LAW OF THE SEA

Opinion divided among the Ten

From 7 to 11 December the UN conference on the law of the sea met in Montego Bay, Jamaica, for the signature of the final act and convention on the law of the sea. By midday on last day 119 countries had signed. A preparatory body will now be set up to prepare for the implementation of the convention, but it will be many years before the actual exploitation of the riches of the seabed can begin. The convention also defines areas of national control over the seabed, exclusive economic zones, the continental shelf and rights of navigation. But its most significant part is the creation of a "zone" which will be subject to no national control and will be a common heritage. It is this vast area which a new "authority" will supervise on behalf of the member states of the UN.

Sixty states need to ratify the convention for it to come into force and given the support at Montego Bay this is likely to be achieved easily. There are, however, some major gaps in support. The United States, the country with the largest economic zone, has not signed. And within the European Community there is no common view. Three of the four largest countries, Britain, Germany and Italy, have not signed although the fourth, France has done so. ○

TXE4 and its developments route signals and speech by means of tiny, hermetically sealed relays which are controlled by solid-state electronic circuits and need no cleaning or adjusting. These exchanges currently form the backbone of British Telecom's analogue electronic modernization of the UK network.

For the future, the trend is to a unified network which will handle not only telephone conversations but will also route data signals from computers, communicating word processors and other message systems, radio and television programmes and many other types of communication.

These are either already in digital form or need to be converted from analogue to digital signals to avoid being degraded in transmission.

Digital signals are in a binary code and represent the original signal by the presence or absence of pulses in particular positions in a train of pulses. Because it remains possible to detect whether a pulse is there or not, even when severely degraded, digital signals are extremely resistant to the effects of interference, fading, etc. and can be converted back to the original analogue signal with almost no distortion or loss of intelligence.

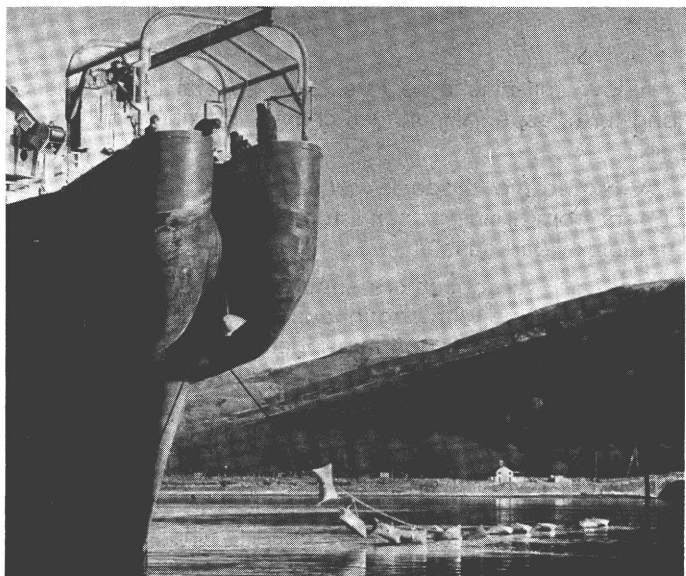
Telephone exchanges to deal with digital signals use circuits very much like those of computers. Britain's digital exchange is called System X. British Telecom and the UK's three largest telecommunications companies, STC, Plessey and GEC, have been involved in its design.

Eventually, the whole of Britain's telecommunications network will be digital. System X installations have already taken place and the rate of further installation will increase steadily. However, there will be no sudden change from analogue to digital standard: an overlay technique will be used and exchanges from the TXE4 family will also continue to be used, probably for the next 25-30 years.

The network

Concurrently with the modernization of exchanges, a quiet revolution is replacing the metallic conductors of the UK network with new ones made from, of all things,

STC submarine optical cable on trial in a Scottish loch



glass. Flexible optical fibres about as thick as a human hair carry signals, converted from the original analogue signal, in the form of pulses of infra-red light. And because the signals are necessarily in pulse form, the concept of an optical fibre network matches ideally to the digital System X exchange.

One of the properties of such an optical fibre network is a very large potential bandwidth. That is, it will be able to carry a wide range of frequencies, so that not only could TV programmes be sent over the network but many telephone conversations and other signals, at the same time, on the same fibre.

Before the advent of optical fibre systems, invented by Standard Telecommunication Laboratories—STC's research unit—in 1966, the need for wide band conductors was met by co-axial cables. Very many of these are still in use between main exchanges. However, they are steadily being replaced by optical fibre cables which occupy a very much smaller part of the underground duct and, as has been said, have a much greater signal carrying capacity. For local area distribution, including lines to subscribers' premises, copper wire is used, in bundles of up to 4 800 pairs. Eventually, even these will be superseded by optical fibre.

Undersea cables

In these days of communications satellites it is sometimes forgotten that international telephone calls long predated the communications space programme. Before then, international calls were carried first by HF radio and then, because radio had limited channel capacity and was subject to atmospheric effects, by undersea cable. Even with the availability of satellites there is a continual increase in the telephone traffic carried by undersea cables.

Undersea cables, also called submarine cables, remain in service for many years. Because of the extreme difficulty of repairing them, the cables and repeaters (amplifiers which are inserted at intervals along the cable) need to have a failure-free life of some 25 years. Consequently, no component or cable can be used until its reliability is beyond question. STC is currently working on an optical fibre version of an undersea cable, having carried out successful trials in a deep sea loch in Scotland.

Recently, STC won an export order described as the biggest ever for the UK telecommunications industry: to supply and install a cable running from Canada, via Fiji, to Australia and New Zealand, a distance of 14 000 km. ACP states which are served by STC undersea cables include the Bahamas, Cape Verde, Fiji, Jamaica, Papua New Guinea and Senegal.

It may be thought that the more obvious and direct projects, agriculture, industry, etc., produce a speedier return from the European Community's aid and in the short term view, this is possibly true. Experience shows, however, that telecommunications, perhaps more than anything else, can dramatically improve the efficiency of the industries they serve. ○ I.B.

Acknowledgement is made of the valuable help obtained from: Povey, P.J. — *The Telephone and The Exchange* (Pitman); Richards, D.L. — *Telecommunication by Speech* (Butterworth) and from Mr W.H. Lowe and Mr S.F. Smith, both of STC.

Solar-powered telecommunications for remote areas

Most low-powered telecommunication systems in remote areas, such as VHF radiotelephone systems, high-capacity microwave telephones, TV repeaters and broadcasting transmitters, are powered by mains or conventional power supplies. Including batteries, diesel motor/alternator sets and small turbines, these are associated with fuel transportation and regular maintenance costs.

Meeting the requirements of reliable, low-maintenance power sources for telecommunication systems, photovoltaic power supplies are becoming a viable and, for continuous loads up to 200 W and more, a preferred power supply for remote areas. Photovoltaic converters, or solar generators, which directly convert sunlight into electricity, seem to be the most promising alternative, solving essential electrification problems in areas with no utility grid.

The advantages of photovoltaic power supplies are:

- no need of fuel;
- modular design;
- simple installation;
- static conversion of diffused as well as direct light into electricity;
- long lifetime.

Photovoltaic power supply

A photovoltaic power supply which has to deliver electricity regardless of sun conditions must include some additional components besides the solar generator.

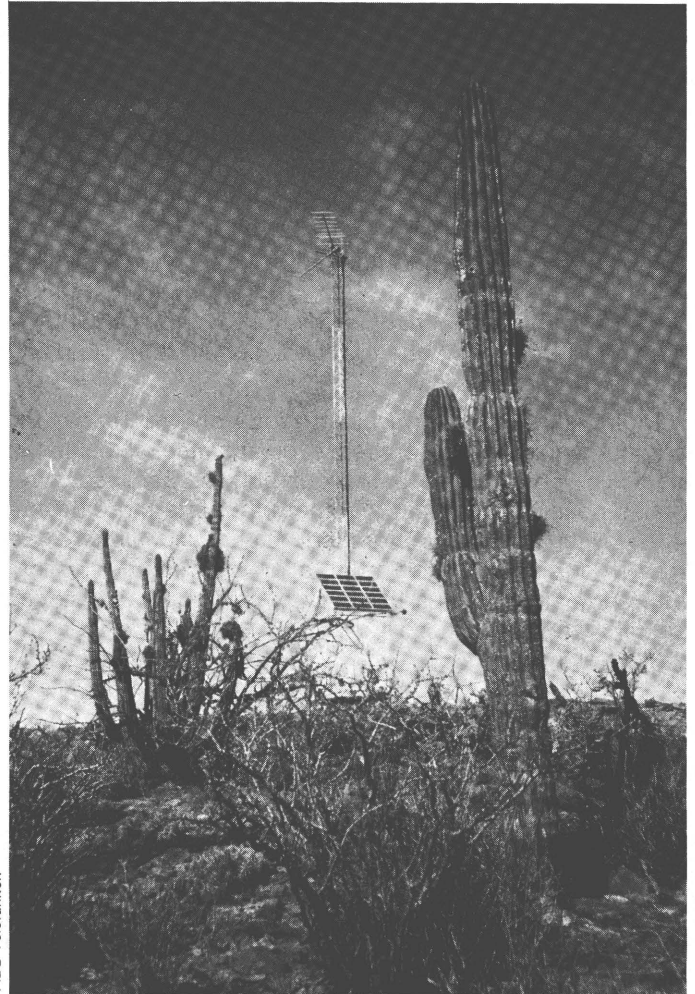
The basic units of the **solar generator** are the solar cells. These cells are wafers made of semiconductor material, preferably of silicon, the second most abundant material on Earth. A thin negative layer is diffused into the positive base material.

When the solar cell is not hit by sunlight, the cell behaves like a large n/p diode. When sunlight strikes the cell a voltage is produced at the metallic contacts.

The operating voltage of the solar cell is independent of its surface area and is about 0.5 v. The current produced with this voltage is a direct function of the solar cell surface and the illumination level.

Individual cells are connected in series to form modules with reasonable voltage (e.g. 6 V, 12 V). In order to provide the modules with the necessary mechanical stability and resistance to environmental conditions, the solar cells must be hermetically sealed.

A solar generator is formed by connecting modules in series and/or parallel according to the load consumption requirements and characteristics.



AEG-Telefunken

Solar-powered relay station in Mexico

A **storage battery** is used to provide power at night and during cloudy weather. Storage batteries act as buffers between the solar generator and the load, supplying power to the load during periods of insufficient sunlight and recharging during periods of high sunlight. The battery must be cycleproof and as maintenance-free as possible. It must be able to be charged with small currents.

A low self-discharge rate is of special importance if long-term, especially annual, charge/discharge cycles occur.

A **protective diode** is necessary to prevent battery current from draining back into the solar generator during periods of darkness.

Most of the consumers supplied by solar generators, especially those with continuous power demand, require a battery control for optimum operation. A **charge regulator** is used to prevent the battery from overcharging and deep discharging in order to reach a high cycle lifetime.

In order to meet the demands of the load concerning voltage and current, **power conditioning** equipment will be provided. Inverters can be used to change the direct current of the solar generator into alternating current.

Article supplied by AEG-Telefunken.

The following are some practical examples of solar-powered communications equipment.

VHF station in Rwanda

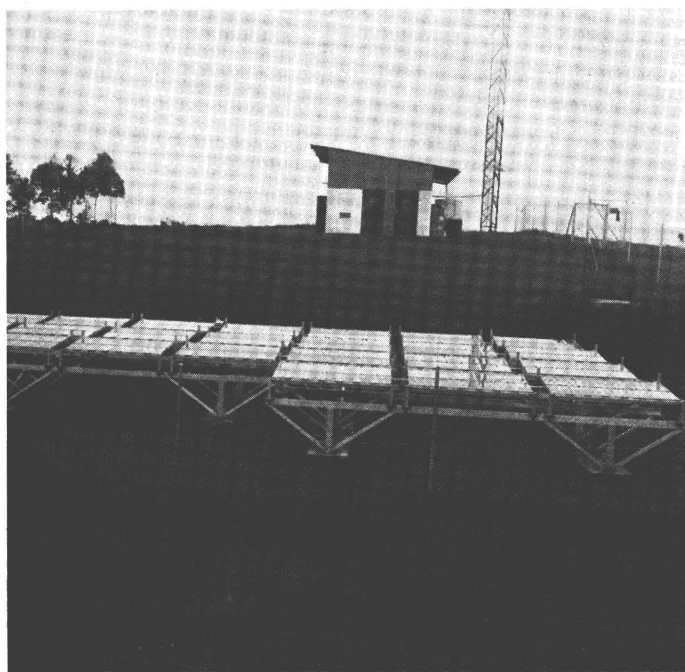
In 1977-1980, commissioned by the German Agency for Technical Cooperation (GTZ) under the media project "Radio Rwanda", the Voice of Germany and AEG-Telefunken built a central station (Mount Jari) near the capital, Kigali, and three regional relay stations.

These relay stations are necessary since, in a mountainous country such as Rwanda, a central station on its own would not have a sufficient broadcasting range. With additional support from the German Federal Ministry of Research and Technology (BMFT), the project was extended via the solar-powered relay station of Kinanira so that the southern part of the country (Cyangugu Province) could also be served with the least difficulty. The VHF transmitter has an output of 300 W; the reception and transmission antennae are mounted on a 45-metre aluminium mast. Since a solar generator, an entirely independent source of power, was chosen, it was possible to site the transmitter at the most favourable location — on Mount Kinanira, not far from the Equator, at 2 145 m above sea level. The solar generator has a maximum output of 3.6 kW. The surplus daytime energy is stored in an accumulator so that even in the hours of darkness there is sufficient energy available for the transmitter to operate. The system's reliability was further increased by the installation of an emergency power unit.

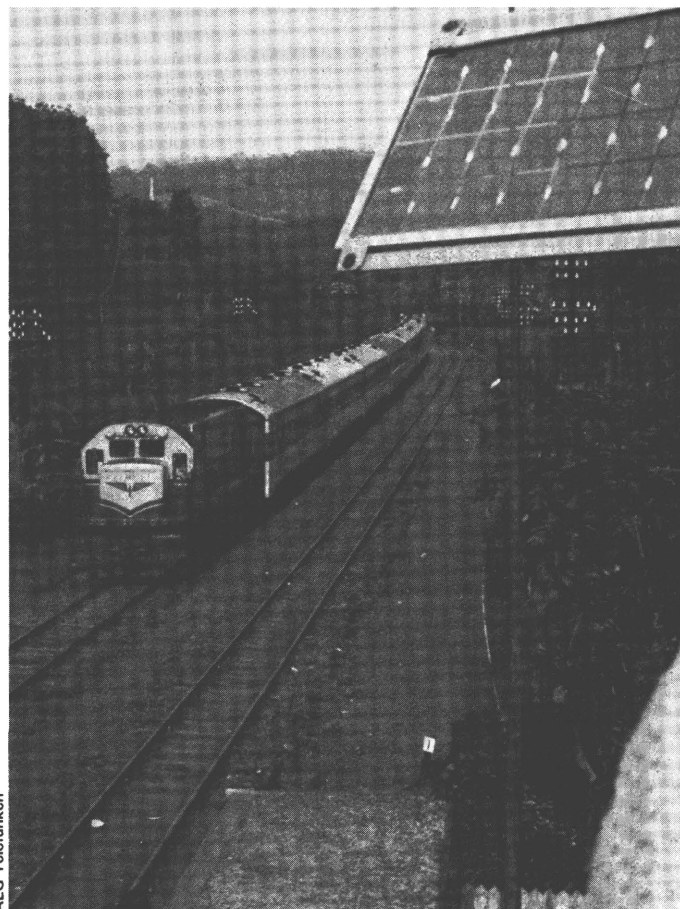
Railway communication system in Indonesia

More than 50 railway stations of the Indonesian State Railway have been equipped with solar powered radio-telephones to increase efficiency and safety. The small, low-consumption radio-telephones are supplied by one single solar generator module. The first sets were in-

VHF station in Rwanda



AEG-Telefunken



Railway communication system in Indonesia

stalled in 1976 and have been working without failure ever since.

Radiotelephone in Mexico

In January 1982 a radiotelephone link between Villa Constitucion and Las Barrancas in Mexico was put into operation. The system consists of two main stations at both ends of the link and a relay station between these stations, which are 130 km apart. All stations are supplied by solar generators. Batteries provide the power for dark periods.

Without the solar-powered relay station, situated on a 210 m mountain, a radiotelephone link would not have been possible.

Conclusion

In the last few years a great number of photovoltaic systems for different applications, including telecommunications, have been installed throughout the world.

With growing and favourable experience, the demand for these unconventional power supplies is increasing. This expanding market for photovoltaic systems supports the efforts to decrease the prices by developing new manufacturing processes and equipment for large-scale production.

With progressive cost reduction, the spectrum of applications will broaden further, while most competitive conventional power supplies are faced with rising fuel costs. o

AEG-Telefunken

Energy from space

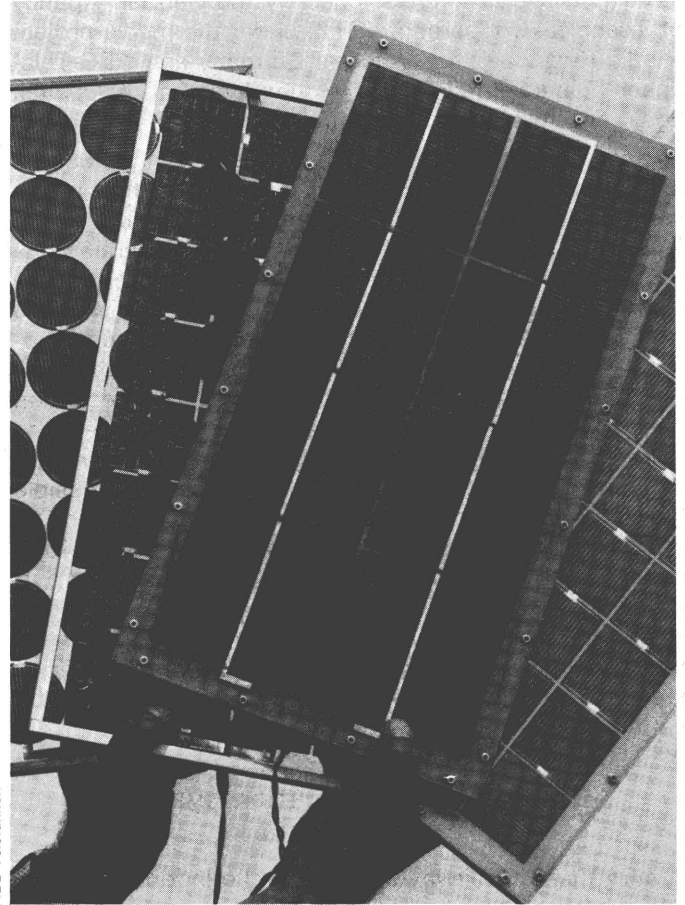
Telecommunications techniques use electromagnetic waves to carry information. The waves are a form of energy, and in theory energy itself could be transmitted. This idea has been explored for a number of years, in the context of transmitting solar energy to Earth from space satellites.

The advantages of capturing solar energy in space, rather than on the ground, are clear enough. Some 90% of the sun's radiation is absorbed by the atmosphere before it reaches the surface of the planet, and ground-based power production systems do not work at night or under cloud cover. In outer space, solar radiation is almost wholly and permanently usable. Satellites would convert solar energy into radio-frequency radiation and beam it down to a ground station, where it would be reconverted into electric energy.

The energy radiating through space is, of course, far more than is needed to satisfy the Earth's requirements for ever. Were the universe not expanding, we would be burnt to a frazzle by the stars. Collecting that energy from our own sun is emerging from the realms of science fiction to become a practical possibility. Projects so far suggest that a geostationary satellite, fitted with large panels of photoelectric or similar cells, could use high-power radio frequency radiation to transmit energy to a ground antenna measuring some 10 kms in diameter. But there are many complications which make it unlikely that such projects will be implemented before the year 2000.

The problems are both technical and legal. Although the USA has successfully tested a re-usable spacecraft (the Columbia shuttle), there is a long way to go before a big enough satellite can be assembled in outer space by a fleet of such space lorries bringing up components from Earth. Another problem is the effect such a beam of energy might have on the human and natural environment in the vicinity of the receiver — energy beams are also being researched for their possible uses as weapons. It might also cause havoc with normal telecommunications.

And yet the technical problems might be solved before the legal. For instance, an appropriate frequency band has to be allocated and the services operating in it transferred (the International Radio Consultative Committee has already suggested the 2450 MHz band), which means more pushing and jostling for the limited wavebands available. Although energy rather than information would be transmitted, the technique would still come under the International Telecommunication Convention, article 33 of which holds that radio frequencies and the geostationary orbit are "limited natural resources (which) must be used efficiently and economically so that countries or groups of countries may have equitable access to both". The Outer Space Treaty of 1967 (in fact the 'treaty on principles governing



A selection of solar panels: an antenna 10 km in diameter would need about 300 million of these

the activities of states in the exploration and use of outer space, including the moon and other celestial bodies') provides that the exploration and use of outer space are the province of mankind as a whole and must be conducted for the benefit and in the interests of all countries. In view of the prolonged wrangle over that other 'province of mankind', the sea, patience would be advised as regards expecting harmonious international cooperation in the uses of space.

Yet there is an aspect of telecommunications that guarantees international cooperation—the law of physics cannot be negotiated. Without compatibility and cooperation, telecommunications equipment simply will not work. The legal aspects of beaming energy from space are at least partly covered by the existing telecommunications agreements. To quote Dr Jan Busak, a lawyer and corresponding member of the International Academy of Astronautics: "Any solution to the problems involved, which must take into consideration the equal rights and sovereignty of all states, would certainly help to overcome international crises arising from energy shortfalls and inequitable energy supplies, and would thus foster the maintenance of international peace and security". ○ B.T.

Educational video

by Charles SIBENALER (*)

The developing countries are concerned in the world-wide proliferation of electronic teaching technology. But they have realized that it takes more than receivers and transmitters for educational television and video to be a success. As so many examples have unfortunately shown, it was a mistake to think that providing the technical equipment was enough. Today, a more realistic attitude shows that it is the content and the quality of the programmes that make the impact of the audio-visual message and provide a real possibility of reaching specific aims.

This means a new approach to programme design. First of all, it is far less a question of teaching than of transmitting useful information that is immediately utilisable by the person receiving it. Then, viewers must be taught how to read the electronic image correctly so as to be able to understand the messages transmitted. And lastly, educational TV and radio must be backed up by people who are able to make intelligent use of the programmes and ensure minimal maintenance of video-recorders, terminals and so on.

This means a revolution in teaching methods and new ways of mastering the art of learning. It becomes essential to move away from traditional lesson techniques towards the provision of educational information (i.e. education by the media, which must be preceded by education of the media).

Suitable programmes also have to be used. Now that video facilities and television enable us to pursue an active policy of aiming programmes at precise targets, it is quite unacceptable to go on generating audio-visual messages which only reflect the Western environment, only refer to Western values and high-handedly ignore the particular context in which the developing countries will have to use them. We have to stop inundating the developing nations with the present style of audio-visual programmes, the content of which can virtually never be used successfully.

The nations of the Third World have their own cultural, spiritual and human values. They have their own outlooks, habits and aims, which are not necessarily carbon copies of ours. Their whole identity is expressed in ways which are often foreign to us and which do not tally with our own ways of living and behaving. So it is not surprising that there should be failures when these countries use educational programmes designed and supplied by the West.

How can people in Asia, Africa, the Caribbean, the Pacific and Latin America feel really involved in the fine pictures we send them, and which contain nothing about their own environment, their customs or the techniques

of their civilizations? How can they be made to believe that their children really will be rid of underdevelopment if they see these pictures from abroad and can only dream of a universe so different from the one they see around them every day?

Regardless of why we sell them useless products—and I would go so far as to say that it is more a question of lack of awareness than of any commercial or political intentions—it is high time we stopped this shameful trickery. We ought to be helping these countries install the means of producing educational programmes of their own that are better adapted to their particular needs.

How? It would be unrealistic to imagine that every country is currently in a position to design, produce and broadcast its own educational programmes. This would not only mean sophisticated technical equipment but specialists as well, people who can combine media-teaching with proper manipulation of the technical equipment used in modern audio-visual studios. These specialists, who are part-teacher, part-technician, experienced in the use of the whole range of electronic communications resources, aware of the very special nature of audio-visual design, combining scientific stringency with the artistic qualities that will enable them to combine attractive pictures with an efficient message, are few and far between. Much sought after, they are hard to find and there are not nearly enough of them to meet the enormous and expanding demand. So they have to be trained, quickly and well. This is the priority before there can be any development of the rational use of electronic teaching media.

How can these qualified designers, this driving force of good programme production, these irreplaceable and versatile specialists, be trained?

We suggest that public and private institutions be set up in the technologically advanced countries, where most of the programmes used in the developing countries are made, to design and produce audio-visual aids in very close collaboration with representatives from the developing countries—who, by being actively involved at all stages, would bring their own view of things to bear and be of considerable help when it came to respecting the specific identity of the populations for whom the programmes are intended. Furthermore, after such collaboration, the developing country representatives will have obtained, through their experience, the professional knowledge they need to use their talents and they will be able to play a major part in setting up local centres in their countries to produce the sort of programmes they really want. The aim is to give the developing countries people who can rapidly develop programmes with standards and content that really are in line with national priorities in the field of education, training, public health, agriculture and the efficient promotion of local products on external markets. These specialists will understand educational communications and information, and have a practical knowledge of how to run audio-visual projects they have been involved in at all stages. They will be in a position to develop their own creativity and to use it to the benefit of audio-visual programmes that reflect the values of the civilization to which they belong. ○

(*) Representative of the International Television Association.

Panaftel 20 years on

The Pan-African Telecommunications Network (Panaftel) began in 1962, at an ITU meeting in Dakar, with a proposal that all independent African countries should be linked by a telecommunications network allowing them to call each other without being switched through another continent.

The UN Economic Commission for Africa and the ITU began studying the most economical ways of achieving this in 1965. The African Development Bank, which has since spent some \$70 million on the project, joined in three years later and in 1973 a Panaftel coordinating committee was set up which brought in the OAU and the Pan-African Telecommunications Union.

Coordinating and financing this vast, complicated project has proved laborious, but real progress has been made in recent years. By 1980, the Panaftel system included some 35 satellite stations for telephone and telex, 30 automatic or semi-automatic telex services, 200 000 km of radio links, more than 20 international telephone exchanges and a submarine cable linking Casablanca, Dakar, Abidjan and Lagos.

The first meeting of multilateral funding agencies for Panaftel was recently held (in September 1982) at ADB headquarters in Abidjan. Among those represented were the World Bank, the West and Central African Development Banks, the EEC and EIB, OPEC and USAID, besides previous financiers such as the UNDP, ABEDIA and a number of Western governments. Not surprisingly, the meeting was partly aimed at harmonizing financial procedures. It was calculated that another \$280 million will be needed to pay for the bits of the Panaftel jigsaw puzzle that have not yet been put in place.

The following article (1) provides a recent state of play on the progress of Panaftel.

Panaftel in 1982

At a time when almost all African countries were colonies of one or other of the European powers, the requirement for international telecommunications from each colony was limited almost exclusively to a link back to the metropolitan power. On the attainment of independence by these colonies, the need arose for telecommunications between them which would avoid the long, complex and very expensive transit routes through one or more switching centres in another continent. This necessity is especially great for neighbouring countries and those with close ties of trade, culture or other affinities.

The advent of satellite communications has made ever more pressing this need to establish direct circuits be-



Djibouti: information service

Ambouli satellite ground station, near Djibouti, tracks Intelsat 35 000 km above the Indian Ocean: the satellite can relay more than 6 000 telephone calls and two TV programmes simultaneously

tween African countries wherever the traffic justifies it. Since most circuits between Africa and other continents are routed by means of satellite communications, this almost inevitably means a double-hop satellite circuit which is highly undesirable from the point of view of propagation time delay.

By 1982, we are able to see that an extensive telecommunications infrastructure, using a wide variety of the means of communication afforded by modern technology, has been constructed within the African continent. Although much development work remains to be done, Africa has gone a long way towards achieving the initial objective of the Panaftel network.

Infrastructure of Panaftel

An examination of the available information shows that by the end of 1982 there will be 27 automatic international telephone transit centres serving 24 countries in Africa. A further nine international centres are programmed, either in the national development programme of the country concerned or in a sub-regional telecommunications programme sponsored by an economic cooperation body, such as the Economic Community of West African States.

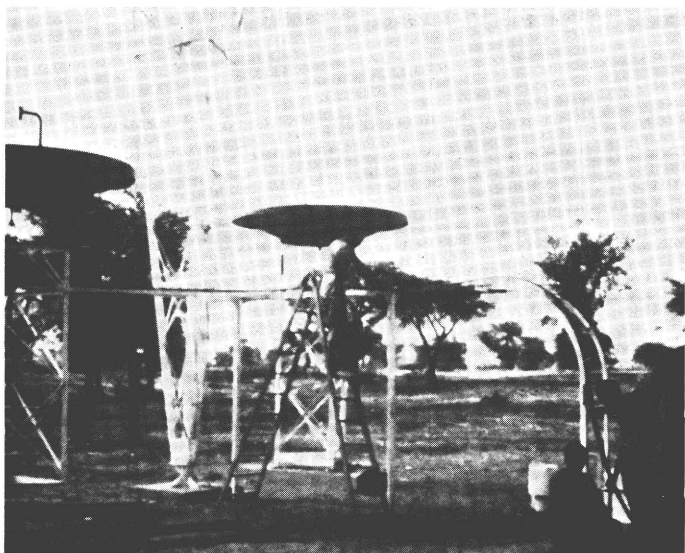
(1) Published in the *Telecommunication Journal*, October 1982.

The situation as regards telex is even more advanced: 48 automatic international telex exchanges serve 41 countries and a further four are programmes (the word "programmed" is used to cover all stages of the process of planning, tendering and ordering through installation).

While we can count the number of exchanges in service, it is rather more difficult to select a suitable yardstick to measure the extent to which the transmission network connecting exchanges in the Pan-African network has been built up. The conventional parameter of route kilometres (which already exceeds 30 000 km) tends to be rather misleading when one considers that the network in the West African sub-region is a complex mesh, while the Panaftel backbone in eastern and southern Africa is a long single line, running north-south, with the addition of a number of branches at different points. Perhaps a better way of assessing the situation is to say that some 39 inter-capital terrestrial transmission routes (including three by submarine cable) will be available for service by the end of 1982. The possibilities of transit in an intermediate African capital, either switched or hard-wired, means that a great many more connections between capitals are available. For example, Ouagadougou-Niamey and Niamey-Cotonou have been counted as separate intercapital routes, but this means that Ouagadougou-Cotonou is also possible by transit through Niamey, though not counted in the total indicated above. In addition to the terrestrial routes, 51 satellite earth stations working in the Intelsat system serve 40 countries for both intercontinental and intra-African traffic. The provision of Spade facilities in a number of these earth stations permits maximum flexibility between different countries. In 1982, 67 routes between African countries will be available using Intelsat satellite circuits.

To complete the comments on the infrastructure of Panaftel, it must be recalled that the intent of any telecommunications network is to connect together the users at either end of the circuit. As the network linking together international exchanges is built up, parallel efforts are necessary to develop the national network con-

Installing cables for microwave antennae in West Africa — linking up the jigsaw puzzle



Microwave station of Mekele North (Ethiopia)

necting the international exchange to and from the subscribers. This calls for development of the urban network in the cities, towns and villages of each country together with the interurban network between them. The OAU Council of Ministers has "urged the Panaftel coordinating committee (OAU, ECA, ITU, PATU and ADB)" to intensify its efforts towards assisting member states for the successful establishment, operation and maintenance of their respective national networks in order to enhance the speedy interconnection of national links and thereby ensure the implementation of the links in the Panaftel network".

The complete system from subscriber to subscriber thus falls within the orbit of Panaftel, which makes use of all available technologies — satellite, submarine cable, radio relay in the transmission sector; step-by-step, crosspoint and electronic in the switching sector; analogue or digital encoding as may best suit the requirements of a particular connection. In many cases, the same transmission route may be used to serve both interurban and international requirements, this complementarity of development being one of the notable advantages of the use of terrestrial systems in the Panaftel network. African administrations and international organizations are putting a great deal of effort into the development of the urban and interurban national networks within the framework of the United Nations transport and communications decade in Africa (1978-1987). Just to provide the urban networks and exchanges called for by the decade targets will require extra investments of over \$ 1250 m in addition to normal development investments in the next five years.

Operation and maintenance

The operation and maintenance of a network such as Panaftel brings with it many problems new to African administrations. A number of these difficulties have been or are in the process of being resolved to enable the network to function as it should.

One of the first issues to be faced was that of the interface: conditions between transmission systems in neighbouring countries. As part of its technical cooperation activities, the ITU has given advice on such matters as frequency and polarization planning, protection

switching systems, multiplex synchronization and multiplex group and super group allocation. Standardized specifications have been prepared for international switching centres and transmission routes, the use of which will ensure the compatibility of equipment connected to the network. Work is in progress to evolve a standardized set of acceptance tests for radio relay systems which will go a step further in ensuring this compatibility.

Decisions on the use of standardized signalling systems have been taken by African administrations. These are aimed at avoiding costly signalling conversion in the network and facilitating cross-border connections between neighbouring districts.

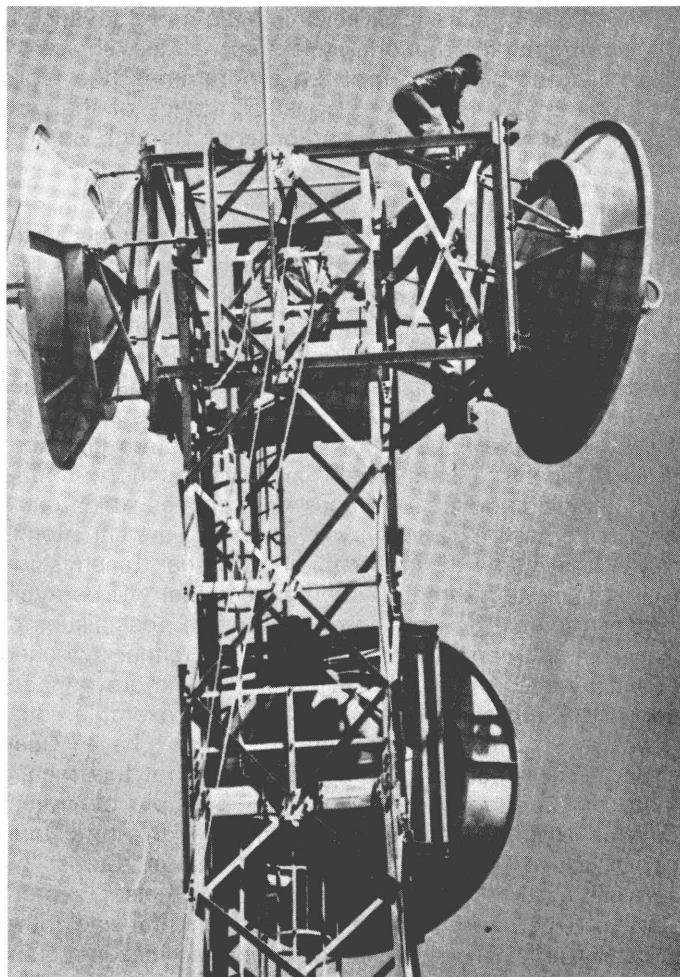
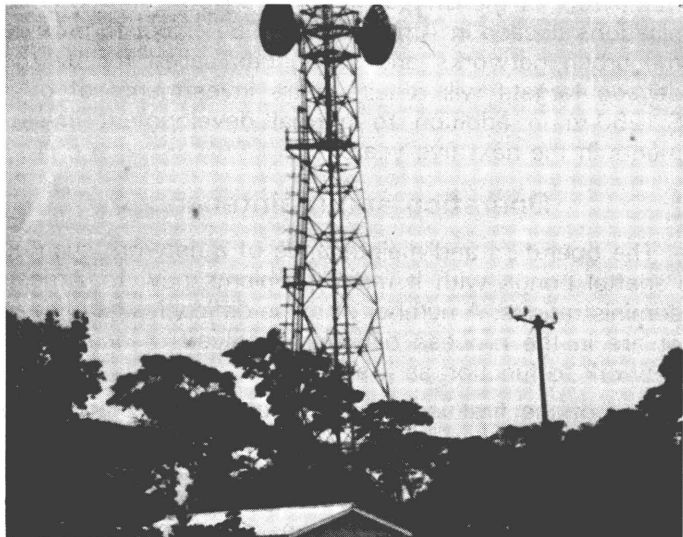
Routing plans have been drawn up for the various sub-regions of the continent; those for West Africa on the one hand, East and southern Africa on the other, have been accepted by sub-regional conferences and by the 3rd African Telecommunications Conference. Work is progressing to finalize the routing plans in the remaining sub-regions and to establish an inter sub-regional traffic routing plan through convenient collection points.

Tariff studies have been carried out in East and southern Africa and in West Africa and it is hoped that these will ultimately lead to new CCITT recommendations of the tariff structure for intra-African relations.

Work has also started on a study of the situation of international accounting in African administrations, which will lead to an improved capability on the part of these administrations to maintain and settle their international accounts not only within the African continent, but on a global scale.

When the first Panaftel systems began to come into service a few years ago, it was quickly recognized that one of the major problems which would face African administrations in the future would be the maintenance of the systems to the high standard required of an international network. While each administration maintains the equipment on its own national territory and the specific details of maintenance may be related to the particular type of equipment in use, the structure of the maintenance organization and the procedures to be followed call for international coordination.

The old and the new: an open wire line alongside a microwave repeater station in Zambia



Alignment of parabolic antennae at a repeater station in Addis Ababa, Ethiopia

Under the auspices of the Technical Committee of the Eastern and Southern African Conference of P & T Administrations, a handbook entitled *Panaftel Radio Relay System Maintenance and Operation Guide* has been drawn up to guide administrations in the maintenance procedures to be followed on the Panaftel network. This handbook is now being translated into French from the original English and will be distributed throughout the continent for further examination and discussion, aimed at the eventual adoption of common guidelines and procedures for the maintenance of the network.

ITU assistance

Since the inception of the idea of a Pan-African Telecommunications Network, the ITU, with solid and continuing financial backing from the UNDP, has taken an active part in all aspects of the development. Two large-scale ITU/UNDP projects are at present operational in Africa — dealing with the implementation of the Panaftel network and with Panaftel maintenance. Multinational training centres set up with ITU/UNDP assistance at Rufisque, Nairobi and Blantyre have contributed extensively to the training of middle level technical staff for African administrations and the new high-level training centre in Dakar will also benefit from this assistance. Many other national and multinational projects are related directly or indirectly to the needs of African administrations in creating and running this ambitious network. ○

Telecommunications and socio-economic development

The telephone, first demonstrated in North America, was exploited largely through venture capital following somewhat the lines of organization of its predecessor, the telegraph. It gratified its founders and promoters, proving to be very profitable. The returns have been used to expand telecommunication facilities, pay the exploitation costs and produce a profit. For more than a century, exploitation policies and lending practices have been formed with the expectation of this profitability.

In the new and developing countries, organizations for exploiting telecommunications as well as the financing policies are very similar to those in the developed countries. There is, however, a vast difference: in the developed countries the urban, inter-urban and international telephone traffic is highly profitable; in the developing countries, even the urban and inter-urban traffic is not so profitable and in the isolated, sparsely populated and rural areas the cost of providing telecommunications is much higher than in the urban areas. The transmission cost over the large areas must be accompanied by such infrastructure as roads and electric power, regardless of the method of terrestrial transmission. These costs must be reflected in the charges for service and this, coupled with the feeble initial demand, means there is no immediate profitability. Thus banks and lending institutions looking for a systematic return on their investments are unwilling to provide the needed capital and the isolated, sparsely populated and rural areas are left unserved.

Telecommunications "expected to operate at a profit"

The legendary profitability of telecommunications is its Achilles heel for the isolated, sparsely populated and rural areas of the least developed countries, because the telecommunication infrastructure, which is *de facto* private in most countries, must compete with the public sector infrastructure such as education, transportation and health, for scarce funds. For more than a century the public sectors have received contributions annually for improvement and operation of their facilities, while the telecommunications sector is expected to operate at a profit and often to pay taxes or support the postal service. So, because of its quasi-private status and its capital intensive nature, the telephone is practically non-existent in the isolated, sparsely populated and rural areas of the least developed countries, and will remain so until policy obstacles to development are removed.

Why are telecommunications important to development? Dean Kamal explains it this way: "Communication

and information play a central role in the modernization process, regardless of the particular approach adopted to bring about modernization. The centrality of communication and information is essentially a function of the role they play in disseminating ideas, ideologies, and values necessary for social change and supporting technological development. In this respect, telecommunications play a unique role. Because of their capacity to break conventional time concepts and communication patterns, telecommunications may play a crucial role in expanding the spatial and temporal domain of the individual's life."

Progress, knowledge and information are interwoven elements of a development process and if the isolated, sparsely populated and rural areas are to develop in the way their governments would want them to, it is imperative that some form of organization for production of goods and services occurs. Of the elements required—labour, capital and knowledge—the latter is often the most critical. Pertinent information retrieved from a distance can fill this need. However, the receiver must need the relevant information and have the capacity to use it. In other words, information has no intrinsic economic value and telecommunications is the channel through which this needed information can be obtained.

Putting up telephone lines around Addis Ababa (Ethiopia): is it worth doing in the sparsely populated rural areas?



The role of telecommunications

The role of telecommunications is not well understood. In the developed countries, users are accustomed to the availability of the telephone. In the isolated, sparsely populated and rural areas of developing countries, people have never had the opportunity to use the telephone nor to observe its benefits. Economists have done very little to explain the economic benefits which are attached to telephone services. Telecommunications, in general, and the telephone, which accounts for about 90% of the investment in telecommunications, can be described as an intermediate product or producer good with strong catalytic effects on the development process. Complementarity is readily observed in transportation, tourism and other sectors. An action taken in one locality may benefit or penalize another locality. It is generally agreed that the caller and the called party may benefit from the use of the telephone. It is less understood that the general public, even those who do not use the telephone, may also benefit.

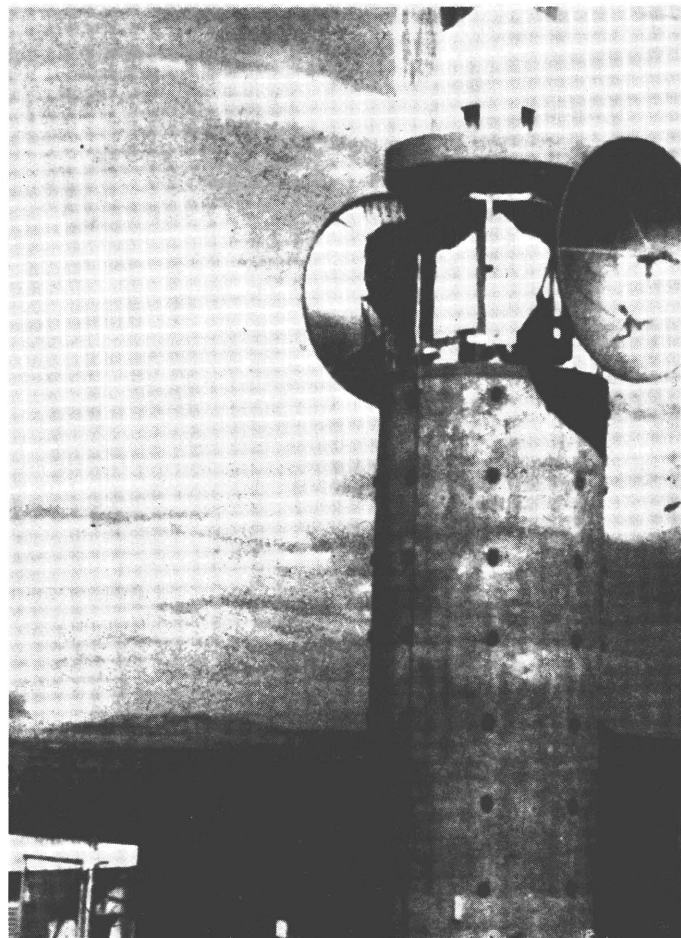
The direct benefit of a telephone service is the commercial rate of return from investments in telecommunications. These benefits are reflected in the gross national product (GNP) as a result of the created markets and employment. A user pays for speed, availability, universality of service, reliability and a defined quantity of service. The indirect benefits that he gets are the efficiencies, effectiveness, convenience or profitability which the user, in a trade or profession receives, compared to non-users of the same trade or profession.

Indirect benefits

The purpose of the study (*) is to quantify these indirect benefits and to propose that a recognition of these values be utilized in investment decisions in the isolated, sparsely populated and rural areas of the least developed countries. In the quantification attempts, we have used the cost of service as a unit of comparison against which the indirect benefits have been measured. During a five-year assessment of these benefits in 142 selected Egyptian villages, these ratios varied widely in the seven provinces studied; in the four sectors such as service organization, trade, artisan and capital equipment, the average was 85:1. In a study of industry in Nairobi, Kenya, where a defective telephone service existed but often did not reach rural supply points, a survey of nine selected industries measured the gains to be made with good telephone service or the losses caused by a defective telephone service. Again, with the cost of service as the base, ratios varied widely amongst the nine companies, with an average of 115:1.

In other cases of benefit assessment, using different criteria, convincing evidence of indirect benefits was shown. For example, in Russia a number of studies were performed which showed that investments in telecommunications yielded a high return. The composite result of these studies convinced the Soviet government to make investments in some of their collective farms which introduced efficiencies in labour and equipment uses. In France, the Telephone Users Association reported that in

(*) Article based on a joint study carried out by the ITU and the OECD.



Concrete tower microwave repeater in East Africa

the early 1970s France was losing 2% of its GNP because of inefficiencies in the telephone system. In the Cook Islands, Dr Hudson, a project researcher, reports year-to-year improvements of as much as 500% in profitability and sales caused by the efficient harvesting and transportation of crops to the market place after installation of telecommunications.

Ephemeral needs, when filled, yield benefits. They may be once-in-a-life-time emergencies. The telephone is needed in order to take an urgent action that cannot be postponed — it may concern a health, security, economic or service matters. Many of these ephemeral benefits would be worth all the cost associated with the telephone service for a period of 50 years, and often the beneficiary would be willing to pay even more.

Yet they are usually overlooked by telephone users and always ignored by the financiers of telecommunication projects. They are nonetheless weighty items favouring the telephone in the family home and cumulatively they add substantively to the gross domestic product.

In view of the mounting evidence of the contribution made by the indirect benefits of telecommunications, there should be an international effort to use, in the isolated, sparsely populated and rural areas of the least developed countries, not just the direct monetary returns in evaluating telecommunication investments, but also a developmental factor based on these demonstrated indirect benefits. o

Bringing better communications to the developing world

by Bernard J. McFADDEN (*)

As the nations of the Third World develop their economies, their needs for faster, more reliable and cost-effective means of communication become more pressing. A better information flow is an important stimulus—in fact it is a condition—for greater economic activity. Hence the interest of these nations' governments in setting up new or improved telecommunications networks.

The United Nations and other international organizations, as well as national governments, have recognised this by making substantial funds available for telecommunications network studies and development. But how should a Third World government proceed in selecting the right kind of equipment and the right kind of supplier for its telecommunications network? Clearly, the developing nations include countries with widely varying degrees of sophistication and experience in telecommunications as in other technological areas. Some have developed a high level of expertise in this field and already have important telecommunications infrastructures, and in some cases have built up their own telecommunications manufacturing industries. Others are starting from a much lower point.

Solutions must therefore vary with the degree of economic, technology and industrial advancement of the country in question. They will also vary with the financial resources available to that nation, including financial assistance from various international organizations. The economic objectives which that nation has set for itself are other important factors.

In Third World telecommunications markets, European suppliers enjoy something of an advantage because they produce equipment to the worldwide standards set by the various international committees of the ITU, such as the CCITT and CCIR.

These standards are accepted by all developing countries linked to the ITU. Not all North American or Japanese suppliers can make available equipment which meets these standards without carrying out important modifications.

Network planning support

In approaching its telecommunications problems, a government can call for various types of support. One source is the ITU; this inter-governmental body, a specialized agency of the United Nations, has a technical cooperation department which sends teams of experts

(*) Vice-president of the International Telephone and Telegraph Corporation (ITT), president ITT Africa and Middle East.



Transfer of technology: an Algerian technician, one of 3000 trained by ITT's Spanish subsidiary in 1976-80. Algeria now has its own telecommunications plant

and can set up training centres, when called upon for assistance and counsel.

For its part, the United Nations Development Program (UNDP) provides financial assistance for both national and regional telecommunications projects, with the ITU acting as the UNDP's agent to implement the assistance. According to the type of project involved, assistance from other organizations, such as the World Bank, UNESCO or others, can be requested.

The ITU can also act as an intermediary between the Third World governments and the PTT authorities of industrialized countries. For various reasons, including linguistic and cultural ties, some governments of developing countries prefer to maintain direct relationships with a national PTT.

Another category of advisers can be recruited from among various reputable consulting organizations. Some

ITT

From the date of its foundation in the Caribbean in 1920 to the late 1950s, International Telephone and Telegraph Corporation (ITT) developed into a major worldwide telecommunications enterprise. It is probably the biggest telecommunications company in the EEC.

In its 62 years of existence, the company has contributed to the development of public telecommunications networks in all parts of the world. Its engineers and research scientists can be credited for countless technological breakthroughs, but perhaps what distinguishes the company most from its competitors is its long and successful experience in transferring technical knowledge from one country to another.

of these companies, notably in the United States, are large, independent private firms with departments specialized in telecommunications. Some European consultants active in this sector have links with their national PTTs or some of the leading banks from their country. All such consultants tend to reflect the views and methods of their home country, as is natural.

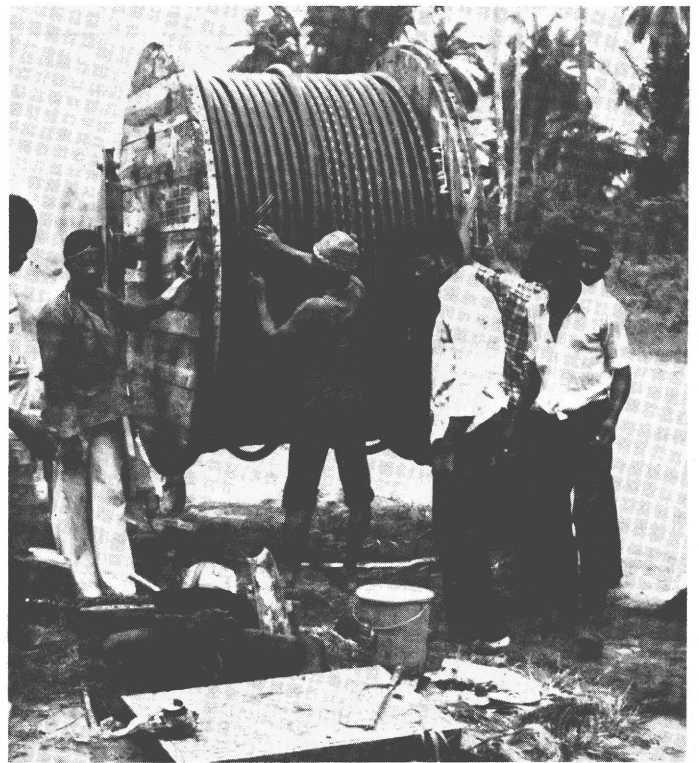
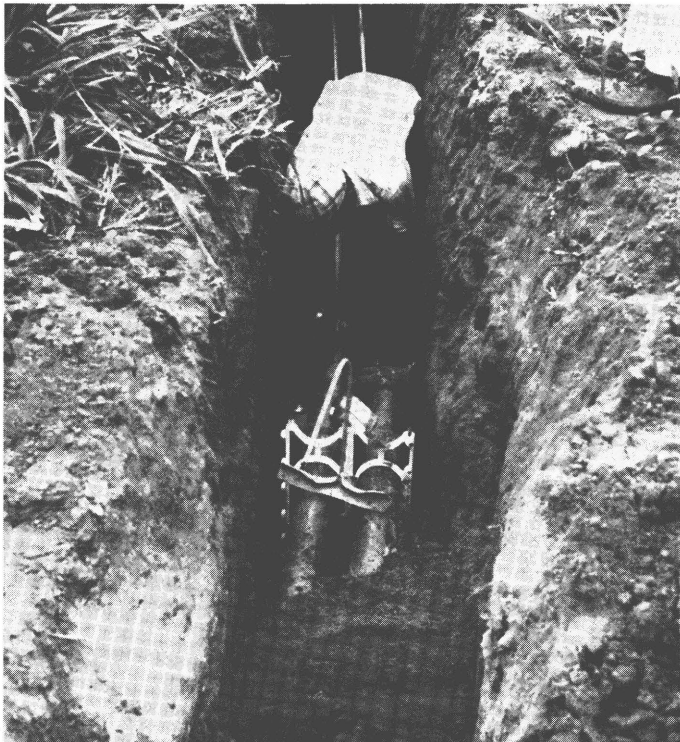
Third World governments may also turn to the industry itself, calling in the well-known telecommunications suppliers as consultants. In order to ensure ironclad objectivity, some consulting contracts may insist on "hardware exclusion" clauses which will prevent the company from bidding for network equipment orders which may result from the network analysis. In order to be qualified as a consultant to Third World countries, a supplier must have acquired considerable expertise and experience in working in different geographic and national environments and in transferring knowledge from one country to another.

Still another method is for the PTT administration of a developing country to hire individual technical experts from another country, generally for contracts of several years. Middle East countries, for instance, commonly make use of such contracts to attract qualified technical specialists from India, Sri Lanka or Pakistan.

The degree of objectivity of the advice given from any source will, of course, vary. Some PTT authorities are likely to recommend solutions involving suppliers of their own country whose products are most familiar to them, while others are not influenced by such considerations, either because their country has no telecommunications industry of its own or because they follow strict administration policies of independence from industry.

Objective advice is, of course, an important element of any feasibility study of a developing country's telecommunications needs and objectives. At least as important,

Cable-laying provides jobs



A very high proportion of local labour is hired by ITT under the telecommunication administrations of developing countries

however, is arriving at a solution which takes into account the long-term overall needs of the nation, its economic and social objectives.

When considering the establishment of a major new high-technology industry, a developing country's government should weigh the advantages which this industry would bring against certain disadvantages. For example, would too large a proportion of the country's engineers and scientists become tied up in the new project and thus be unavailable to work on other developments more relevant to the nation's basic infrastructure and to the needs of the people?

The timing of a decision involving the adoption of new technologies in telecommunications is also crucial. This can be illustrated by the choices currently faced by Third World PTTs regarding which telephone switching system to adopt.

A growing number of these PTTs are interested in ordering the latest generation digital switching systems. Much is to be said for this choice, as digital equipment offers substantial advantages in terms of ease of maintenance (electronic fault location) and repair (simple board replacement), and greater capacity in much smaller space (which reduces the need for new PTT building construction). Furthermore, the cost of the newer technologies is dropping steadily, which will make them progressively more accessible to the developing nations.

However, a developing country which has a young telecommunications manufacturing industry may find that "going digital" at this time runs counter to the interest of that industry and to the national employment objectives which have been set for it. After the industry's engineers have successfully grappled with the new tech-

nologies, they will need more highly skilled but a considerably smaller total number of workers to produce, install and maintain the new equipment. Moreover, a high degree of "integration" (local material content) for digital equipment of all kinds is far more difficult to achieve than with the older technologies. The highly sophisticated microelectronic components on which digital telephony is based originate from a few research, development and production centres which require very large production to make them viable. Making them locally in many cases would be out of the question, because of inadequate production volume as well as technical difficulties. Furthermore, it would be somewhat dangerous for a developing country to assume that it can raise production volume of such high technology items and thus lower unit costs by exports.

In other words, a rational decision on the adoption of new technology (and more particularly the timing of that adoption) by a Third World government must take into account quite a number of economic and social factors, and a compromise often has to be reached between sometimes conflicting forces. On the one hand, the pressure for technical progress is difficult to resist or slow down, and the new technologies present many advantages to developing as well as developed nations. On the other, their early adoption could damage the health and growth of the developing countries' new telecommunica-

Connecting up a telephone exchange: "a better information flow is a condition for greater economic activity"



tions industries, or adversely affect other aspects of economic development.

None of the above should be construed as arguments designed to block the technological progress of the Third World. The breakthroughs made in the communications and information industries in recent years carry important implications for the developing world. We have already referred to the advantages offered by the new telecommunications digital switching systems — electronic fault identification, ease of maintenance and repair, greater capacity and smaller space requirements. These are particularly significant advantages for Third World countries.

Other technical innovations offer equally significant opportunities. Satellite communications and microwave technology today make it possible, through satellite earth stations, to receive and transmit into remote areas TV broadcasts as well as telephone communications from all over the world.

The development of optical fibres permits the production and installation of glass fibre cables which are considerably thinner and lighter than conventional copper cables of equal capacity. The new cables offer many other advantages and they are impervious to interference from external factors, such as lightning, which can be important in the climatic conditions prevalent in some Third World areas.

Responsible international telecommunications suppliers, such as ITT, are in a position to offer these and various other types of equipment, but they are also sharply aware of their total responsibilities towards the developing countries. Moving into high technology systems requires a long and careful analysis of all the aspects involved.

Close cooperation between developing countries, international advisory bodies and the telecommunications industry to solve these problems will continue to be necessary as both industrialized and other nations move into the period of accelerated technological change which lies ahead.

Financing, training and technology transfer

Telecommunications projects are favourably regarded by sources of financing, such as the UNDP and the World Bank, because, unlike most other public projects, telecommunications networks can become self-financing fairly rapidly. As Robert J. Saunders, chief of the telecommunications Division of the World Bank, pointed out in the August 1982 issue of *Telecommunications Journal*, "in developing countries, where in almost all instances the demand for telecommunications services considerably exceed supply, international telephone, telex, long-distance telephone and local telephone services in the larger urban areas can, even if relatively poorly managed, generate large financial surpluses. In countries in which development priorities lie in providing employment and necessary infrastructure in the more rural, small town and backward areas..., a part of these financial surpluses can be used to extend at least basic public call office service to the initially less financially profitable smaller towns, villages and semi-rural areas".

Reference was made earlier to the support which the ITU, UN and other international organizations extend to developing countries in training and advanced education in telecommunications technology.

Large telecommunications companies such as ITT also have extensive training programmes for customer employees, many (although by no means all) of whom come from Third World areas.

In 1981, for example, ITT's Belgian subsidiary, Bell Telephone Manufacturing Company, carried out 380 training programmes, in five different languages, for citizens of 30 different countries. Of these, 14 were from developing nations in Africa, the Middle East, Latin America and the Asia-Pacific areas. Some of these programmes took place in Belgium, others in the customer country.

From 1967 to 1978, ITT's Spanish subsidiary, Standard Eléctrica SA, trained 640 students from Latin America and 130 students from Africa and the Middle East. In 1975 Standard Eléctrica signed an agreement with the Algerian government to construct and equip a telecommunications factory at Tlemcen, to produce telephone switching equipment and subscriber sets with 93 % local content. The plant went into operation in 1980. The contract included full transfer of technology and training. Since 1976 Standard Eléctrica has trained a total of 3 110 Algerian personnel. Of these 100 attended US universities selected for them by ITT, 370 were trained in Spain and the remainder were trained in Algeria.

In Nigeria, ITT has created a training school which gives courses in the maintenance, operation and supervision of telephone exchanges. On-site training is also given in switchboard operation and supervision, in air-conditioning maintenance, in installation and testing, etc.

The company has also assisted the Nigerian P & T and the ITU in the training given at the Oshodi P & T school by donating or lending equipment and documentation.

Telecommunications : a vital element of infrastructure

There is no doubt that telecommunications are a vital element in the infrastructure of developing nations. Indeed, some believe they are *the* most important element, because without the ability to pass a message from A to B other programmes like roads and major civil engineering projects will be slowed down. It has been proved that a reliable level of telecommunications service can and will stimulate economic development and, in so doing, will promote both the economic viability and the economic independence of a rural area.

The critical importance of telecoms is one reason why the United Nations has declared 1983 as World Communications Year. In addition to the ongoing training work already mentioned, ITT will allocate substantial funds in 1983 to assist the developing nations in finding optimum solutions to their telecommunications problems. With telephones per hundred population at low levels in many countries, the job to be done is massive. But maybe there are opportunities too. Some countries will leapfrog right into the "information age" with consequent benefits to their economies and peoples. ◦

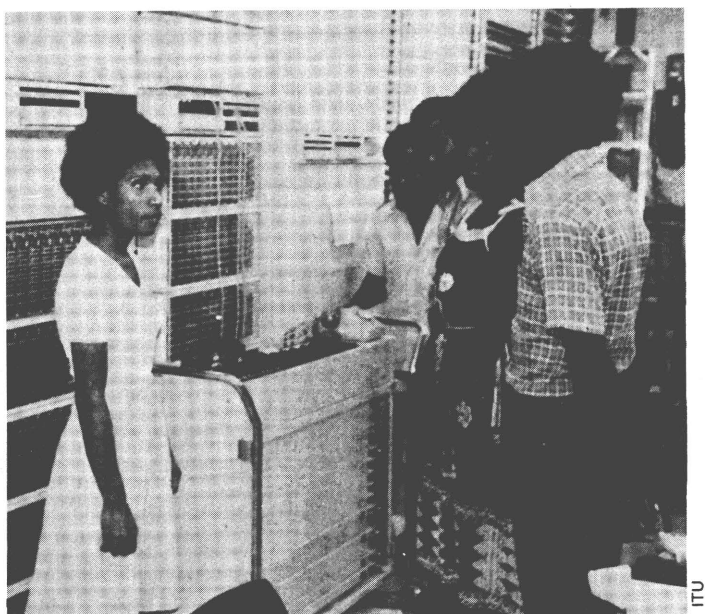
EDF aid for telecommunications

Development financing by the European Community reflects the rapidly growing importance of telecommunications in the social and economic infrastructure of the ACP countries. Some 20 years ago, for instance, the EDF financed one of the first telegraph and telephone links between towns in the Ivory Coast, putting up around 2.5 m units of account to link Abidjan and Man. It was one of only three EDF telecommunications projects to be launched in the 1960s (see *Courier* no. 74). More than a dozen ACP countries have become involved in EDF funding for telecommunications in the last few years, and this sector will continue to expand considerably under the 5th EDF. Under the first four funds, a total of ECU 47 043 000 has been committed to telecommunications projects, 70 % of which (nearly ECU 33 m) has been allocated from the 4th EDF (1st EDF 12 %, 2nd EDF 8 %, 3rd EDF 10 %). This amount can be broken down as in the following tables.

The growing importance of telecommunications is also reflected by the interest in this sector expressed by more recent members of the ACP group. As recently reported in the *Courier*, for instance, some 80 % of the Lomé indicative programme for Kiribati is earmarked for the rehabilitation of the telephone system in the capital, South Tarawa.

EDF thinking on telecommunications has nonetheless been consistent over the last decade or so. As Commission deve-

Regional projects			
Country	Project	EDF	Total amount ECU '000
Fiji, Tonga, Samoa	Telecommunications	4	4 300
Seychelles Mauritius Comoros Kenya Somalia Madagascar Tanzania	Telecommunication aids to aerial navigation	4	Still to be financed 7 600
UAPT countries	Technical study of three regional schemes	4	200
ECOWAS countries	Telecommunications project (study)	4	40
TOTAL (regional projects)			12 140



Telephone trainees in Western Samoa. The EDF has earmarked ECU 4.3 m for a regional telecommunications project in Fiji, Tonga and W. Samoa

National projects			
Country	Project	EDF	Total amount ECU '000
Belize	Improvement of Radio Belize	4	645
Comoros	Telecommunications	4	2 500
Congo	Radio relay links	1	1 531
Gabon	Radio relay links Moanda-Franceville radio relay	1	1 930
		3	756
Ivory Coast	Radio relay links	1	1 925
Kiribati	Telecommunications	4	2 894
Solomon Is.	Development of telephone system	4	5 200
Somalia	Radio relay links	2	3 275
	Telecommunications	2	136
	Radio relay links	2	390
	Telecommunications	3	157
	Public works study	3	117
	Telecoms. (system)	3	3 883
			7 958
Sudan	Improvement of telecommunications	4	6 974
Swaziland	Improvement of radio services	4	990
Uganda	Technical assistance: telecommunications	4	1 600
TOTAL (national projects)			34 903

development official Pierre Lequeux wrote in 1974:

The next few years will see experiments in new systems which, in the 21st century, will be ushering in what may be called the age of telecommunications. In this period the dialogue between man and machine will mark fresh advances, and this is what makes it so important to promote the development of telecommunications in all countries. It is unthinkable that a modern nation could aspire to life of a high economic and social standard without the centres of its activity being linked with the outside world by its telecommunications system.

A growing number of countries engaged in the race for progress are now facing problems of telecommunications development. These are the more important for the fact that demand is constantly growing, and the technological systems are fast developing. As the extension of communications around the world becomes increasingly complex, the indispensable investments will be very great. Developing countries thus have an additional interest in setting up and modernizing their telecommunications systems, for the appointment of local staff with adequate qualifications to operate the system is not something which can be arranged overnight. Sufficient schooling and practical experience over a number of years are what is needed if these countries are to get full advantage from the very advanced technology brought into use.

In the limited framework of the operations of the European Development Fund, telecommunications have an important place. The development of these systems in the ACP countries is part of a large-scale scheme which involves:

- providing these countries with resources to deal effectively and cooperatively with national, regional and international affairs, whether they be political, economic, social or cultural;
- stimulating the rational operation of productive enterprise and the marketing of its product, by making it possible for information to circulate;
- bringing into every home the "umbilical cord" which will make those who live there part of the outside world and its events, and bring to them an audiovisual education, the merits of which are no longer in doubt;
- supplementing the road, waterway and air connections which, in most cases, are inadequate;
- bringing in the indispensable technological help for training the skilled workers these countries so badly need. ○

Studying microwave communications at the National Telecommunication Training Institute in Mogadishu. Somalia will benefit from a big EDF air navigation project



Examples of EDF projects

Air navigation in the Indian Ocean

An EDF scheme costing more than ECU 10 m is planned for the Indian Ocean, to establish or completely renovate the regional telecommunications networks for aid to air navigation. The beneficiary countries are Kenya, Madagascar, Mauritius, Somalia, Tanzania, the Seychelles and the Comoros.

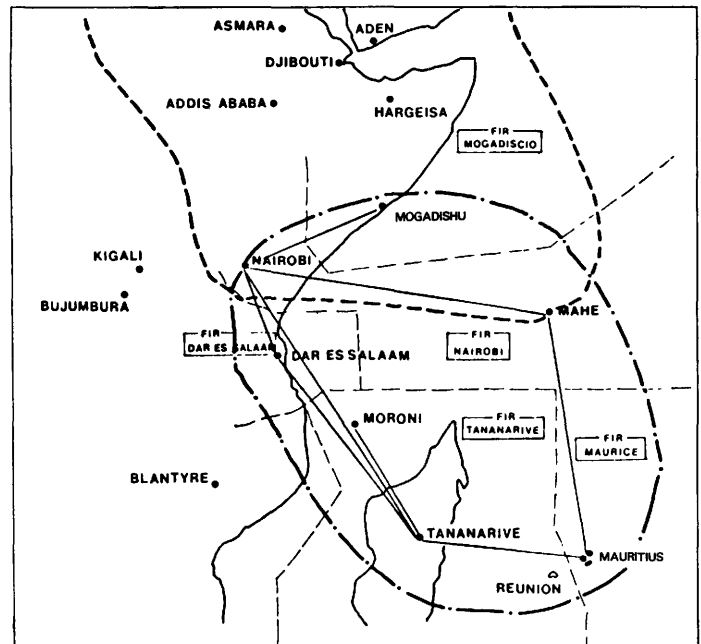
Air transport is of vital importance to all seven countries, especially the islands, which are wholly dependent on aircraft for international passenger transport. The mainland countries, too, rely mainly on air transport, with Kenya at the hub of air traffic in East Africa.

The aeronautical infrastructure of the different countries varies considerably, although all the governments want to improve and extend it. As far as international air traffic control is concerned the airspace is divided up, like all airspace, into flight information regions (FIRs) approved at international level by the International Civil Aviation Organization (ICAO). Five such regions cover this area, centred on Mauritius, Nairobi, Mogadishu, Antananarivo and Dar es Salaam, with the secondary Seychelles and Comoros centres attached to the FIRs of Nairobi and Antananarivo. Telecommunications between these centres are inadequate and outdated. Air traffic controllers have no direct means of verbal communication. Teleprinter facilities, if they exist, take the form of manual morse radio telegraphy or underpowered and unreliable radioteleprinters.

Air traffic has grown considerably in the region, especially in the Seychelles and Mauritius. As the traffic increases and faster aircraft are introduced, the risks of collision become higher. Apart from preventing accidents, the air traffic controllers' job includes trying to reduce travelling time, which calls for a constant exchange of information of all kinds beyond the immediate vicinity of the airports. Pilots cannot follow the most economical or safest routes without adequate meteorological data, for instance, and they have to take on reserves of fuel in case the radioelectric navigational and landing aids are not working properly. Without adequate telecommunications, it is impossible for the ground services to mount normal search and rescue operations if something does go wrong.

So the project aims to provide air traffic controllers in the region with the means of ensuring that international air traffic is safe, regular and efficient. Foreign airlines operating in the region will naturally benefit as well as the national airlines concerned. It should be a decisive step towards giving the region an air traffic control service matching international standards and ICAO recommendations. The existing morse links will be replaced with reliable teleprinter links that are some 10 times faster,

and the region's controllers will be able to talk directly to each other.



--- ATS-DS conference circuits (direct verbal communication)
 — AFTN network (teleprinter communications)
 - - - - FIR boundary

The project will provide for the following:

- Supply and installation of about 30 transmitters, 60 receivers, 30 antennae, 20 teleprinters, miscellaneous equipment, spares and measuring equipment.
- Construction or fitting out of buildings in Madagascar, Mauritius, the Seychelles, Somalia and Tanzania.
- Technical assistance and training of national staff. Technical assistants will be available for 18 months in Kenya, 12 months in Mauritius and four months in the other five countries (services to be provided by the suppliers of the equipment).

It is proposed that the entire project be financed from regional funds, as follows: ECU 7.6 m from the 4th EDF and ECU 3.3 m from the 5th EDF. Seven international invitations to tender (one per country) will be issued simultaneously for the supply and installation of the equipment, building works, training and technical assistance. The installations should come into operation about two years after the financing agreement is signed, providing two direct speech networks and teleprinter communications in the form of a partially interlinked network.

Madagascar is also receiving aid in the same sector from another 5th EDF regional project put forward by the Agency for Air Navigation Safety in Africa and Madagascar. Financing of the project was originally requested by the Seychelles, the Comoros, Kenya, Mauritius and Somalia; Madagascar and Tanzania joined later, thus ensuring a more coherent regional design. An ECU 60 000 general study was carried out in two stages, followed by a detailed ECU 300 000 technical study, both financed from the regional component of the 4th EDF. ○ B.T.

Mano River Union communications⁽¹⁾

The Mano River Union, now in its ninth year, was established essentially as a customs union but as the union evolved over the years it developed other areas of economic cooperation, of which telecommunications forms part of its top priorities.

The member states, Sierra Leone, Liberia and Guinea, like many other African countries, have suffered for centuries from deficiencies in telecommunications services. During the colonial era, when some progress in this area was made, the capital cities of African states were only linked with their respective colonial capitals. Hence, after independence, hardly any African city on the west coast could communicate with another without first going through Europe.

In 1972 a decision was taken by the heads of state of the Organization of African Unity to develop a pan-African telecommunications network. In compliance with this decision, Liberia and Sierra Leone started a link which is now fully operational. The link with Guinea (a member since October 1980) will soon be commissioned.

With the advent of these modernization schemes, the need for middle-level manpower has become greater and the training more expensive. At the national level, each member state developed its own training programme in this area. However, since economic integration aims ultimately at developing economies of scale by avoiding duplication of facilities, the two original member states took a decision to combine their training programmes. These programmes evolved from an interim stage to a full-scale Union Telecommunications and Postal Training Institute in 1979.

The institute is run under two separate divisions. In the division of telecommunications, the long-range objectives are to provide for the improvement and expansion of the telecommunications, broadcasting and industrial communications services of the member states through the development of a self-sustaining training centre, designed to meet their manpower requirements.

The postal division also aims at creating adequate staff, up to junior management level, who would be able to improve the efficiency of the postal services of the member states. It also aims to provide in-service vocational and related courses for junior and senior employees of the user agencies in member states.

Students from Liberia, Sierra Leone and the Gambia (although the latter is not a member state) have been receiving training in the various areas mentioned above. The institute is staffed by local and foreign instructors. Funding comes from the Mano River Union and external donors. So far, external assistance has been given by the Netherlands government and the EEC.

EEC aid

Under Lomé I, the EEC provided ECU 0.9 million for

experts, 0.5 million for equipment, including telecommunications equipment and 0.1 million for training personnel abroad. The EEC is still actively showing interest in this programme.

So that this training institute and others maintain their effectiveness, a Union Training and Research Board was established as an implementing body within the Mano River Union. It has given much attention recently to the Telecommunications and Postal Training Institute, particularly as it is a Union priority programme and also because satisfactory arrangements have to be made to relocate the institute in more spacious surroundings.

The institute is currently sharing a building with other offices in the centre of Freetown; with its new equipment and increased personnel, space and other facilities have become a growing concern. As a result, a new site has been acquired in Goderich, on the outskirts of Freetown. Thus far, architectural drawings have been completed and it is expected that the new complex will have a capacity for 225 students — the present premises can only accommodate 70 students at a time. The current estimate for the complex is approximately US\$5 million.

The Mano River Union countries are determined to keep abreast of international technological developments in telecommunications. The aim is to undertake certain technical measures to achieve these goals:

- the modernization and expansion of vital parts of the public telecommunications services in the member states;
- the extension of the long-distance network, using primarily microwave transmission, and to some extent the renewal of it;
- the enlargement of existing automatic telephone exchanges and provisions for new exchanges;
- access to areas of the countries which do not yet have telecommunications services, and to the international network;
- the already planned provisions for an automatic telex/gentex system;
- the integration of existing and planned extension of the national networks into the pan African network;
- the establishment of earth stations for satellite communications;
- the modernization and expansion of radio broadcasting and television systems.

The Mano River Union is equally developing other programmes: forestry, marine, customs; it is improving and planning to build roads as well as industries—for which there is a small industrial development unit in the secretariat, financed by the EEC—and above all it intends to develop a hydro-electric project, making use of the Mano River and in this context, improve its agricultural and fisheries sectors (feasibility studies for this were equally financed by the EEC); the Union is also accelerating trade within its member states.

In pursuing all these goals, the Union realises that a good telecommunications network is a prerequisite for easy access from one member state to another and to the international community, and this is paramount in its quest for integrated development and economic cooperation. o

(1) From the Mano River Union Secretariat.

World Communications Year and the ACP countries

some case studies

Bahamas

The Commonwealth of the Bahamas is an archipelago of some 3000 islands, small cays and rocks of which a great many are barren, wind-swept and uninhabited. Although there are only 14 large islands which contain the bulk of the population, the land mass is spread over an area of 120 000 square miles of sea.

The population of the Bahamas depends upon telecommunications to provide many of the necessities and conveniences of life. Access to emergency medical care and security services depend upon adequate telecommunication facilities. A considerable number of people of the Bahamas also derive their living from tourism, tourist-related activities, and the international banking services which have established themselves in the Bahamas because of its unique tax situation. Without good telecommunication facilities, none of these industries can sustain adequate growth and development.

The Bahamas Telecommunications Corporation (Batelco) is a government-owned statutory corporation whose principal aim is to provide the needed telecommunication services to the Bahamian people. This organization, which has approximately 1300 employees, has facilities and representation in every inhabited area of the Bahamas and maintains contracts with all major telecommunication carriers of the world.

The services which Batelco now provides to the Bahamian public are in the telegraph, telex and telephone fields. The telex service is automated and direct distance dialing (DDD) is available by telephone from the larger islands to many parts of the western hemisphere. Dedicated leased services are also available.

Because of the increasing need for data communication services, Batelco is in the process of entering the packet data switching field. This is one of the developments with which we shall mark World Communications Year 1983.

In the past, the scattered and remote nature of the islands have presented peculiar problems to Batelco. This inter-island telecommunications traffic is not yet sufficient to justify the major capital investment involved in an inter-island submarine cable system. Because the distances between the inhabited islands is too great to be served by microwave radio systems, we had to explore other methods of bridging the expanses of water.

In the 1960s and '70s Batelco began developing a network of tropospheric scatter radio systems linking the major toll centres on the larger islands. From these toll centres, a number of VHF radio links branch out to connect the many settlements, islands and cays into the network.

The final step in this network of tropospheric scatter radio systems will link the remote southeastern islands of the Commonwealth of the Bahamas. Implementation

of this project will begin in 1983 and will be our second contribution to WCY 83.

The third project which will mark WCY 83 is the commissioning of a stored programme control digital telephone switching system in Nassau, New Providence, the capital of the Bahamas. This system will be brought into service in the third quarter of 1983. The system will comprise one main exchange and toll switch, another main exchange and four remote concentrators. The implementation of these offices will signal Batelco's major step into the world of digital technology and will provide the tourism, banking and the business community in general, with the telecommunication facilities they need for the decade of the '80s.

Batelco is not unmindful of the use of satellites for telecommunications, and preliminary of the use of satellites for telecommunications, and preliminary investigations are in progress to determine the economics of satellite earth stations versus other methods of providing restoration facilities for our international telecommunications circuits. ○

Fiji

The main objectives of World Communications Year 1983 are:

- To provide an opportunity for all countries to undertake an in-depth review and analysis of their policies on communications development;
- To stimulate the accelerated development of communications infrastructures.

To meet these two objectives, the Department of Posts and Telecommunications is undertaking a review of all of its current policies with regard to the provision of telecommunications services, and in particular with regard to policies on the development of rural telecommunications. Further, a long-term development plan (15-20 years), as opposed to the usual 5-year plan, will be prepared covering both technical and financial requirements, to ensure the continuing expansion of telecommunication facilities to meet the needs of all sectors of the community.

While the major thrust of telecommunications development in the 1980s will be to meet the demand for services in the main urban centres, an increasing proportion of development funds and planning activity will go towards meeting the needs of the rural people.

The provision of rural telecommunications in a country such as Fiji is very difficult and very costly. The rural population tends to be widely scattered rather than grouped in rural centres, and even where such rural centres do exist, they are invariably separated from the urban centres by a large expanse of ocean. This geographic isolation of many rural communities inevitably leads to thoughts of satellite communication to meet the telecommunication needs of these rural dwellers. The

major difficulty is finding a suitable space segment that could be made available at a cost that can be afforded.

Largely through the efforts of the South Pacific Bureau for Economic Cooperation and the regional office of the International Telecommunication Union, with the assistance of some of the developed countries of the Pacific, two independent studies have been carried out to determine the communication needs of rural communities in the island nations of the South Pacific and how those needs can best be met. It is inevitable that satellite communications will play a large part in any recommendations made. It would be most fitting if during World Communications Year a start could be made in implementing the recommendations of these two study teams. ○

Swaziland

There was impressive economic growth in Swaziland throughout the 1970s, with emphasis being placed on the creation of a modern communications infrastructure. Development of a railway system and a national airline has been accompanied by a continuing programme of road improvement. Telecommunications have responded to the injection of money and expertise to such an extent that a wholly manual telex system has been replaced by an automatic system with international subscriber dialling (ISD), whilst the telephone system will reach 97% automation with ISD at the end of 1982.

In the field of telecommunications the beginnings were modest enough: the first telephone network was magneto with open-wire junction circuits some of which utilized small-capacity carrier systems. The magneto exchanges in the capital, Mbabane, and the next most important centre of Manzini were replaced at the earliest opportunity by step-by-step exchanges and subscriber trunk dialling (STD) between the two centres introduced. The telex system for the whole country was based on a single manual switchboard located in Mbabane. All calls were passed on a manual basis through South Africa, with whom Swaziland has a strong community of interest.

A first loan from the Africa Development Bank (ADB) in 1977 was used to finance four new crossbar telephone exchanges, a time division multiplex telex exchange to replace the manual switchboard and a basic backbone microwave system linking the main centres. At this juncture the decision was taken to standardize on the R2 signalling system in accordance with Panaftel needs and also to employ centralized accounting for international subscriber dialling (ISD), which was about to be introduced. The centralized accounting equipment was installed in one of the new crossbar exchanges which was located in Mbabane to function as a hybrid local exchange and national tandem switching unit. All ISD calls, telephone and telex, gained access to the international network by way of the South African gateway.

Plans were drawn up for the virtual full automation of the telephone network by the start of the 1980s. To finance these plans a second ADB loan was negotiated and this funded the provision of a further 12 crossbar exchanges along with extensions to the microwave

backbone system, so that all but three of the new exchanges were served by broadband radio links. The provision of adequate channel capacity throughout the national network allowed, for the first time, the previously suppressed demand for leased circuits fully to develop. There was an upsurge in demand for circuits for teleprinter, voice and datel 1200/2400. Many of the circuits provided terminate in neighbouring South Africa.

In an effort to improve communications to the rural areas as quickly as possible, a prime government objective, operators at existing magneto exchanges were given, where possible, incoming and outgoing dial access into the automatic national network by means of radio links. Radio links were also used to provide out-of-area automatic coinboxes at selected rural locations. These coinboxes have proved to be very popular, providing as they do STD facilities into South Africa, Namibia and Lesotho. In contrast, the needs of the business subscriber were catered for by the launching of a locally-financed PABX installation programme in 1979. Business users were offered an install-and-maintain package for a range of PABX systems designed to meet a broad spectrum of needs. The range of PABX units chosen as standard by the administration employs the same hardware as the exchanges in the national network, and the success of the programme is attested to by the fact that business subscribers are opting for the administration-supplied units and ceasing rental agreement with private suppliers.

1983 and beyond

1983 will be significant for Swaziland, marking, as it does, the completion of the first two phases of the modernization programme. With 2.7 stations per hundred of the population, Swaziland is high in the league table of the Third World. The public switched network and the administration-supplied PABXs will employ a standard system technology. However, there will be gaps in the infrastructure which it is planned to fill in 1983 and the following years.

There will be a residue of rural subscribers not within reach of the present system and Swaziland as yet does not have its own gateway into the international network. In phase III of the automation programme it is planned to open a type-B Earth satellite station working the Atlantic path and an ISC which will also act as a national main switching centre (MSC) eventually to replace the congested existing hybrid local-and-tandem unit in Mbabane. The acquisition of its own ISC is seen by the administration as a profitable exercise to increase its share of the international call revenue at present paid to transitting agencies. It is planned that the ISC/MSC will be digital, with remote switching stages located in the pockets of potential subscribers as yet not served by the phase II network. Digital radio links are planned to interconnect the ISC/MSC and the remote switching stages, such that the whole will form a digital overlay which will interconnect with the existing analogue network at the central ISC/MSC. The digital overlay is seen by the administration as the first step towards the ultimate goal of the integrated digital network, wherein the advanced facilities in communication may be accommodated and introduced throughout the 1980s ○

Articles provided by the EEC Commission delegations in Fiji and Swaziland.

“Afrika Verein”

There are many aid organizations and financial and technical bodies in Germany working for the economic development of the Third World, and Afrika Verein (Association for Africa) is the oldest. This organization, which will be celebrating its 50th anniversary in 1984, covers 400 German firms in all sectors (industry, banking, commerce, transport, services, etc.) and a large number of project study consultancies. So, above all, it is an organizer of business with the countries of Africa and the Third World in general, and Germany has a similar organization for each continent. What is original about Afrika Verein, and its sister bodies that deal with the other parts of the world, is that it is not just seeking to give Germany economic bases abroad; it is also trying to give the developing countries some counterpart in terms of investment in the various sectors of development.

Aims and methods of Afrika Verein

Mr Winkler, one of the heads of the association in Hamburg, suggests that one of the aims of Afrika Verein is to develop the economy of the countries of Africa. This, he says, means “bringing Africa nearer to Europe”, in the interests of both continents. But, in view of Africa’s slight economic weight in comparison to that of America, Asia and, of course, Europe, the drive to understand the economic environment in the African continent, so as to generate a massive movement of German and European capital in that direction, is particularly difficult. This is because, Mr Winkler stresses, the “image” we have of African states is one of revolutions, sudden changes of government and economic policies—disorder and instability, to put it in a nutshell—and this is an important factor in making potential investors wary. And the feeling may be aggravated by Europe’s own prejudice towards the African countries. So Afrika Verein’s job is to overcome these various obstacles as far as German firms and Africa are concerned and it does so by supplying information and running studies on all the economic problems of

A service for German industries involved in African development

Africa; economic situation, budgets, development planning, infrastructure and public works etc.

One or two figures are enough to show how well German firms do in Africa thanks to the work of Afrika Verein, and in the field of trade first of all. Although German imports from Africa have dropped over the past two years, they still represent considerable amounts. In 1980, for example, Germany bought DM 26.6 billion worth of goods from Africa, DM 25.6 billion worth in 1981 and DM 11.6 billion worth in the first half of 1982. The range of imports is fairly narrow (60% is oil), but the goods come from all over the continent.

Exports increased rapidly in 1980 and 1981, rising from DM 19.2 billion to DM 24.9 billion. Angola bought DM 52 million worth and Mozambique DM 30 million worth of German products. The most popular German goods in Africa are metallurgical products, food and textiles.

Investments, which are the most important aspect of the development of the countries of Africa, only account for a small part of German capital, as, in 1952-80 Germany invested DM 3.4 billion in Africa—just 4.6% of all West German investments abroad. This is a small proportion, bearing in mind the size of the African markets and the wealth of raw materials that can be processed on the spot. In 1981, the Germans placed DM 445 million in the African economy, or 4.5% of what they invested in the world as a whole that year. However, it is worth noting that the oil producing countries got most of these investments, Nigeria and Angola getting DM 24 million and DM 22 million respectively in this sector. Egypt and Liberia got greater benefit from Federal German investments, but the fields involved are sometimes of no great interest as far as immediate development is concerned. The DM 73 million Germany invested in Liberia in 1981, for example, went into flags of convenience, as Germany charters vessels flying the Liberian flag, which

brings in a certain amount of tax. Kenya was the only country of Africa to get any productive investments from Germany in 1981 and they were worth around DM 17 million.

Hamburg has a technical unit which runs studies for all the Afrika Verein-type associations. It is called the Technisch-Wirtschaftlicher Dienst (TWD) and it is headed by Dr Peter H. Mettler. The TWD is to the German government and industries what the CID would like to be to the ACP group. It is financed by the state, German industry and the government of the Land (province) of Hamburg. The body is not an international one. It serves Germany’s aggressive economic policy abroad with a view also to taking part in the drive for development. The TWD often finds itself in competition with similar organizations from other countries of the Community when seeking markets and major works contracts and the competition can be very lively when in addition to technical ability, France and Germany, say, are on equally friendly terms with a given developing country. Mr Mettler quotes the case of Cameroon or Tunisia. The head of the TWD thinks that, in future, the idea should be to seek far greater cooperation between the European technical services working with the developing countries rather than to go in for competition at any price, as this can do the European firms more harm than good in the long run. So there is a certain amount of collaboration between the TWD and the CID here. The former aids the latter in its drive to seek European national investments in the ACP group.

But Mr Winkler says that more than one CID is called for if the development of Africa and the ACP countries in general is to be a success. We almost need one for each country—or one for each region of Africa, the Caribbean and the Pacific at least. This is what America and Asia do when they want to win markets and channel European finances into the development of their economies.

Afrika Verein is a fine example of an organization which, while seeking to assist the developing countries, opens the way to immense commercial and industrial possibilities for the German economy. ○ L.P.

Transfer of technology and cultural identity in the Third World

by Cahsai BERHANE (*)

The transfer of technology is nothing new. Technology has always worked its way from one world and one culture to another.

Today, the problem of the transfer of technology is that it involves a massive influx of information in a range of sophisticated technological sectors from countries which have a proper mastery of it into what we call the under-developed countries—which are therefore in a situation of dependence.

Let us take the example of Japan, which was able to integrate foreign technology right at the beginning of the industrial revolution into its language and its culture, thereby making a success of the transfer. But there is nothing innocent about it. The industrial revolution in the industrialized countries did not come about without pain and destruction, so it is not surprising that the problems facing the Third World are considerable, particularly since the imported technology has been devised outside and the Third World has, in only a few years, to make the sort of adaptation that would have taken 150 in Europe.

But the problem is that, going beyond this, the techniques themselves are a vehicle for infinitely more extensive cultural values—so the transfer of technology also poses the problem of the dialogue of cultures. One cannot talk about a simple technical transfer of techniques. The introduction of foreign techniques uproots the local populations from their own values. Hence the common feeling of rejection.

So there is a problem of training people in the technique-importing countries, and a problem for the exporters (experts, development officials and technical assistants) who have to prepare them for the realities of the people they will have to get to use the new techniques.

(*) Cahsai Berhane is an African jurist now holding French nationality.

But there is more to it than this. The local people themselves have to be better informed within their own educational systems, so that they learn to ask for what they need, culturally speaking. And passive technological consumption has to stop.

The difficulty is that people in the Third World, who have been trained in the industrialized countries, ought to transfer the techniques as naturally as possible, but they often lose touch with their roots in much the same way as the technocrats of the developed world do. If the local people are to be involved in their development and in the new techniques development implies, then they must understand the phenomena, otherwise they will not have a proper grasp of the transfer.

Transfer includes the notion of education—hence the need, we believe, for self-orientated and self-managed development that integrates the cultural identity of the developing societies, and secondly a proper control of the financial means needed for the development process.

We have to encourage the integration of the new techniques available in the countries of the south (animal power, wind power and solar energy) that the local people can assimilate directly—although the traditional techniques they use with their elementary means must not be overlooked.

Recognizing cultural identity and taking it into account does not mean maintaining it as it stands. It means transforming it, developing it and improving it (and improving standards of living too) with the means and in the spirit of the people. Hence the call for a different kind of development, a refusal to accept a single model and the need for development designed in a regional framework, one that takes account of the specific features of the area in question.

We think that the underdeveloped countries of the Third World should be able to develop their local languages as far as possible and as soon as possible as language is a cultural link. It is also a development link and a vehicle for transporting technology into people's minds. They should stem the brain drain and avoid getting bogged down in administrative matters. They should avoid the outflow of capital which people prefer to invest, as they do brains, in places where profit is immediate.

At a time when the world is engaged in a new technological revolution, we must be very much aware of the cultural dimensions of the world too.

The very notion of transfer of technology will be meaningless unless it is seen within a world-wide framework. The approach must be a global one which includes the psychological and sociological aspects. It must integrate the diversity of the societies concerned. And the choice and formulation of a type of society, which is a political act, must also be a global one.

In this global context, the technological revolution demands that we revise our standard concepts of development. It means striking a new balance of human, financial and material means at international level, so as to put an end to the discrimination that is so typical of present international economic relations.

We have a technological revolution and with it we must capitalize on cultural identity, bringing an open mind to creativity, to imagination and innovation, as an expression of the new power of freedom. History shows that nations rise and nations wane. The time has come to change our outlook and behaviour, to take account of this new dimension and to suggest how complex problems can be overcome. This is the challenge of what we might call the history of the future, now the 21st century is so nearly with us.

How is it possible, given this challenge, not to place cultural identity and technological revolution within the framework of a project for a global society of development in solidarity? ○ C.B.

Brain drain in reverse

One of the dozens of projects which the EDF committee has recently agreed to finance is an unusual regional one. Not because of the amount involved (the ECU 3 300 000 is an average EDF financing) or because it concerns countries (Sudan, Somalia, Kenya and Zimbabwe) from different geographical zones, but because of its aim. What it is setting out to do is get 200 nationals, trained to a high level, to go home and get involved in development schemes in these four countries. The Community has never financed an operation like this before.

The brain drain, a universal phenomenon, has been the subject of discussions, studies and resolutions in international bodies like UNESCO for years. There are a number of reasons why people leave their country. They emigrate for financial and political reasons and to find better working conditions. But the effects tend to be harmful for the countries of origin and they can be disastrous in the case of developing countries, which have so little qualified labour. Because these countries have paid for the training of the skilled people, it becomes a subsidy to other richer states, when the emigration is from the less developed to the more developed countries.

The ACP countries have their share of the brain drain, particularly those in Africa which have many of their nationals working in North America and the European Community.

It follows that these countries are short of qualified staff and that this situation is prejudicial to their development plans. The African planning and human resources ministers judged the situation to be one for concern when they met in Monrovia on 5-7 October 1981. They decided to try to get their qualified fellow countrymen, now living outside Africa, to come home and they invited the ECA to find the money to reverse the brain drain which affects their countries. The ECA found the financial means in the EDF which, prudently, decided to considerably re-

duce the initial programme, involving some 3000 skilled Africans.

The new project is a pilot scheme which can be extended if it is successful. It covers a two-year period and hopes to encourage 200 qualified Africans to go home to Sudan, Somalia, Kenya and Zimbabwe. The total cost will be ECU 3 300 000 and most of it (ECU 2 000 000)—and this is an additional guarantee—will only be spent if candidates are actually found, as the money consists of travel expenses and installation allowances. If the project is successful, each expert recruited in this way will cost ECU 16 500, which is relatively cheap compared to the average cost of training such people. The final precaution that illustrates the circumspection of the EDF, which is organizing the project, is that the Interministerial Committee on Migration will have to give six-monthly progress reports to the Community.

This committee, which celebrated its 30th anniversary last year and in which seven (Germany, Belgium, Denmark, Greece, Luxembourg, Italy and the Netherlands) of the 30 members and two (France and the UK) of the 16 countries with observer status, also belong to the Community, has considerable experience in organizing the return of skilled personnel. But it is, first of all, as a humanitarian organization, specializing in taking responsibility for, transporting and settling refugees of all kinds that it made its mark. You find its stamp on almost all the major population migrations of the past 30 years. It was the committee that took responsibility for the 300 000 people still in camps in eastern Europe after the Second World War. It was the committee that dealt with the 200 000 Hungarian refugees who fled their country after the Budapest uprising in 1956. And it was the committee that evacuated and then returned children to Biafra and, more recently, transported 700 000 refugees from Indo-China. It has helped more than two million people since it first started.

But over the past 10 years or so, it has also been organizing more spe-

cialized movements. A number of Latin American governments asked it to recruit high-level staff in the developed countries and is still recruiting 2000 experts a year.

This is the experience the committee will be making use of in the African regional project, applying formulae that have proved their worth. It helps candidates and their families with the journey, provides accident and sickness insurance and an addition to salary for a certain period (see table). The recruits will be volunteers, chosen in the light of the

Estimated cost per person placed	US \$
1. Travel costs — the candidate selected & two members of his family (one adult & one child)	2 000
2. Transport costs — baggage and personal effects	1 400
3. Assistance during the transitional period (cost of living during 2 months)	2 200
4. Salary supplement during 6 months (average US \$ 300 per month)	1 800
5. Equipment — scientific or professional equipment and publications (up to US \$ 10 000 in 10 % of cases)	1 000
6. Training for the job (up to US \$ 10 000 in 5 % of cases)	500
7. Sickness and accident insurance for a year (US \$ 400 per adult & US \$200 per child)	1 000
8. Miscellaneous expenditure	100
Total average cost	10 000
	ECU 9 730

(In each individual case, some of the outlay provided for above may not be paid if other costs have to be increased).

needs of the four countries and their training programmes. The project will only assist candidates who can prove they have not received any support nor are entitled to any if they go back to their country of origin or an other country of Africa or who cannot pay their own travel costs. Students on grants are thus not concerned. But if the committee representative in Belgium, Giovanni Tortora, is to be believed, the organization, which has just opened a project office in Nairobi, will not find it difficult to get the 200 specialists it needs, as in spite of no advertizing, more than a dozen people have already filed applications. o A.T.

Alpine airing for ACP-EEC cultural cooperation

ACP and European figures from government and academic circles met in the Aosta Valley, near Mont Blanc, to discuss cultural cooperation in October. The meeting was organized by the Académie mondiale pour la paix (see box) and subtitled: "the search for a new international cultural order — the case of ACP-EEC relations". In effect, it provided a forum of discussion outside the ACP-EEC institutions for the initiative taken by ambassador Raymond Chasle of Mauritius to formally include cultural cooperation in the Lomé framework.

Mr Chasle has been patiently pursuing this cause for some two years now, on the basis of the many suggestions drawn up in his 1981 report on the subject. Although an ACP-EEC Joint Committee working group has been pressing for wider distribution of the Chasle report, a good many meetings on cultural cooperation have been held in the last few months by bodies outside the Lomé institutions. Nonetheless, discussion tends to circle around what exactly is involved and Mr Chasle's concrete proposals still seem to be in advance of the often abstract debate.

The discussions at St Vincent in the Aosta Valley, a part of Italy which itself has a mixed cultural status, were of high level in more than a geographic sense. Presenting his "project" for ACP-EEC cultural cooperation, Mr Chasle initially cleared some ground by defining culture in neither artistic nor social terms but as "the interaction of man and his environment", including the physical, social and psychic environments. He hoped the project would "snowball"; the cultural dimension was needed in development project planning. Mr Chasle quoted T.E. Lawrence's view that a man caught between two cultures is "destined for madness or death", although neither

of these afflictions seemed to worry his hearers, most of whom had a foot in at least one culture foreign to their own.

The chairman of the Académie mondiale pour la paix, professor René-Jean Dupuy, took a more concrete starting point in his introductory report: the adoption by UNESCO in October 1980 of a resolution on a "new world information and communications order". He reminded the meeting that the 1948 Universal Declaration of Human Rights affirmed not only freedom of opinion and expression but also the "right" to be informed. UNESCO and the International Telecommunication Union, the principle UN bodies involved in putting this principle into practice, had not been able to prevent international communications from becoming a Tower of Babel, dominated by the strongest technologies. Mr Dupuy sketched out why the developing countries needed to correct the balance of world information: as in their calls for a "new international economic order", the developing countries had a double purpose — to regain sovereignty over their own national resources and to bring under the rule of international law the outside influences, from multinationals



Participants in the Aosta Valley cultural cooperation meeting enjoy a breath of fresh air

The Académie mondiale pour la paix was founded in 1972 on the initiative of the International Peace Academy (New York) and the Institut européen des hautes études (University of Nice). Based in Nice, it meets principally in Monaco and serves as a centre for discussion and information, drawing on expertise from a number of international organizations and universities. Since its first session in October 1972 on "mediation and the peaceful resolution of conflicts" the academy has examined peace-making, from both the military and the economic angles, at a dozen or more meetings lasting three or four days. Financed by local grants, voluntary inscription fees and occasional subsidies from public bodies interested in particular sessions, the academy takes pride in its "complete independence and neutrality". It is run by a board currently chaired by professor René-Jean Dupuy of the Collège de France. The first chairman was Nobel peace prize winner René Cassin.

to news agencies, that affected them.

Freedom of information should not amount to a licence for the nations with the strongest means of projecting themselves to impose their identity on others, Mr Dupuy felt, thus leading from a 'new information order' to the 'new international cultural order' under discussion.

Is freedom of information incompatible with the preservation of cultural identity? As recently as this November, a leading Western newspaper, the London *Times*, in an editorial titled "poison in the media pool", attacked the cultural identity argument as "likely to be a euphemism for uniformity and repression" in the UNESCO context. Mr Dupuy unravelled the strands of the debate through a recent history of international declarations. He attacked the denial of press freedom in the name of public order practised by many governments (and suggested John the Baptist as an early example of such repression). Besides censor-

ship, electronic blocking of broadcasting is also widely practised. However, freedom of information is also compromised by the concentration of the media in relatively few hands, whether state or private, in the developed countries, while developing countries tend to see information as subordinate to their overall aim of development. The salient point was the inequality between North and South in the world's media, by which the North purveys "a prefabricated image" of the Third World while advertising its own way of life, Mr Dupuy reminded the meeting.

Culture, in Mr Chasle's definition, stems from a specific environment. Communications, by definition, link different environments. Satellite TV broadcasting could offer a worldwide choice of programmes direct to the viewer without any government intervention — but, Mr Dupuy pointed out, many countries would consider such a free movement of information unacceptable. As it is, the ITU adopted a regulation in 1977 limiting satellite TV coverage to the territory of the broadcasting state. But the debate goes on, via such concepts as "ideological pollution", and in sum the conflict between freeing information and preserving culture was "the vast subject which this colloquium will be discussing", Mr Dupuy said.

The 19th century idea of progress being made on behalf of humanity as a whole and leading to world unity had been overtaken by a desire for individual and national self-expression, to which "the failure of development cooperation so far gives a greater dynamism". Yet the conflict between tradition and progress is personal to each individual and it was up to the developing countries, Mr Dupuy felt, to find a balance of cultural values, old and new, national and foreign, for themselves. "So the new world information and communications order is an open concept, like the new international economic order. It will be what we make of it and it supposes continued, difficult negotiations which the world cannot avoid," Mr Dupuy concluded.

Linking three different claims for a new international order, this introduction stressed the importance of communications techniques and le-

gislation in the question of cultural cooperation. The questions that followed marked a return from the general to the particular. Mr O'Neil Lewis, Trinidad and Tobago's former ambassador in Brussels, queried whether government intervention in the media was necessarily repressive by giving as an example the screening of World Cup football on daytime TV—this would encourage viewers to stay off work and a government had a duty to decide on such matters. The 'mediacrats', to use a French term, were not present to answer that nothing obliges people to watch TV—they have only to push a button to remove such cultural influence from their drawing-rooms. But the influence of the international press and broadcasting agencies only constituted one line of discussion at the St Vincent meeting. It is principally the preserve of UNESCO, whereas "the case of ACP-EEC relations" has been laid out by Mr Chasle under a number of chapter headings, of which information is only one.

Other areas of cultural interaction presented in papers at the meeting included medicine, administration, technology and industrialization. Many more particular issues were raised in open debate, such as the repatriation of works of art and the treatment of ACP nationals in Europe, although the full range of the Chasle report's suggestions was far from exhausted at the two-day meeting. Some of these contributions will provide food for thought in future issues of the *Courier*. To close this initial report, it may be appropriate to return from generalities to the more practical matter of what the EEC can do in the Lomé framework to advance cultural cooperation with the ACP countries.

The director of 'development activities' at the EEC Commission, François Van Hoek, pointed out that "the Treaty of Rome considerably limits the powers of the Commission as regards cultural cooperation". It is, after all, the European *Economic Community*. Yet the Commission's development directorate is trying to bring socio-cultural factors further into consideration. These factors are "the submerged part of the iceberg", Mr Van Hoek said. The new outline for cooperation recently put forward by development commis-

sioner Edgard Pisani refers to the development of "human resources" and the need to "take into account the socio-cultural dimensions of development"; yet cultural cooperation in its own right is "primarily the responsibility of the ACP countries", the EEC director felt.

Mr Van Hoek suggested that the Community and the ACP countries should jointly research a wider approach to development by:

- Examining obstacles to development projects on a country-by-country basis, with the emphasis on socio-cultural factors. The "weight" of tradition should be turned into "dynamism", by harnessing it to development through a better understanding of local feelings and beliefs.

- Planning "endogenous" development on a regional basis, regions being defined as areas sharing the same culture.

- Drawing up projects on a three-sided basis, to include the local people concerned as well as the national authorities and the international agencies.

Ambassador Seydina Sy of Senegal found little encouragement and a lack of new ideas in the Pisani memorandum; its ideas on cultural cooperation were "very interesting but, to me, mistaken". He felt it premature and "superficial" to programme this aspect of ACP-EEC relations into an outline for future action without closer consultation and research. There was, for instance, "a whole field of African science which remains to be discovered".

The St Vincent meeting confirmed that culture can be taken to mean almost everything that distinguishes people from animals. Hardening the debate into concrete issues relevant to the ACP-EEC machinery is a dizzying enough mental exercise even without facing the suspicions that still remain, notably on the African side, that Europe may be tempted to further its own interests through cultural domination as it has done by military and economic power. The more the subject can be openly discussed, however, the less need there should be to go over the same ground again. As Mr Van Hoek observed: "this kind of meeting is much more effective than similar discussions in the official ACP-EEC institutional framework". o B.T.

European "museum of the year" award goes to Greece

"A museum is not just a building housing precious items aesthetically presented but a cultural centre with a wide field of interests," said Ioanna Papantoniou, curator of the Folk Art Museum in Navplion, Greece, recently named European Museum of the Year (1).

Part of the Peloponnesian Folklore Foundation, the museum is indeed far more than a showcase, although the costumes, textiles, tools, utensils and other folk art are superbly displayed. It is also a beehive of activity on and off the premises which includes a far-reaching educational programme and a wide variety of research projects.

"Both nationally and internationally the museum is exceptional", said the judges who made the award, presented in Stockholm. "It also marks the beginnings of a broad spectrum of museums in Greece where archaeology has so long predominated," they commented.

This year 28 museums in 13 countries competed for the European Museum of the Year awards, which are divided into three categories. The main award, won by Navplion, is for a new, or thoroughly rearranged or modernized museum. A second award, the Council of Europe Prize, goes to the museum, not necessarily new, which is judged to have made

(1) This article by Betty Werther appeared as an UNESCO feature.

the most significant contribution to an understanding of the European cultural heritage. This year's recipient, the Stockholm Music Museum, is a particularly active centre where instruments can be played, recordings listened to and concerts attended. A third prize, the Bank of Ireland Special Exhibits Award, went to "Flowers and Colours", and "Locomotion", staged at the Africanum, part of the Northern Animal Park at Emmen in the Netherlands. Mixing learning with entertainment and relaxation, the exhibits encourage maximum participation for both adults and children. A small museum is as likely to win as a large one and the selection committee, headed by Dr Richard Hoggart, Warden of Goldsmith's College, University of London, and a former Unesco assistant director-general for social sciences, humanities and culture, is not biased towards any particular type of museum. Special mentions, for example, went to the Musée de Préhistoire in Nemours, France, and to Hunday National Farm and Tractor Museum in Stocksfield, Great Britain, which boasts the world's largest, most comprehensive collection of tractors, all in working condition. Frequent demonstrations are given in Hunday, which forms part of a restored early 20th century farm and agricultural village. Another special mention was given to the Gardeners and Winegrowers Museum in Bam-

ber, Germany, which is complete with an adjoining garden planted with vegetable crops.

"A museum is a microcosm of the country which created it, as good a social laboratory as any other", said Kenneth Hudson, author of *The Directory of Museums* (Macmillan 1975) and *Museums for the '80s* (Unesco-Macmillan 1977). Mr Hudson was one of the founders of the awards, set up in 1977 with the help of the International Council of Museums (ICOM) and now run under the auspices of the Council of Europe with the sponsorship of the Arthur Andersen Foundation, the charitable arm of the international accounting firm.

"Even as the economic recession worsens", said Mr Hudson, "the number of museums increases."

"It may be that as the present becomes more threatening, the past acquires added attractions for us. Or perhaps in the face of so much vandalism and indifference, the wish grows to place what can be saved in a place of safety", he said.

While recognising that first-class showmanship must be based on sound scholarship, the committee also considers such mundane aspects as the comfort of visitors, adequate cloakrooms, good cafes... It looks at the museum as a place of public entertainment but also as a research centre, educational institution and even a political symbol. Mainly judges require that it be a genuine community centre with a good range of activities — not just a curiosity box or treasure chest open from 9 to 5.

Recipients of past awards are convinced they have been useful not only to themselves but to the museum world as a whole. Dr Neil Cossons, director of the Ironbridge Gorge Museum in England, first winner of the main award, said: "In the past years Ironbridge has become synonymous with a new generation of museums. The European award helped to convince people who saw museums through traditional eyes that new things were happening in the museum world, and in fact did much to assist the redefinition of the word museum". ◊



Popular art in the Navplion museum

Alfredo Eric CALCAGNO & Jean-Michel JAKOBOWICZ — **Le monologue nord-sud — Du mythe de l'aide à la réalité du sous-développement** (The North-South monologue — from the aid myth to the realities of under-development) — Editions Le Sycomore, 102 bvd Beaumarchais, 75011, Paris, France — 211 pages — 1981

This book says it is based on realism. There is no point, it argues in Manichaeistic repetition of the fact that the under-developed countries are being exploited by Western imperialism and its agents, the transnational firms, nor in saying, as some do, that if the people in the under-developed countries worked a bit harder or were less corrupt then their countries would be able to develop.

What we need is an analysis of the process of under-development and of the international framework in which it takes place, so as to see what the facts, the machinery, the rules and the laws are that govern international activity. And we have to try to decide, as in a detective novel, who gained from the crime and who really takes the decisions in the world today. Once we have this overall picture, based on facts and figures, we can try and detect the contradictions that will threaten the existing powers so as to see what is possible and what is not. With international conditions as they are today, what can an under-developed country hope to do to emerge from its under-development? How much room does it have for manoeuvre?

"If the North-South monologue is to be replaced by a North-South dialogue, the South has to have proper negotiating power and if that is to be possible, the under-developed countries have to act together and strengthen their national and regional autonomy. This autonomy can only be a consequence of independent, not imitative, internal development and of a political desire for independence" the authors conclude.

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Y.A. FAURE & J.F. MÉDARD — **Etat et bourgeoisie en Côte d'Ivoire** (The state and the bourgeoisie in the

Ivory Coast) — Editions Khartala, 22-24 bvd Arago, 75013, Paris, France — 270 pages — FF 85 — 1982

The Ivory Coast has almost everything that radicals instinctively reject — extraversion, dependence, imperialism, cultural alienation, bourgeoisie, money, materialism and more. And for the past 20 years, experts have been writing that the country is heading for disaster.

A book by Samir Amin, published in 1967, launched all this literature. It had the merit of posing many fundamental questions, but the disciples who preached it did no more than embroider on the words of the master — they went on working on a picture of the Ivory Coast instead of looking at it as it really was.

Today it is impossible to explain everything by dependence. The constraints of the international environment are, of course, overpowering, but governments and social forces have a certain amount of room for manoeuvre and action. Such relative autonomy explains why countries like Guinea and the Ivory Coast are plotting such different courses. They have not done away with dependence. They have dealt with it differently and the Ivory Coast has got more out of it.

The authors of this book bring back political matters into the framework of a global, multidisciplinary approach to the Ivorian developments. They stress the strategic role of the state and show how its extension and the diversification of the economy, financed by an agricultural surplus, have enabled the ruling elite to expand and the political-administrative class to be confirmed as dominant.

The work, which contains contributions from S. Affou Yapi, D. Bach, Y.A. Fauré, J.M. Gastellu, J.F. Médard, C. de Miras and A. Touré, is neither a simple collection of papers on the same country nor a collective undertaking produced by a seven-man team. It is the somewhat chance outcome of a number of initially separate pieces of research into the Ivory Coast, carried out within

the framework of different institutions, subjects and problems, which converged under the stimulus of joint reflexion sometimes made difficult by distance. Relatively unified contributions emerged from this discussion of individual experiences. The unity was unplanned. It excludes neither divergences nor contradictions and it cannot be explained in terms of contact alone. It is also, and perhaps above all, the result of a strong desire on the part of everyone involved to understand the mechanics of the society under scrutiny before judging it.

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Bernard LANNE — **Tchad-Libye: La querelle des frontières** (Chad and Libya: the border dispute) — Editions Khartala, 22-24 bvd Arago, 75013, Paris, France — 245 pages — FF 66 — 1982

The interminable civil war in Chad has pushed the border dispute with its northern neighbour Libya into the background. The intervention and subsequent withdrawal of Libyan troops after a year did nothing to solve the problem of the "Aouzou strip".

The frontier conflict which broke out between Chad and Libya in 1977 is the last manifestation of what is virtually a time-honoured problem. At the beginning of the 19th century, Libya was the last outpost of the Ottoman Empire in Africa. When France and England drew the frontiers of their influence, the Turks objected, but no one took them seriously. Italy made the same claims over many years and now it is Colonel Kadhafi who wants the "historical rights" returned.

Bernard Lanne traces the developments of the frontier affair and outlines the many treaties signed on the subject. There is no doubt as to his conclusion: there is no real foundation for the Libyan claims

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Jacques ATTALI — **Les trois mondes — Pour une théorie de l'après-crise** (The three worlds — towards a post-crisis theory) — Fayard, 75 rue des Saints pères,

INDUSTRIAL OPPORTUNITIES

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Agro-food sector

A quarter of CID projects belong to priority sector



The CID, ever since it was established in 1977, has paid great attention to agro-food industries.

It held its first meeting for the agro-food sector in October 1982. At the meeting it promoted over 30 new projects for the processing and preservation of food in the Economic Community of West African States (Ecowas). A report on this meeting which describes the importance of the agro-food sector, appears on other pages.

About 25 % of CID projects fall under the agro-food heading and here we give examples of some of them.

Continued on page 2

A view of the attendance at the opening session of the CID's first meeting for the agro-food sector

Gold Mercury International Award CID awarded for work in Africa

On November 28th, 1982, the CID joined the long list of distinguished individuals and organisations who have received the Gold Mercury International Award for Peace and Cooperation. The list includes former UN Secretary General Kurt Waldheim, the late Soviet leader Leonid Brejnev and other world figures like Presidents Sadat of Egypt and Pompidou of France.

The award was conferred on the CID for the work it has done in pro-

moting productive development in Africa. It was accepted on behalf of the CID by Dr. Isaac Akinrele, Deputy Director. The ceremony took place during the Panafrican Conference for Peace and Cooperation held in Addis Ababa, Ethiopia.

The Gold Mercury International Award is bestowed annually. It may be given to heads of government and state in recognition of what they have done for world peace. It may also be conferred upon companies, or organisations and state bodies that increase production or improve the human, social and economic relations of a country or among peoples.

The award was founded in Italy in 1961 at the initiative of an independent association of journalists de-

voted to promoting exchange and economic cooperation at all levels. The award was initially intended to call public attention to noteworthy Italian companies. In 1970 it became a European award under the patronage of the President of Italy; then in 1975 it became an international award.

The Gold Mercury International Award for Peace and Cooperation has its headquarters in Rome. However, 54 countries are represented on the International Honorary Committee which chooses personalities, companies and organisations as candidates for the award. The presentation ceremony takes place in a different country every year and is preceded by a conference on international cooperation.

In this issue

West Africa Industrial Forum **2** and **3** ■ Adapted Technologies **3** ■ Flour from local grain to reduce imports **4** ■ Positive response in Ireland **4** and **5** ■ Seychelles coconuts and Mauritian prawns **5** ■ Mohammed Rimi's projects **6** ■ A CID case history **6** ■ Offers from ACP sponsors **7** ■ Offers from EEC firms **8** ■

Continued from page 1

Traditional food crops

CID does not assist purely agricultural schemes. It does however give high priority to food processing. The object is to reduce imports of essential foods like flour, rice, meat, dairy products and canned fruit.

Cassava and yams

In three West-African countries, the CID is helping to study and promote projects for the industrial processing of cassava (into gari or attiéké) and yams.

The success of such projects initially depends on two factors: firstly, high yields per hectare leading to low raw material costs; and, secondly, the acceptability of the product to consumers who very critically compare industrial products to those made in the traditional ways.

In Togo, the CID is supporting German investors who are preparing a project for the industrial processing of yams and cassava for the local and regional markets. They are also studying the possibility of exporting to Europe where they would replace potato flour with yam flour. A feasibility study is at present under way, financed by the German Government.

Flour from sorghum

CID helped to set up a small sorghum mill in Wad Medani (Sudan). This is now in commercial operation. Joint venture partners are private Sudanese investors, the Sudan Development Corporation (SDC), a private Danish firm and the Danish Industrialisation Fund for Developing Countries (IFU).

From plant protein to animal

The provision of protein-rich foods is one of the most urgent needs in all ACP countries. The CID has therefore concentrated much effort on the promotion of projects with a favourable conversion ratio of plant protein into animal protein. Aquaculture, lake and river fishing, fish preservation and poultry, all fall into this category.

Better fishing, prawns and a boat yard

In 1979, the CID has provided advice, information on technology and assistance with a study, for an integrated fisheries development programme on Lake Tanganyika in Zaïre. The first phase—the improvement of artisanal fishing—has been completed with EDF financial assistance. For the second phase—the setting-up of a small boat yard—further EDF support plus CID implementation assistance have been approved. Implementation will start in early 1983. The final and third stage will involve setting-up interlinked small industries, such as fish processing, refrigeration, the making of fishing nets and fishing lamps, and the expansion of the saw mill supplying timber to the boat yard.

In Mauritius, CID has helped private sponsors to set up a pilot pond for producing fresh-water prawns.

Poultry and chicks

In the Seychelles, a chicken hatchery has been in operation since October 1982, following a feasibility study prepared by CID.

An integrated project for day-old chickens, poultry and animal feeds, is under implementation in Cameroon and a similar scheme in Togo is under study.

Feeding pigs and other animals

The production of animal protein is

seriously restricted by the inadequate development of the animal feed industry. CID has therefore supported a number of animal feed projects.

In most cases these projects are linked to poultry, cattle or pig production. In Gabon for instance, a pilot plant is in production since 1981 as part of a cattle breeding scheme.

For Togo, CID is co-financing a study on the production of animal feeds as part of an overall farm development programme which includes a rice mill, a saw mill and energy production from agricultural waste.

Fruit, juice and vegetables

Increasing labour costs in Europe and the advantages of tropical and sub-tropical climates, make many ACP countries ideal locations for fruit and vegetable processing industries. There are ready local markets and there is the added possibility of export to the EEC.

The CID co-financed studies and the cost of technical expertise for projects in Swaziland (fruit juice concentrate), Senegal (fruit juice), Kenya (pineapple juice and jams).

In Madagascar, a soya milk factory is under construction. This project will considerably improve the supply of high quality protein to the population. The CID located the EEC partner, co-financed the feasibility study, and assisted in raising loan finance.

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West Africa Industrial Forum Major event for investors



The West Africa Industrial Forum, held every two years in Dakar, is one of the world's oldest events for promoting industry in developing countries. The EEC is the main source of finance for the forum which is held in conjunction with the Dakar International Trade Fair. The third forum was held in November 1982.

CID made an important contribution to the third forum by identifying private African investors and subsidising their stay in Dakar. The forum is intended to promote industrial development in the 16 member states of the Economic Community of West African States (Ecowas). It allowed

Small, cheap, labour-intensive, simple,
using local materials and suited to ACP needs

Adapted technologies

Since 1978 the Centre for Industrial Development has published about 60 technologies which are adapted to the socio-economic conditions of ACP countries. The hallmarks of adapted technologies are low investment levels, the use of local materials, production suitable to local markets, high employment in relation to investment and above all technical simplicity. From now on each issue of Industrial Opportunities will carry a profile of an adapted technology. These profiles will be brief and any ACP promoter who wishes to have fuller particulars should get in touch with the CID in Brussels.

All current profiles are available individually from the CID. A volume containing descriptions of all adapted technologies in the CID's inventory has now been republished in a revised edition.

Luxury wash basins made cheap

A process is available for making wash basins and other bathroom items from marble powder and cold-setting resin. This enables high quality sanitary ware to be produced without the high investment and fuel costs associated with traditional ceramic ware. The basins are cast in reusable flexible moulds and are ready within half an hour of casting.

For a foreign currency investment

of about \$ 60 000 a small plant employing 6 people can produce up to 8 000 wash basins a year, or equivalent numbers of other bathroom fittings. The ex-factory price of the wash basins should be about \$ 45.

The materials used are marble powder (or any other inert mineral available locally) and chemical resin.

Moulds can be made locally to create products of identical shape and size. The products are many times stronger than ordinary ceramic ware and can be sawn or drilled for easy fitting.

The technology, with joint venture capital to support it, is now available. CID would like to hear from ACP entrepreneurs interested in manufacturing these items.

How to make money from buttons

ACP entrepreneurs can set up a small but profitable industry for an investment of only US \$ 75 000 plus a small factory building of around 70 square metres and installation costs.

This opportunity is provided by a plant which produces buttons from sea shells and other natural materials such as horn, wood, coral and coconut.

These buttons are used on garments sold in the fashion centres of Europe. The range of buttons can also be extended to include military type, textile and standard.

The machinery is designed to suit tropical conditions and requires a minimum of maintenance.

This industry which can give a high

rate of return on investment can be installed and operating within 17 months. It requires a minimum workforce of 11.

This industry has already been established successfully in one developing country and is being considered for a number of other countries. ACP entrepreneurs interested in knowing more about this adapted technology may contact CID. *ab*

European investors to meet, over four days, a wide cross-section of African investors and industrial promotion specialists.

CID in early 1982 paid consultants to travel to Ecowas countries to identify industrial projects and investors. Their work provided the basis for the CID's agro-food meeting in October 1982. It also provided the 25 industrial projects which CID promoted in Dakar. The European Commission financed organisations and consultants in the EEC countries to identify companies interested in the opportunities afforded by the forum. The Commission also shared with

the United Nations Industrial Development Organisation (UNIDO) the cost of identifying Ecowas industrial projects, in addition to those identified for the forum by CID.

About 180 European firms attended the forum. This figure—albeit substantial—is down on the figure for the previous forum and doubtless reflects the difficult international economic climate.

The forum was also attended by all West African finance institutions and by 138 African promoters.

CID was a member of the organising committee for the West African

Industrial Forum and is coordinating all follow-up action for projects involving EEC partners.

The forum was attended by six CID professionals including Director Jens Mosgard. In concluding his speech to the forum Mr. Mosgard warned EEC investors that they cannot afford to ignore the Ecowas countries. "As the world economy improves", he said, "Africa will have fast-growing purchasing power and Ecowas will provide a very big market. Eventually, everybody will be rushing in—so this may be your chance to gain a foothold". *ab*

Big response to EEC offer

Flour from local grain to reduce imports

United Milling Systems (UMS) of Denmark received about 100 enquiries from ACP firms following an offer published in CID's Industrial Opportunities in September 1979.

A good Nigerian business contact emerged from the replies. This contact, in the words of the Danish company "had entrepreneurial ability and the right commercial background". This Nigerian contact subsequently visited the Danish company's pilot plant in Copenhagen. Relations between the two parties matured, and a contract was signed which should shortly lead to the installation of a mill.

UMS has designed a milling technique suitable for locally available non-wheat crops such as sorghum (guinea-corn), maize and millet. The Nigerian project, arising from the offer in Industrial Opportunities, involves the installation of a UMS mill by a Nigerian company to produce flour from locally grown grain. The mill should help to stimulate local agricultural production by creating additional demand for sorghum and maize. It should also help reduce the country's import bill for wheat.

Advice for ACP entrepreneurs

The Marketing Director for UMS, Mr. Bjarne Nilsson, has some advice for ACP entrepreneurs replying to offers published in Industrial Opportunities.

According to Mr. Nilsson, many of the replies he received to his offer



were poorly presented. In many cases people either did not provide enough information or had the wrong approach to a joint-venture arrangement. In other cases people were way off the point. For instance, some enquired about an animal feed mill and others wanted a wheat mill complete with bakery.

Some of those who replied seemed unwilling to take the responsibility of finding the major share of the finance needed. They expected too much of the Danish company. "We had a hard job", says Mr. Nilsson, "in persuading some people that THEY were also required to invest. We are in business but some

Bjarne Nilsson, Marketing Director, United Milling Systems (UMS).

The interior of a UMS mill for making flour from local grain which has been established with CID assistance in Sudan

people unfortunately tended to regard us as an aid-giving organisation".

Others who replied to the UMS offer had insufficient commercial background and provided neither financial details nor bank references. Mr. Nilsson, speaking as an EEC industrialist, advises would-be ACP partners to prepare their proposals carefully. *cb*

Promotional meeting



Positive response in Ireland

About thirty Irish organisations and companies who attended CID's first promotional meeting in Ireland in October 1982, responded positively to CID Director Jens Mosgard's advocacy of investment in ACP countries. →

A view of the first CID promotional meeting held in Ireland. (In the picture, from the right, Diarmuid Peavoy CID, John Kenna CII, Jens Mosgard Director CID, and Patrick Keene CID)

Mission by CID's Deputy Director

Turning coconut shells into profit in Seychelles. Good prospects for fresh water prawns in Mauritius

Dr. Isaac Akinrele, Deputy Director CID, led a mission to Seychelles and Mauritius in October 1982. He was accompanied by Joop Steketee, Deputy Manager of CID's Industrial Promotion Division. The purpose of the mission was to follow up CID-assisted projects and to see whether the CID could provide further help in any area. The mission met people from the public and private sectors in both countries, to explain the role which CID plays in industrial development.

Seychelles

Tourism is Seychelles' most important source of foreign exchange. However, another important source of foreign exchange is the export of copra—the dried kernel of the coconut from which oil is extracted. The Seychelles government wishes to make better use of its coconut resources. It therefore attaches great importance to investigating the possibility of developing an integrated coconut industry. This would provide substitutes for imported products and increase the added value given locally to coconuts. The CID financed a study for Seychelles, completed in 1979, on oil extraction from coconuts and the conversion of coconut shells into gas. Another study on the production of activated charcoal from coconut shells, is almost ready.

There was some discussion at a meeting with the Seychelles government about CID assistance for a comprehensive study of the industrial potential of the Seychelles. The study would include a look at the

notion of an integrated coconut industry and the first steps in this direction could well be the production of activated charcoal.

CID co-financed pre-feasibility studies, or was otherwise involved, in various parastatal projects in the Seychelles. These projects also received follow-up attention from the CID mission. Some have been implemented on a limited scale (salt, lime, and water bottling). One project—a chicken hatchery with an annual capacity of 320 000 day-old chicks—became operational in October 1982. Further assistance with projects for the production of clay bricks and compost are currently under negotiation with other organisations.

Mauritius

Over 25 projects, old and new, were discussed. Most of these projects were initiated by the private sector. It is worth noting that industrial development in Mauritius received a real boost with the establishment 12 years ago of Export Processing Zones which offer attractive facilities. State legislation provides

encouragement to export oriented industries.

One important project entails the establishment of a wheat mill. It will have a capacity of about 500 tonnes per day and will employ 100 people. CID co-financed the pre-feasibility study for this project. It should be operational in 1984.

In another Mauritian project CID assisted with the training of workers in textile printing.

There has been continuous CID involvement in the implementation of a prototype aquaculture industry for the production of fresh-water prawns. CID co-financed research aimed at perfecting techniques for the mass production of the prawns. The enlargement of the prototype to the dimensions of a commercial enterprise is now being considered. The prospects look good as the total commercial production in Mauritius, based on prawns hatched in the prototype enterprise, rose from 9 tonnes to 23 tonnes over the last two years. It is anticipated that further CID assistance will be requested for this project. *ob*

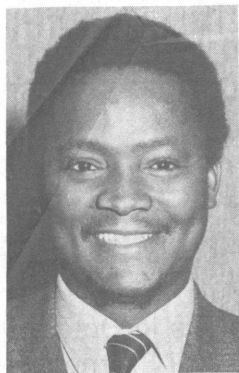
→ The meeting was organised in conjunction with the Confederation of Irish Industry (CII) and John Kenna, CII's director of transport and foreign trade, closed the meeting saying that from now on he hoped to "lock-in more closely with the CID".

At a subsequent meeting in Ireland, the parastatal Industrial Development Authority (IDA) offered to identify Irish firms likely to be seriously interested in investing in ACP countries. Irish firms falling into this category may well be those which need to restructure by relocating part

of their operations in an ACP country. (An offer from such a firm appears on page 8). In another Irish meeting the Irish Export Board (CTT) also offered to assist in identifying Irish firms suited to CID projects. IDA also offered to feed the industrial opportunities published by CID into their "ideas bank" for Irish companies.

It appears that Irish firms lack two important incentives which are enjoyed by firms in other European countries. Firstly, they lack a state sponsored insurance scheme for en-

terprises investing abroad or alternative bi-lateral investment protection agreements with ACP states. Secondly, they lack an Irish state development bank which would take equity or otherwise support joint-ventures by Irish firms in ACP countries. CID discussed these drawbacks with directors of Allied Irish Banks and with officials of the Irish departments of Foreign Affairs and Industry and Energy. Despite these drawbacks Irish firms have shown increasing interest since the Irish meeting in exploring the industrial opportunities offered by CID. *ob*



Syringes, Matches and Shoes

Mohammed Rimi's projects

Mohammed Rimi

Mohammed Rimi came from Nigeria last October to spend three months with the CID. His stay was financed under the CID's promotional attaché programme. This programme enables senior staff from ACP institutions which promote and finance projects, to come to Europe to promote their projects and to study CID at first hand.

Mohammed Rimi is a senior investment executive with the New Nigeria Development Company in Kaduna, Northern Nigeria. The New Nigeria Development Company is owned by northern Nigerian states and has a number of joint-venture projects with foreign partners. Up to now, he says, it has taken too long to locate

partners. It has also been costly. He believes that the CID can offer his company a cheaper and quicker service.

In selecting European partners he prefers to choose carefully from several offers. He looks mainly at the experience of a potential partner and likes the partner to have been involved in his field of manufacturing for some time. Partners whose main interest is the supply of machinery do not, he says, work well. He also says that partners can make demands for concessions like tax allowances which his company has no power to give.

Mohammed Rimi obtained a BSc in Economics, and an MBA from the University of Ahmadu Bello, Nigeria. He joined the New Nigeria Development Company after spells at the Central Bank of Nigeria and at the Economic Planning Section of the Kaduna State Government. During his stay with the CID he was promoting projects for restructuring a match

factory, a shoe factory and a factory for making disposable medical syringes. These factories had been obliged to close for reasons such as obsolete machinery, bad management and quality control problems. As a result of his stay with CID, a study will be undertaken for the medical syringes project and it is hoped that rehabilitation studies will be undertaken for the other projects.

While at the CID, Mohammed Rimi was in the company of three other anglophone promotional attachés who were profiled in the last issue of Industrial Opportunities. These others also had some success with the projects they were promoting. For example: A Belgian firm will undertake a study to establish an iron foundry in Malawi; a potential joint-venture partner has been selected for a vegetable dehydration plant in Swaziland; and an implementation study is to be undertaken by a Danish company for making wheelbarrows in Sierra Leone. *db*

A CID case history

The problems we face

The action of a European partner has caused the temporary closure of a fishmeal factory in Sierra Leone. It had received substantial assistance from CID and started production in Freetown in early 1982. The factory was established under a joint-venture agreement between a European company and Sierra Leone investors.

According to the agreement, the European company was to transfer a second-hand fishmeal plant to Sierra Leone and take a small share of the equity. It was also to supply the factory with fish which it would catch in the seas off Sierra Leone.

The project began well. A CID mission found the plant in perfect operating condition and reported that, technically speaking, it was well managed. The future looked bright as the product was good and had a ready market in Europe.

However, the European partner found that the price for the fish, which he had agreed with the factory, was less than what he could fetch on the open market. He soon obtained other buyers and curtailed the supply of fish to the factory. The factory had to shut down for lack of fish.

The European company then withdrew its trawler and thereby relinquished all opportunity to make steady if smaller profits over a long period. It thus lost the long term possibility of expanding its business, increasing its fishing fleet and establishing a future in an ACP country.

CID had helped to get this project going. It had, for instance, financed an independent expert's evaluation of the second-hand fishmeal plant. CID therefore responded positively to a request from the Sierra Leone factory owners for assistance in find-

ing another European partner.

CID brought a representative of the factory owners to Europe. He took part in promotional meetings and visited potential partners. However, the Europeans who showed an interest in the project again took the short term view. They only wanted to supply fish and had no wish to make a long-term commitment to the plant by taking a share of the equity. Today the factory is still in need of a far-sighted European partner.

This is but one instance of the obstacles which may face a CID project. The obstacles are varied: for example, a potential partner may die or go broke; financial support or loan guarantees may be withdrawn; there is always the red tape which may delay a project and cause a partner to lose interest. It is not easy to establish joint venture projects in ACP countries. But with patience, a good project, the right partners and favorable circumstances, a project will get going—and the benefits will be real for both sides. *db*

Offers from ACP sponsors

EEC INDUSTRIAL PARTNERS WANTED

EEC industries are invited to contact CID, quoting the reference number, in response to any offer outlined in this section. CID will answer questions on any item and will indicate the kind of assistance which CID provides. EEC industries should give a brief description of their operations; and, in relation to the proposed project, they should state the kind of involvement which they envisage.

Organisations reprinting these offers in their own publications are asked to ALWAYS include the CID reference numbers.

Garment maker seeks cut and sew contracts DOMINICA

Ref. 83/1a

A company in the Commonwealth of Dominica, already manufacturing industrial coats, sports shorts, thermal underwear and undergarments, is looking for EEC companies wishing to contract out orders on a cut and sew, or on a sew only, basis. At present the company employs 50 but could increase this number.

An EEC financial and marketing partner would also be welcome for the expansion of existing operations.

Wood processing based on large resources of quality timber FIJI

Ref. 83/2a

The Fiji Pine Commission has large plantations of pinus caribea at present covering 36 000 hectares which it plans to increase to 60 000 hectares by the early 1990's. The Commission is now studying the implementation of a major complex needed to process 110 000 cubic metres of sawlogs and 140 000 cubic metres of pulplogs per annum.

The Commission's large resource of good quality clear timber, added to indigenous wood resources, could be a good basis for the development in the Fiji Western Region of industries for processing the timber—for export—into furniture blanks, furniture parts, knock-down furniture and semi-manufactured items like handles. A few companies in the area already manufacture furniture and joinery items mainly for the local market. They have indicated to the CID their interest in finding joint venture partners from Europe, who could invest, provide techni-

cal expertise, designs and export markets.

Through the SPARTECA agreement, preferential entry into the Australian and New Zealand markets is possible for goods manufactured in South Pacific Islands like Fiji. This could be an added incentive for investors.

Information about Fiji investment laws is available.

German partner wanted to market leather gloves MAURITIUS

Ref. 82/61a

A Mauritian private company producing industrial leather gloves is looking for a German joint-venture partner already manufacturing this product and wishing to expand his production. The German partner should be backed by a good marketing organisation.

The purpose of the joint-venture is to set up production of 160 000 pairs of gloves annually for export to Germany. Transfer of know-how is not required.

Total fixed capital cost for the new investment is DM 97 000. Estimated working capital requirements are DM 115 000. Equity will be DM 76 000 of which 40% for the German partner.

This project can in principle benefit from an Export Free Zone certificate and a tax holiday on profits/dividends. Local loans are available.

Existing company wishes to move into oleo-resins and fragrances JAMAICA

Ref. 83/3a

An existing Jamaican company involved in the production of essential oils is looking for a European joint-venture partner able to provide the neces-

sary know-how to go into the production of oleo-resins and fragrances.

This extension of present production would involve the utilisation of local herbs and spices. The existing factory has most of the required equipment but any additional equipment will be financed by the Jamaican sponsors.

The EEC partner would also be required to assist with the marketing of the finished products.

Tannery seeks marketing partner KENYA

Ref. 83/10b

A newly established tannery in Thika, Kenya, with a capacity of about 100,000 sheep skins per year, plans to export most of its production to the EEC and is seeking a European marketing partner.

The company would also like to process part of its production into leather articles such as handbags, jackets and toys and would welcome assistance with this.

Clothing factory revives operations MAURITIUS

Ref. 83/4a

A well known Mauritian investment and development company has a factory available for the manufacture of readymade clothes. The factory is not currently in use, but the building along with all the standard facilities and equipment, are in very good condition.

Product made to date: Blue denim cotton work clothes for export to Europe. Annual capacity: 261 000 units (operating one shift). Annual turnover: at least US \$ 600 000. Total person-

Continued on page 8

Offers from ACP sponsors

EEC INDUSTRIAL PARTNERS WANTED*(continued)**Continued from page 7*

nel: 60, most of whom will be available when the factory reopens.

The owner wants to revive the enterprise and is offering up to 49% of equity to a joint venture partner capable of providing know-how, technical assistance and an export market. Suggestions for products with a higher added value than the previous product are welcome. The partner may supply his own raw materials. A foreign investor exporting the total production may in principle avail of interesting incentives.

Partner wanted for hospital GAMBIA**Ref. 83/5a**

Private participation in equity is sought for a modern 30 bed hospital to be built in Farafenni to serve 500 000 people.

The hospital will be operational in 1985 and includes an x-ray department, a pathological laboratory, an obstetrics department, an operating theatre and a pharmacy.

The staffing target of 50 is to be reached within 5 years.

Total investment is US \$ 1 463 000. There is a tax holiday of 5 years. Equity to be taken by foreign investors is negotiable.

The project is supported by the Government and the hospital facilities and services will be paid for according to the regulations of the National Health Service.

A copy of the feasibility study can be made available on request.

Offers from EEC firms

ACP ENTREPRENEURS PLEASE REPLY

ACP entrepreneurs are invited to contact CID, quoting the reference number, in response to any offer outlined in this section. ACP entrepreneurs must supply the CID with background information about their industrial and commercial activities. They must also provide a short assessment of the viability of the proposed project, giving details of the potential market.

Transfer of vegetable dehydration plant to an ACP country**Ref. 83/6b**

An Irish parastatal company is one of Europe's largest producers of dehydrated vegetables. For reasons of cost it wishes to close at least part of its plant in Europe and set up production in an ACP country. Some of its advanced processes afford a distinct competitive advantage. The Irish company also wishes to relocate an instant mashed potato plant which can be adapted to produce instant yam flake.

It is prepared to offer plant as equity in a joint-venture arrangement with an ACP partner. It can also offer technical assistance, management and access to existing markets. In the event of a likely joint-venture arrangement, CID can finance the assessment and evaluation of the plant by an independent expert.

UK company seeks partner to make plastic products**Ref. 83/7a**

A company based in Scotland (UK) specialises in machinery for the production of reinforced plastic (GRP). The machinery may be used to produce a range of products designed by the company, including a complete modular building system.

The company is prepared to enter into a joint venture arrangement with an ACP partner to set up production of its range of reinforced plastic products.

From trailers to coach bodies to agricultural equipment**Ref. 83/8a**

A medium sized British engineering Company producing a comprehensive

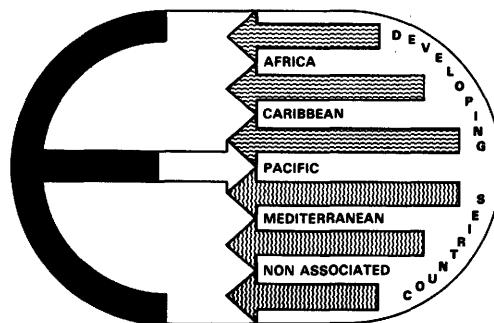
range of articulated, semi and draw bar trailers, accommodation units, agricultural equipment, mobile workshops, bus and coach bodies plus steel fabrication, wishes to contact ACP companies with an interest in this field, with a view to establishing joint ventures in manufacturing.

The Company is open to all types of co-operation.

A Belgian offer Electric motors**Ref. 83/9a**

A Belgian company specialized in this field is interested in implementing a project for the repair of electric motors in an ACP country. The workshop envisaged in the project would have the annual capacity to repair around 1 000 AC or DC motors with power ranging between ½ HP and 75 HP. An estimated investment of 0.75 million US \$ would be required. The Belgian company is open to all types of cooperation.

Operational summary of EEC-financed development schemes



OPERATIONAL SUMMARY No. 14 – January 1983

(position as of 18 December 1982)

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) and Lomé II (31 October 1979), 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 recipient 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:

Mr. Franco Cupini
Directorate General for Development
Commission of the European Communities
(ARCH.25/1-1)
200, Rue de la Loi
B-1049 Brussels

who will pass on requests for information to the services in charge of projects.

ACP STATES

★ Denotes new projects

BAHAMAS

Food technology laboratory. Resp. Auth.: Ministry of Agriculture and Fisheries, Nassau. 0,800 mECU. Establishment of first food technology laboratory in the Bahamas. Gross area 520 m² consisting of a chemical and microbiological laboratory, pilot processing plant, store rooms and offices. Building construction: direct agreement. Equipment and fittings: int. tender. TA: two food technologists specialist in processing and in standards and quality control. Contracts: in '83. Project in execution. 4th EDF.

BARBADOS

Trade Promotion Programme. Resp. Auth.: Barbados Export Promotion Corporation. 0.175 mECU. T.A., Trade promotion, Training, Research. Date decision October '82. 5th EDF.

BENIN

Djougou-Porga road. Resp. Auth.: Ministère des Travaux Publics. Intermittent road improvements over 180 km. Economic study: SEDES Consultant (F). Technical study: BELLER Consultant (D). 4th EDF.

Dassa-Parakou road. Resp. Auth.: Ministère des Travaux Publics. 0.7 mECU. Rein-statement and asphaltting of the road (210 km). Economic study: Technosynthesis (I) and Carrara (ACP). 4th EDF. Works 5th EDF.

Upgrading of health service infrastructure in Porto Novo Hospital. Resp. Auth.: Ministère de la Santé Publique. Porto Novo: renovation and construction of the hospital building and equipment. New technical and architectural studies to be prepared. Short list done. 4th EDF.

Parakou polytechnical complex. Resp. Auth.: Ministère de l'Enseignement Moyen, Général, Technique et Professionnel. Total estimated cost 6.9 mECU. Construction of 8 000 m² of pedagogical and administrative buildings and hostels. Supplies and equipment. Technical and architectural study: Arch. VINOUE (Local). Project on appraisal. Date foreseen for financial decision 1st half 84. 4th EDF.

Cotonou maternity hospital. Resp. Auth.: Ministère de la Santé Publique. ±1 mECU. Works: Acc. tender. Equipments: int. tender in '82 or '83. Date foreseen for financial decision: 1st quarter '83. 4th EDF.

Continuation and extension of fishery development project. Resp. Auth.: Ministère des Fermes d'Etat, de l'Elevage et de la Pêche. 1.7 mECU. T.A.: C.T.F.T. (F). Project in execution. 5th EDF.

Livestock development in the Borgou region. Resp. Auth.: Ministère des Fermes d'Etat, de l'Elevage et de la Pêche. Numeri-

cal and stabilizing cattle improvement for meat production increase. Study on hand: SCET International (F). Project on appraisal. 5th EDF.

Geological mapping and mining research between 9th parallel and Ocean. Resp. Auth.: Ministère de l'Industrie et de l'Artisanat. 3.5 mECU. National mineral resources development. Drawing up a geological chart, surveys, supplies. Project on appraisal. 5th EDF.

Rural Hydraulics. Resp. Auth.: Ministère de la Santé Publique and Ministère des Travaux Publics. Estimated cost 4.5 mECU. Water points. Establishing a maintenance service. Nationals training. Works, supplies and T.A. Int. tender for wells and supply of pumps launched August '82. Project in execution. 5th EDF.

BOTSWANA

Trade promotion. Resp. Auth.: Ministry of Commerce and Industry — Trade Promotion Unit (TPU). 1.1 mECU. TA, marketing studies, training. Date financial decision October '82. 5th EDF.

★ **Villages Water Supplies.** Resp. Auth.: Ministry for Mineral Resources and Water Affairs. Planning Study; short-list not yet drawn up. Project on appraisal. 5th EDF.

BURUNDI

Consolidation of tea production. Resp. Auth.: Ministère du Plan. 8.9 mECU. To increase productivity and to improve quality production of tea projects previously financed. TA foreseen for 6 years, '81 to '86: A.H.T. (D). Crop inputs: int. tender '82 to '84. Fertilizer: int. tender launched August '82. 4th EDF.

Institut Universitaire de Sciences de l'Education (IUSE). Resp. Auth.: Ministère de l'Education Nationale — 0.7 mECU. Construction and equipment of educational buildings (general teaching classes, laboratories, workshops). Architectural and technical studies: TETRA Consultants (Lux). Evaluation study; DURIAU (B). Project on appraisal. 4th EDF.

Rural development of East Mpanda. Resp. Auth.: Ministère de l'Agriculture. Development of 5 950 ha of land — irrigation, construction of a road network, socio-economic infrastructure, for a population of 5 320 families (of which 3 835 are to be installed). Duration 7 years. Estimate 50 mECU. Cofinanced project. Foreseen funding: IFAD — Local — AFD — OPEC — PAM. Project in execution. Discussion on EDF participation. 5th EDF.

High altitude foodcrop production. Resp. Auth.: Ministère de l'Agriculture. First phase (4 years), estimate 8.3 mECU. Cofinanced project. Production of selected seeds, their distribution and commercialization of surplus products, fertilizer and plan-

health products, training. Foreseen funding: Local 0.4 mECU — USAID 4.1 mECU — EDF 3.8 mECU. Int. tender 1st quarter '83. T.A.: short-list, already drawn up. Project in execution. 5th EDF.

Livestock development project. Resp. Auth.: Ministère de l'Agriculture. Estimated Cost: ±1 mECU. Supply of equipment and T.A. Study: SEDES Consultant (F). Project on appraisal. 4th EDF.

Remera tea factory. Resp. Auth.: Ministère du Plan. Tea factory building for 600-700 tons/year. Project stage: identification. 5th EDF.

Tora region electricity supply. Resp. Auth.: REGIDESO. Estimated Cost ±3 mECU. Construction of medium voltage electric lines. Int. tender foreseen end 82, beginning 83. Date foreseen for financial decision March 83. 5th EDF.

Bujumbura naval ship yard. Resp. Auth.: Ministère des Transports. Study on hand by I.P.G. (D). 4th EDF.

Rwegura. Hydro-electric power station. Resp. Auth.: Ministère de l'Energie des Mines et des T.P. Estimated total cost 71 mECU. EDF part estimated at ±8 mECU. Foreseen cofundings with KFW (D), CCCE (F), BAD, Kuwait Funds. EDF part for electromechanical equipment. Prequalification launched November 83. Int. tender in 1st half '83. Date foreseen for financial decision 1st half 83. 5th EDF.

Kitaba-Gihofi road. Resp. Auth.: Ministère des Travaux Publics. Estimated cost 9 mECU. Asphaltting of the road. 28.5 km. Date foreseen for financial decision January '83. Works: int. tender launched December 82. 5th EDF.

CAMEROON

Douala-Yaoundé road. Resp. Auth.: Ministère de l'Equipement. Construction of a modern road and new bridge (±311 m) over Dibamba-river. Estimated cost: 220 mECU. Cofinancings: Af.D.B. ABEDIA, FRANCE, EDF, NETHERLANDS, KUWEIT, IDB, WORLD BANK, CANADA. Local. EDF: part for the bridge. Supervision of work financed by non EDF donors. Works: int. tender launched in August '82 for the bridge. Date foreseen for financial decision February 83. 4th and 5th EDF.

Transcam — realignment of Eseka-Maloume railway. Resp. Auth.: Office des Chemins de Fer Transcamerounais (OCFT). Geotechnical study: Coyne et Belier (F). Economic Study: Sofrerail-OCCR Inter Co (F). 4th EDF. Works, 5th EDF with cofinancing. Estimated cost: ±120 mECU. Works: int. tender with prequalification foreseen, 1st quarter '83. Prequalification launched November 82.

Rural development in the Benoué upper valley. Resp. Auth.: Ministère de l'Agriculture and Ministère de l'Urbanisme et de l'Ha-

bitat. (Mission de développement de la Benoué - Garoua). Estimated total cost 22.4 mECU. EDF 12.880 mECU, France 1 mECU. Local 7 mECU. Strengthening, continuation and extension current operations. T.A.: NEDECO (NL). Supplies: int. tender launched August '82. Project in execution. 5th EDF.

Rural development in Logone and Chari departments. Resp. Auth.: Ministère de l'Agriculture. (SEMRY). Continuation and extension current operation, study on hand: Hydroplan (D) - 5th EDF.

Trade promotion programme. Resp. Auth.: C.N.C.E. 0.650 mECU. Organisation and improvement of the production. T.A. to the C.N.C.E., short list already drawn up. 5th EDF.

CAPE VERDE

Sal international airport improvement. Resp. Auth.: Ministère des Transports et Communications. Technical study financed by Italy. Partial financing envisaged. Project stage: identification. 5th EDF.

Underground water research in the Praia region. Resp. Auth.: Secretariat du Plan. Estimated cost \pm 1 mECU. Study: Administration. Date foreseen for financial decision, 2nd quarter '83. 5th EDF.

Praia water supply and sewerage. Resp. Auth.: Secretariat au Plan. Estimated cost \pm 7.5 mECU. Study on hand: Bureau W.P.W. (D). Date foreseen for financial decision, 1st quarter '83. Project on appraisal with Kuwait Fund. 5th EDF.

Civil works for laboratory construction. Resp. Auth.: Secretariat au Plan. Estimated cost 0.066 mECU. Construction of a laboratory for soil and rock mechanics in St. Jorge. Date foreseen for financial decision 1st quarter '83. 4th EDF.

Cooperative development. Resp. Auth.: Secretariat au Plan. Estimated cost 0.347 mECU. EDF 0.310 mECU. Works, equipment and T.A. Date financial decision September '82. 5th EDF.

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). Date foreseen for financial decision: 4th quarter '82. 5th EDF.

College of Education in Bangui (Lycée d'application de l'E.N.S.) Resp. Auth.: Ministère de l'Education. Estimated total cost 1.2 mECU. Building and equipment of the school. Date foreseen for financial decision, 4th quarter '82. 5th EDF.

Damara-Sibut Road. Resp. Auth.: Ministère de Travaux Publics. 8.960 mECU. Repairing and maintenance (\pm 109 kms). Works: int. tender conditional upon provisional finance launched end of March '82. Date financial decision, September '82. Supervision of works: RAUSCH (D). 5th EDF.

Rural development in the coffee region. Resp. Auth.: Ministère de l'Agriculture. (AD-ECAF). 9.7 mECU. Continuation current operations. T.A.: Short-list already drawn up. Date financial decision October '82. 5th EDF.

Livestock development at Ouaka and Basse Kotto. Resp. Auth.: Ministère de l'Agriculture et de l'élevage. 3.4 mECU. Works, supply of: vehicles, equipment, furniture and T.A. Works, by direct labour, supplies: int. tender. T.A: direct agreement. Date foreseen for financial decision, January 83. 5th EDF.

Rural development in the cotton area. Resp. Auth.: Ministère de l'Agriculture (SO-CADA). Cofinanced project with I.D.A. and France. Study done with I.D.A. funding. Project evaluation on the way. Project on appraisal. 5th EDF.

CHAD

Rural interventions in the sudan area. Study on the way by A.D.C. (UK). Project stage: identification. 5th EDF.

COMOROS

Economical and technical study to assess harbour infrastructure in Grande Comore and in Mohéli. Resp. Auth.: Ministère des Travaux Publics. NEI-D.H.V. (NL). Project on appraisal. 5th EDF.

Maize development project. Resp. Auth.: Ministère de l'Agriculture. Estimated Cost 1.5 mECU. Works, supplies and T.A. Project on appraisal. 5th EDF.

Fomboni water supply. Resp. Auth.: Ministère du Plan. 0.700 mECU. Renovation of installation and drinking water network in the chef-lieu of Moheli island. Works by direct labour. Supply of equipment: int. tender or acc. proc. 1st half 83. 5th EDF.

CONGO

Sibiti-Bihoua-Loudima Road. Resp. Auth.: Ministère des Travaux Publics. Estimated Cost: 25 mECU. Reconstruction of the section Sibiti-Bihoua (20 km) and construction of a new road Bihoua-Loudima (57 km). Works: contract on a warding. Supervision of works: short-list not yet drawn up. Date foreseen for financial decision 1st quarter 83. 5th EDF.

Sanitary and social actions. Resp. Auth.: Ministère de la Santé Publique. Study and construction of the Ouesso hospital and construction of the Ecole de formation paramédicale et médico-sociale J.J. Loukabou (Brazzaville). Appraisal of the project after sanitary programming and technical studies. Project stage: identification. 5th EDF.

DJIBOUTI

Support to the livestock service for anti-ticks baths network settlement. Resp. Auth.: Ministère de l'Agriculture. 1.123 mECU. Date financial decision September '82. 5th EDF.

Medical equipment for the Peltier Hospital. Resp. Auth.: Ministère de la Santé. 0.632 mECU. Supply and transport. Project on appraisal. 5th EDF.

Djibouti water supply. Resp. Auth.: Ministère du Plan. 1 mECU. Improvement of production (EDF part). Pump station rehabilitation and reinstatement of the installations' management. (CCCE part). Works and supplies. Date foreseen for financial decision 1st quarter '83. 5th EDF.

DOMINICA

Reinstatement of Pont Casse-Castle Bruce Road - Surfacing of 2 coastal roads East and West. Resp. Auth.: Public Works Department. Estimated cost 2.5 mECU. Study on the way: Nicolas O'Dwyer (Irl.) Project stage: identification. 5th EDF.

★ **Crop diversification project.** Estimated cost 0.547 m ECU. Continuation of essential oils programme. Initiating floriculture programme. Works, supplies and T.A. Project on appraisal. Date foreseen for financial decision January 83. 5th EDF.

EQUATORIAL GUINEA

★ **Rural interventions.** Project stage: identification. 5th EDF.

ETHIOPIA

Health project. Resp. Auth.: Ministry of Health. 15.400 mECU. Construction and equipping of two rural hospitals and a school for laboratory technicians in Addis Ababa. Works: on hand. Equipment: int. tender in 83-84. 4th EDF.

Fishery Development. Resp. Auth.: Fisheries Development and Marketing Corporation. 2.078 mECU. EDF 1.513 mECU, Local 0.565 mECU. Supply of equipments, facilities and T.A. Supplies: int. tender in '82 and '83. T.A.: GOPA (D). Project in execution. 4th EDF.

Amartis river diversion. Resp. Auth.: E.EL.P.A. Ethiopian Electrical Power Authority. Estimated cost: 10 mECU. Dam and tunnel. Study and T.A. Works: int. tender launched in July '82. Date foreseen for financial decision January '83. 5th EDF.

Electrical tariffication study. Resp. Auth.: E.EL.P.A. Short-list already drawn up. Project on appraisal. 5th EDF.

Coffee improvement (phase 2). Resp. Auth.: Ministry of Coffee and Tea Development. 27.2 mECU. Works, supplies and T.A.: Short-list already drawn-up. Int. tender for fertilizer, insecticides and equipment in '83. 5th EDF.

FIJI

Central Division Roads. Resp. Auth.: Government of Fiji. Construction of a modern earth road. Estimated cost 2 mECU. Date foreseen for financial decision January '83. 5th EDF.

★ **Trade promotion.** Resp. Auth.: Economic Development Board (EDB). T.A. and training. Date foreseen for financial decision February 83. Project on appraisal. 5th EDF.

GABON

Reafforestation (improvement of the reafforestation brigade's activity). Resp. Auth.: Ministère de l'Agriculture. EDF part for renewing and completing equipment. Project stage: identification. Study: C.T.F.T. (F). 5th EDF.

Mining and geological inventory in 3 sections. Resp. Auth.: Ministère des Mines et du Pétrole. Direction Générale Mines et Géologie. Section 1: Radar survey done. Section 2: Aerial-geophysical survey: awarding of contract on the way. EDF-GABON. Section 3. Soil prospection (FAC-GABON). EDF part 5th EDF, 3.212 mECU. 5th EDF.

Small-fishery centre in Owendo. Resp. Auth.: Ministère, des Eaux et Forêts. Total cost 2.450 mECU EDF 1.900 mECU. Italy 0.425 mECU, local 0.125 mECU. Infrastructure for handling facilities for boats and fish products, marketing and management. T.A. and supervision of works, direct agreement on 1st quarter '83. Date financial decision December '82. 5th EDF.

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, 2nd half 1982. 4th EDF.

Banjul sewerage and drainage project. Resp. Auth.: Ministry of Works. Estimated Cost: ± 15 mECU. Cofinancings: BAD/FAD 7.3 mECU, EDF 3.5 mECU, KFW (F.R.G.) 3.3 mECU, Local 0.9 mECU. Construction of a sewerage and drainage network, 2 pumping stations. T.A. and training. T.A.: GITEC (D). Works: int. tender, 4th quarter 1982. 5th EDF.

Rural vocational training, phase 2. Resp. Auth.: National training board. 0.500 mECU. Supply of pedagogical equipment. Date foreseen for financial decision 4th quarter '82. 5th EDF.

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.

Aveyme livestock development. Resp. Auth.: Ministry of Agriculture. 3.2 mECU. Works, supply of vehicles and equipment, T.A.: short-list already drawn up. 5th EDF.

GRENADA

Eastern Main Road Rehabilitation Phase 2. Repairing and strengthening of a section of the circular road. Estimated cost 1.350 mECU. Project on appraisal. 5th EDF.

Hillsborough Jetty. Resp. Auth.: Ministry of Public Works. 0.357 mECU. Construction of a jetty for goods and passenger handling. 5th EDF.

GUINEA

Land development in Kankan and Labé regions. Phase II. Resp. Auth.: Ministère de l'Agriculture et des F.A.P.A. Valuation: Mac Donald and Partners (UK). Project on appraisal. 5th EDF.

★ **New energy research and test.** Resp. Auth.: Ministère de l'Energie et du Konkourè. Study on hand. 5th EDF.

Dairying in Guinea. Resp. Auth.: Premier ministre 3.5 mECU. Dairying improvement for population nourishment. Construction of a milk reconstitution unit. Project on appraisal. 4th EDF.

Cotton development. Resp. Auth.: Ministère de l'Agriculture, des Eaux, Forêts et FAPA. Rural infrastructure, supply of rural inputs, equipment, vehicles and T.A. Project on appraisal, 5th EDF.

Town planning and construction of council houses. Resp. Auth.: Ministère de l'Urbanisme et de l'Habitat. Estimated cost 9 mECU. Buildings, supply of equipment and T.A. Project on appraisal. 5th EDF.

T.A. to Ministère des P.M.E. et de l'Artisanat. Resp. Auth.: Ministère de P.M.E. et de l'Artisanat. 5 mECU. One expert specialised in industrial work during 36 months and one expert for bank management. Project on appraisal. Date foreseen for financial decision January 5th EDF.

GUINEA BISSAU

Improvement of small scale fishing in Cacheu. Resp. Auth.: Secretariat d'Etat pour la pêche. 1.970 mECU. Improvement of infrastructure and equipment. Cold factory. Works: Acc. tender. Supplies: int. tender launched in December 82. T.A.: IDRO-CONSULT (I). Project in execution. 4th and 5th EDF.

Bafata Gabu rural development. Resp. Auth.: Commissariat Général au Développement Rural. EDF 6.8 mECU, F.A.C. 4 mECU. Crop production development (cotton, peanut, cereals) by harnessing cultivation, rural credit and correct crop trading. Supply of crop inputs by int. tender in '82 and '83. T.A.: by C.F.D.T. (F). 5th EDF.

Rio Campossa Bridge. Resp. Auth.: Commissariat d'Etat aux Travaux Publics. Bafata-Bambadinca Road. Works, supply may be, T.A. Study STINCEM (I). Project on appraisal. 5th EDF.

Health infrastructures. Resp. Auth.: Commissariat d'Etat aux Travaux Publics. Es-

timated cost 1.9 mECU. Construction and equipment of 2 district hospitals, 4 health centres and staff-housing. Supply of equipment: int. tender on 1st half 83. T.A.: Ass. Engineers (I). 5th EDF.

North-East forestry development. Resp. Auth.: Commissariat général au développement rural. Study on the way by Atlanta (D). 5th EDF.

Rural hydraulics. Resp. Auth.: Ministère des ressources naturelles. Estimated cost 1.4 mECU. Construction of big diameter wells (1.5 m) about 120 wells in the GABU region. Project on appraisal. Date foreseen for financial decision 2nd quarter 5th EDF.

GUYANA

East Bank Berbice rural development programme. Resp. Auth.: Ministry of Agriculture. Works: feeder roads, infrastructure. Supply of fertilizers and equipments. T.A. Project stage: identification. 5th EDF.

Faculty of Agriculture. Estimated cost 1.100 mECU. Construction, supply of equipment and supervision of works. Technical study and tender dossier: Rodriguez (ACP). Project on appraisal. 5th EDF.

Rehabilitation of sewerage and water supply systems of Georgetown. 1.6 mECU. Laying sanitation pipes, construction of water supply wells. Supplies and T.A. Date financial decision October '82. Supply: int. tender foreseen 1st quarter '83. 5th EDF.

★ **Georgetown water supply improvement.** Drinking water production. Works and equipment. 0.400 mECU. Project on appraisal. 5th EDF.

Fishing port and fish-market in Georgetown. Building of a new port and fish market in Georgetown. 2.700 mECU. Date foreseen for financial decision 1st quarter '83. 5th EDF.

IVORY COAST

Trade promotion programme. Resp. Auth.: Centre Ivoirien du commerce Extérieur (CICE). EDF part 2.325 mECU. Local 8 mECU. EDF: vocational training actions (seminars and training) and products promotion (studies, marketing) and monitoring. T.A.: foreseen until end '83 for european offices and until end '85 for CICE in Abidjan. T.A.: direct agreement after prequalification. 5th EDF.

JAMAICA

Assistance to Veterinary Services. Resp. Auth.: Ministry of Agriculture. 1.5 mECU. Works: construction of office by direct labour, supply of equipments, vehicles, medical products, int. tender or direct agreement. T.A.: training by direct agreement. Date foreseen for financial decision, February 83. 5th EDF.

Board of Revenue - Revenue Information System. Resp. Auth.: Govt of Jamaica. 3.26 mECU. Reorganisation of the adminis-

tration and preparation of the Revenue Information System. Supplies and T.A. Date foreseen for financial decision January '83. Supervision of project : X-TRA Consult. (B). 5th EDF.

KENYA

Machakos integrated development programme. Phase II. Resp. Auth.: Ministry of Economic Planning and Development Valuation study on the way: Overseas Dev. Int. (UK).

Kenya Trade Promotion. Resp. Auth.: Kenya External Trade Authority. 1 mECU. T.A. for sales and marketing missions, provision of equipment and materials for the Training Division. Project in execution. 5th EDF.

Eldoret Polytechnic. Estimated cost. 6 mECU. Construction, supply of equipment (pedagogical) and T.A. Preliminary Plan Study: Hughes & Polkinghorne (ACP). Project stage: identification. 5th EDF.

Veterinary Investigation Laboratory Mariakani. Adm. Resp.: Ministry of Livestock Department. Veterinary Department. 3.4 mECU. Construction of a veterinary investigation laboratory. Supply of materials and equipments. T.A. Materials and equipment: int. tender 1st quarter '83. T.A.: direct agreement. 5th FED.

Turkwell hydro-electric project. Resp. Auth.: Ministry of Energy. Feasibility study to be done. Project stage: identification. 5th EDF.

KIRIBATI

Rehabilitation of the South Tarawa telephonic network. Resp. Auth.: Controller of Telecommunications of the Ministry of Communications and Works. 2.894 mECU. Works by direct labour. Supply of equipment int. tender launched December 82. Supervision of works: CROWN Agents. (UK). 4th EDF.

LESOTHO

Maseru airport. Resp. Auth.: Ministry of Transport and Communication. Estimation 50 mECU. Provision of a modern international airport 15 km south of Maseru. Foreseen funding: Lesotho - Saudi Fund - Kuwait Fund - ABEDA 4.4 mECU - OPEC - Abu Dhabi - ADB. EDF and Finland. - Project on appraisal. 4th and 5th EDF.

Feasibility study for the project: "Lesotho Highland Water Scheme". Resp. Auth.: Ministry of water resources, energy and mines. Estimated cost ± 5 mECU. Int. tender foreseen on 2nd half '82. After pre-qualification. Prequalification on the way. 5th EDF.

Mohale's Hoek - Quthing road. Resp. Auth.: Ministry of Transport and communications. Reinstatement of a road. 50 km. Estimated cost ± 15 mECU. EDF contribution estimated for ± 8.5 mECU. Cofinancing needed. Project stage: identification 5th EDF.

Trade and Tourism Promotion Programme. Resp. Auth.: Ministry of Trade, Tourism and Industry - Trade Promotion Unit (TPU) and LNTO (Lesotho National Tourism Office). 0.714 mECU. Studies, T.A. missions, marketing. Date foreseen for financial decision January '83. T.A. for S.M.E.: short-list already drawn up. 5th EDF.

LIBERIA

Coffee and cocoa development project at Zwedru and Plahn. Resp. Auth.: Ministry of Agriculture 5.7 mECU, EDF 2.9 mECU, Local 2.8 mECU. To develop 980 hectares of robusta coffee and 1 320 hectares of cocoa in Grand Gedeh and Sinoe countries. Works by acc. tender. - Supplies by int. tender in '83. Project in execution. 4th EDF.

Buto oil palm. Resp. Auth.: Ministry of Agriculture. Study on the way by I.R.H.O. (F) for phase 2. 4th and 5th EDF.

★ **Port Development Study South East - Phase II and III.** Resp. Auth.: National Port Authority. Continuation of feasibility study. Short-list to be drawn up on 1st quarter '83. 4th EDF.

MADAGASCAR

Rural hydraulic. Resp. Auth.: Ministère de l'Agriculture et de la Réforme Agraire. 7 mECU + Local. Irrigation improvement for traditional rice-plantations in the Hauts Plateaux. Works by direct labour in '81 up to '85. Supply of means of transport and equipments: int. tenders launched in June '82. T.A.: short-list already drawn up. Project in execution. 5th EDF.

Bridges over RN 5A, Isezy-Vohemar. Resp. Auth.: Ministère des Travaux Publics. Estimated cost ± 13.7 mECU. Reinstatement and construction of bridges. (15). Int. tender launched July '82. Supervision of works: short-list not yet drawn up. Date foreseen for financial decision 1st quarter 83. 5th EDF.

Supply of pharmaceutical and medical products and analysis of the industrial sector rehabilitation. Resp. Auth.: Gouvernement de Madagascar. 2.165 mECU. Date foreseen for financial decision 2nd half '82 or 1st quarter 83. 5th EDF.

Urgent programme. Resp. Auth.: Ministère de la production agricole et de la réforme agraire. Damage from cyclonic depressions. Rice-growing areas 3 mECU. Works by direct agreement or direct labour. Supervision of works: Hydroplan (D). Rehabilitation study: HUNTINGS (UK) Sambava coconut palm plantations: works by direct labour. 1.2 mECU. 5th EDF.

MALAWI

National rural development programme, phase I Resp. Auth.: Ministry of Agriculture. Integrated rural development programme financed in parallel with other donors. Infrastructural improvement, roads, housing, boreholes. EDF 7.9 mECU, UK 9.0 mECU, Germany 5.1 mECU, IBRD

14.6 mECU, CIDA 2.0 mECU, USAID 0.6 mECU, Local 7.5 mECU. Int. tender for vehicles and equipment launched end of July '82. TA: Huntings Consultant (UK). Project in execution. 4th EDF.

Blantyre-Mwanza road. Resp. Auth.: Ministry of Works. Reinstatement and asphaltting of the road (± 95 km). Economical study: Hoff & Overgaard Consultant (DK). Technical study: COWI CONS (DK). Project on appraisal. 4th EDF.

Dairy cattle development. Resp. Auth.: Ministry of Agriculture. Cross local bovine breed with european dairy breeds. Project on appraisal. 5th EDF.

Improvement of district hospitals and health centres. Resp. Auth.: Ministry of Works. 3.8 mECU. Building of small district hospitals and health centres. Works, supplies and T.A. Project on appraisal. Date foreseen for financial decision February 83. 5th EDF.

MALI

Strengthening of sanitary infrastructure in the Nioro region. Resp. Auth.: Ministère de la Santé et des Affaires Sociales et Ministère des Transports et T.P. 2.570 mECU. Buildings, equipments, training. Architecturals and technicals studies: GOUSIER (F). 4th EDF.

Sevare-San road repairing. Resp. Auth.: Ministère des Transports et Equipment. Complementary study: RAUSCH (D). Project on appraisal. 4th EDF. Works by int. tender. Date foreseen for financial decision 2nd quarter 83. 4th and 5th EDF.

Rural hydraulics. Resp. Auth.: Ministère du Développement Industriel et du Tourisme. Direction de l'Hydraulique. Estimated cost: 3.4 mECU. Water-points. Study: situation of the hydrolic sector in the project area: UNIGEO (I). Project on appraisal. Date foreseen for financial decision 2nd quarter 83. 5th EDF.

Action programme for Mali development. Resp. Auth.: Ministère du Plan. 2.6 mECU. Actions for rural sector, for tobacco, for "l'office du Niger", seed and crop protection, livestock, human hydraulics, public works and transport. Works, supply of 6 solar pumps and 4 wind pumps, reinstatement of 2 feeder roads and 1 bridge. Works: acc. tender. Supplies: int. tender or direct agreements. Date financial decision September '82 except. for rural hydraulics roads and bridge. Decision foreseen on January '83. 5th EDF.

★ **Renovation of the Badalabougou school-complex in Bamako.** Resp. Auth.: Ministère de l'Éducation. 3 mECU. Works and T.A. Works, acc. tender 2nd half '83. T.A.: direct agreement. Date foreseen for financial decision January or February '83. 5th EDF.

MAURITANIA

Extension of Kaédi regional hospital. Resp. Auth.: Ministère de l'Équipement.

1.925 mECU. Construction, equipment and TA for Kaedi hospital (100 beds). Works: on the way. Medical-technical equipment int. tender, 2nd half '83. Project in execution. 4th EDF.

Monitoring for small irrigated areas. Resp. Auth.: Ministère du Développement Rural. Estimated cost: 3 mECU. T.A. and monitoring, direct agreement. Supply of agricultural input and pumping equipment: int. tender, in '83. Works by direct labour. Project in execution. 5th EDF.

Regeneration of Gum-tree plantations. Resp. Auth.: Ministère du Développement Rural. Estimated Cost: 1.5 mECU. Feasibility study: Bureau COURTOY (B). Works. T.A. and supplies. Project on appraisal. 5th EDF.

Small dams construction in the Hodhs region. Resp. Auth.: Ministère du Développement rural. Estimated cost 3.5 mECU. Study on the way Binnie and Partners (UK). Project on appraisal. 5th EDF.

Nouakchott - Rosso Road. Resp. Auth.: Ministère des Travaux Publics. Estimated cost 5 mECU. Repairing and reinstatement. Project on appraisal. 5th EDF.

Livestock development in the South-East. Resp. Auth.: Ministère du Développement Rural. 3.943 mECU. Works, supplies and T.A. Supply of vehicles, equipment and veterinary products, int. tender 2nd half '82. T.A.: short-list already drawn up. Works by direct labour. 5th EDF.

Regional capitals water supply. Resp. Auth.: Direction de l'Hydraulique. Estimated cost 2.5 mECU. Studies: deep water research and towns water supply. Short-list not yet drawn up. 5th EDF.

Nouakchott Wharf. Resp. Auth.: Ministère de l'Équipement et des Transports. Estimated cost 1.6 mECU. Maintaining, equipment and repairing. Project stage: identification. 5th EDF.

MAURITIUS

Mauritius housing project. Resp. Auth.: Mauritius Housing Corporation and the Ministry of Housing, Lands and Town and Country Planning. 3.2 mECU. Financing (for low income households) of approximately 1 250 housing units: Infrastructure work for urbanisation and service plots: int. tender, in '82. Consultancy service: — APFEL (D). 4th EDF.

Development of Ile Rodrigues. Resp. Auth.: Ministry of Agriculture. Development centred on agricultural production. Economical and technical study, on the way; VINK (NL). 5th EDF.

Investments and trade promotion. Resp. Auth.: Ministry of Trade and Industry. (Investment Promotion Unit and Export Promotion Unit). 1.610 mECU. Contracts by direct agreements. Short-list already drawn up. 5th EDF.

Strengthening of the sanitary infrastructure. Resp. Auth.: Ministry of Health.

3.150 mECU. Reinstatement and extension of 3 hospitals and 2 health centres. Supply of equipment, int. tender in '83. 5th EDF.

2 maize drying units. Resp. Auth.: Ministry of economic planning and development. 0.850 mECU. Construction and equipment of the 2 units for treatment of 1.500 T each of maize grown in alternating rows with sugar-cane. Works and supplies, int. tender with competition 1st quarter '83. Date foreseen for financial decision February '83. 5th EDF.

NIGER

Rural Development of Zinder Department. Resp. Auth.: Ministère de l'Agriculture. Estimated cost 7.6 mECU. Project on appraisal. 5th EDF.

Rural Development of Bodeguicheri Department. Resp. Auth.: Ministère de l'Agriculture. Estimated cost 3.4 mECU. Project on appraisal. 5th EDF.

Air Valley development. Resp. Auth.: Ministère de l'Agriculture. Estimated cost 2.8 mECU. Hydro-agricultural works. Project on appraisal. 5th EDF.

Rural hydraulics. Resp. Auth.: Ministère de l'Hydraulique. 300 drills in the Zinder region. Hydrogeological study and tender dossier: Bureau GKV (D). Project on appraisal. Date foreseen for financial decision 2nd quarter 83. 5th EDF.

Kolo water supply. Resp. Auth.: Ministère de l'Hydraulique. Estimated cost 1 mECU. Study on the way: G.K.W. (D). Project on appraisal. Date foreseen for financial decision 2nd quarter 83. 5th EDF.

Animal disease control. 2nd phase. Resp. Auth.: Ministère du Développement Rural. 1.840 mECU. Supply of equipment and T.A. Project on appraisal. 5th EDF.

★ **Kandadji Dam.** Resp. Auth.: Autorité du barrage de Kandadji. (ABK). Cofinancing with UNDP, FAC, EDF and Local. First part of the detailed technical studies. EDF and Local part: complementary exploring study: short-list in process of drawing up. 5th EDF.

NIGERIA

Hydraulic development. Resp. Auth.: Ministry of Education. Estimated Cost: 2.350 mECU. Equipment for Technological Institute of Kaduna. T.A.: Bureau M.R.T. (UK and Nigeria). Supply of drilling equipment; int. tender in '82. Project on appraisal. 5th EDF.

★ **Kaduna afforestation project.** Resp. Auth.: Federal Department of Forestry. Estimated Cost 10 mECU. Feasibility study: EUROCONSULT (NL). Project on appraisal. 5th EDF.

PAPUA NEW GUINEA

Foodstuffs production on the south coast. Resp. Auth.: Department of Primary Industry. E.D.F. part 3 mECU. Development

of seasonal cultivation and marketing. Technical and economic studies. Definition of the project: Produce Studies Ltd. Consultant (UK). Project on appraisal. 4th EDF.

Momote airport. Resp. Auth.: Department of Transport and Civil Aviation. Estimated cost 1.000 mECU. Reconstruction and sealing of runway. Date foreseen for financial decision January '83. 5th EDF.

RWANDA

Bugesera water supply. Resp. Auth.: Ministère du Plan. Construction of a drinking-water network in Bugesera. Project on appraisal. 5th EDF.

Development of Zaire Nil Crest. Resp. Auth.: Ministère de l'Agriculture 13.8 mECU. Développement of agricultural production and social-economic infrastructure. T.A.: INSTRUPA (D). Supply: int. tender in '83. Project in execution. 5th EDF.

Transmission-lines study in secondary centres. Resp. Auth.: Ministère du Plan. Economical and technical studies to be done. Short-list not yet drawn up. 5th EDF.

IPN of Ruengeri - vocational school. Resp. Auth.: Ministère de l'Éducation. Estimated cost 0.970 mECU. Works, equipments, expert's mission. Project stage: identification. 5th EDF.

Cyangugu-Butare Road. Resp. Auth.: Ministère des Travaux Publics. Estimated cost 74 mECU. Reinstatement and asphaltting of the exiting hearth road. (153 km). Co-financing: World Bank, BAD, Kuwait Fund, BADEA. Int. tender for works launched July '82 conditional upon provisional finance. Date foreseen for financial decision March 5th EDF.

Educational and handicraft integrated centres. Resp. Auth.: Ministère de l'Enseignement primaire et secondaire. Estimated cost ±2 mECU. Construction and equipment of 40 centres. Project on appraisal. 5th EDF.

Lines of credit for S.M.E. Resp. Auth.: Banque Rwandaise de Développement. 0.700 mECU. Development of the credit to the S.M.E. rurals with "Banque Populaire". Project on appraisal. 5th EDF.

Strengthening of the "public enterprises". Resp. Auth.: Ministère du Plan. Estimated cost 2.595 mECU. Creation of a central accountancy agency, training and control data. Supply of equipment for auditing and office and vehicles. T.A.: Short list already drawn up. 5th EDF.

Development of Préfecture de Butare. Priority actions. Resp. Auth.: Ministères du Plan et de l'Agriculture. Total estimated cost 11.765 mECU. EDF 10.400 mECU. Local 1.365 mECU. Actions to improve rural products, S.M.E., handicrafts and administration. Works by direct labour or direct agreement. Supplies and equipment, int. tender or direct agreement. T.A.: Short-list not yet drawn up. Date foreseen for financial decision December '82. 5th EDF.

ST LUCIA

Livestock development project. Phase 2. Resp. Auth.: Ministry of rural development. Estimated cost 0.860 mECU. Extension project zone. Works, supplies and T.A. Study: short-list already drawn up. Project on appraisal. 5th EDF.

ST VINCENT AND GRENADINES

★ **Livestock Development Project.** Resp. Auth.: Ministry of Agriculture. 0.415 m ECU. Works, equipment and supply of vehicles. Project on appraisal. 5th EDF.

SENEGAL

Increase of cereal-growth in S.O. Resp. Auth.: Ministère du Développement Rural. 4.68 mECU. Preparatory study: SODEFITEX (Senegal). Hydro-agricultural improvements in small areas. Works by direct labour. Supply of crop inputs and pumping equipment: int. tender in '83. Project in execution. 5th EDF.

New energy research and test in rural region. Resp. Auth.: Secretariat 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: short list already drawn up. Equipments: int. tender in '83. Project on appraisal. 5th EDF.

Gum-tree plantation. Resp. Auth.: Ministère du Développement Rural. Estimated cost 2.5 mECU. Works, supplies and T.A. T.A.: Deutsche Forstinventur Service (D). Project in execution. 5th EDF.

Sewerage of the "Gueule Tapée" district. Resp. Auth.: Direction Générale des Travaux Publics. Estimated cost 7 mECU. Construction of canalization and pipes for rain waters. Improvement of the sewerage network. Definition study and tender dossier: GEO PROGETTI (I). Project on appraisal. Date foreseen for financial decision 2nd quarter '83. 5th EDF.

Rural Hydraulics. Resp. Auth.: Ministère de l'Équipement. Directeur de l'Hydraulique. 1.5 mECU. Construction of 21 drills. Study for phreatic sheet and modalities for execution: UNIGEO (I). Project on appraisal. Date foreseen for financial decision February '83. 5th EDF.

Trade Promotion programme. Resp. Auth.: Centre Sénégalais du Commerce Extérieur. 1.083 mECU. Actions for productions, marketing and T.A. Contract: direct agreement or restr. tender. 5th EDF.

Renovation of "St. Louis Hospital" and of the health centre of Tambacounda. Resp. Auth.: Ministère du Plan et de la Coopération. Estimated total cost 3.725 mECU. EDF 2.825 mECU. Luxembourg 0.900 mECU. Works: acc. tender 2nd half '82. Supplies: int. tender in '83. Project in execution. Supervision of works: Simon et Christensen (Lux). 5th EDF.

Expenditures previously foreseen as participation of Govt. of Senegal for 3

projects financed on 4th and 5th EDF, charged on 5th EDF. 1.985 mECU. Complementary funding for the project: "Livestock development" 0.700 mECU. Complementary funding for the project "Construction and equipment of ENIE", 0.900 mECU. Complementary funding for the project "Handicraft promotion". 0.385 mECU. Project on appraisal. 5th EDF.

Small villager areas. (Podor). Resp. Auth.: Ministère du Développement Rural. Estimated cost 4.700 mECU. Hydra-agricultural improvement of 1000 ha in 20 small areas. Works: irrigation, tracks. Supply of motor-pumps. T.A.: Short-list already drawn up. 4th and 5th EDF.

Noirot Bridge at Kaolack. Resp. Auth.: Direction Générale Travaux Publics. Estimated cost 2.4 mECU. Existing bridge replacement with a new. T.A.: to prepare technical dossier for an int. tender with competition. Int. tender foreseen 1st half '83. T.A.: Bureau Obermeier (D). 5th EDF.

SEYCHELLES

Renovation of Victoria Hospital. Resp. Auth.: Ministry of Health. Estimated cost 6 mECU. EDF 2.4 mECU, ADB (African Dev. Bank) 3.6 mECU. Renovation and new constructions, supply of medical equipment. Project on appraisal. 5th EDF.

SIERRA LEONE

North-western integrated agricultural development project. Resp. Auth.: Ministry of Agriculture and Forestry. Four-year integrated programme to develop mangrove swamps, upland crops, coastal fishing, infrastructure. Estimated Cost: 6.03 mECU. EDF 4.9 mECU. Local 1.13 mECU. Works: acc. tender. Supplies: int. tender. T.A.: direct agreement. Project in execution. 4th and 5th EDF.

Koinadugu — Phase II. Resp. Auth.: Ministry of Agriculture and Forestry. Estimated total cost 8.370 mECU. EDF 7.5 mECU. Local 0.870 mECU. Buildings and housing, transport equipment, farm inputs, operation, maintenance, staff salaries. Date financial decision December '82. 5th EDF.

Support for existing educational institutions. Resp. Auth.: Ministry of Education. 2.050 mECU. Water and electricity supply and equipment for Njala University College, building and equipment of additional hostel accommodation at several teacher training colleges. Njala University: works for water supply, int. tender in 1982. Agricultural equipment: int. tender, in 1982. Teacher training colleges — building works: int. tender, in 1982. 4th EDF.

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). Date foreseen for financial decision 2nd quarter '83. 5th EDF.

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.: Short-list already drawn up. 5th EDF.

N'Jala University College Water Supply. Resp. Auth.: Sierra Leone Electricity Corporation (S.L.E.C.) Estimated cost 0.950 mECU. Water supply capacity of 1000 m³ per day. Pumping station, water tanks, network. Study to determine system: E. Davies and Ass. (UK). Works: acc. tender, launched 2nd half '82 upon provisional finance. Date financial decision October '82. 5th EDF.

Economical study of the Sambamba-Kabala Road. Short-list already drawn up. Project stage: identification. 5th EDF.

SOMALIA

Saakow rural experimental centre. Resp. Auth.: Ministry of Agriculture. Creation of an irrigated area (60 ha) with all facilities and equipment. Aim: agronomical experiments. Estimated total cost: 5.026 mECU. EDF: 4.950 mECU. Local 0.076 mECU. Works: 4 kms of tracks, pump station (180 l/s) electric power station (120 KVA). Supply of: agricultural equipment, 3 tractors, vehicles, furnitures. T.A.: Istituto Cerealicoltura (I) Land improvement works and estate infrastructure: contracts awarded. Supplies: int. tender 2nd quarter '83. Project in execution. 4th EDF.

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, Koweit 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 233 000 ha of irrigated agriculture in the Juba Valley, and energy to Mogadishu. Civil works: first int. tender during 1984. Transmission lines int. tender in 1984. Equipment: powerhouse main equipment and auxiliary equipment, int. tenders in 1985. Gates, valves, intake equipment, int tender in 1986. Study: 4th EDF. Works: 5th EDF.

Mogadishu Slipway. Resp. Auth.: Ministry of Planning. 3 or 4 mECU. Construction of a slipway and ship repair facilities in Mogadishu harbour. Feasibility study on the way: AVECO (NL). Date foreseen for financial decision: in '82. 4th EDF.

Mogadishu Dairy. Resp. Auth.: Ministry of Industry. Estimated cost 3.81 mECU. EDF 1.250 mECU. EIB 2.56 mECU. Rehabilitation of the existing dairy. Works, supply of equipment and T.A. Supplies, int. tenders 2nd quarter '82. T.A.: short-list already drawn up. 4th EDF.

Mogadishu Institute of Statistics. Resp. Auth.: Ministry of Public Works. Estimated cost: 0.800 mECU. Supply: int. tender in '83. Project on appraisal. 4th EDF.

Development of pheniculture (date-palm). Resp. Auth.: Ministry of Agriculture. Estimated cost 2 mECU. 1000 ha plantation in the North region. Supply of equipment, machines, inputs, rural monitoring. T.A. to define, may be French aid. Project on appraisal. 5th EDF.

Mogadishu water supply. Resp. Auth.: Ministry of Planning. Estimated total cost 38.5 mECU. EDF 5.34 mECU. Foreseen cofinancing, World Bank, Arab Funds et Local. New drills and strengthening of existing network. 2 int. tenders foreseen 1st quarter '83. Date financial decision September '82. 5th EDF.

Somalia Trade Promotion. Resp. Auth.: Ministry of National Planning. 0.670 mECU. Four independent components: development of supportive infrastructure and T.A. for frankincense, myrrh and gums. Identification of obstacles to livestock exports and study of livestock marketing. Participation in Trade Fairs. Training, short term consultancies. 5th EDF.

"Aula Magna" Mogadishu National University. Resp. Auth.: Ministry of Public Works. ±2.5 mECU. Project on appraisal. 4th EDF.

SUDAN

Jebel Marra rural development project. Resp. Auth.: Ministry of Agriculture, Food and Natural Resources. 15.043 mECU. EDF 11 mECU. Local 4.043 mECU. Agricultural extension and improvement or rural infrastructure (road improvement and maintenance, forestry programme, community development programme). Supplies: int. tender for fertilizers in 83. TA: Hunting Technical Services Ltd (UK). Project in execution. 4th EDF.

University of Juba, phase II. Resp. Auth.: Ministry of Education. 7 mECU. Additional facilities on the new campus for a capacity of about 400 students: 3 hostels, (1 100 m² each) dining hall and kitchen (360 m²), 3 college buildings (1 850 m²), 21 staff houses (each 170 m²). Works including infrastructure for water, sewerage and electricity: int. tender launched September '82. Equipment: int. tender in 1983. 4th EDF.

Upper Talanga Tea Project - Phase 2. Resp. Auth.: Ministry of Agriculture, Food, and Natural Resources 12 mECU. Works, supplies and T.A. Supply of vehicles, agricultural machinery, equipments, material inputs, int. tender '82 or '83. Other works by direct labour or restr. tender or direct agreement. T.A.: A.H.T.(D). Int. tender launched in July '82 for vehicles. 5th EDF.

Trade Promotion Sudan. Resp. Auth.: Ministry of Co-operation, Commerce and Supply. 0.34 mECU. Studies, T.A. and participation in trade Fairs. Studies and contract: Short-list already drawn up. 4th EDF.

Port Sudan-Hayia Railway. Resp. Auth.: Sudan Railway Corporation. Expertise: KAMPSA(DK). 4th EDF.

Aweil Rice Development Project Phase II. Resp. Auth.: Ministry of Agriculture, Food and Natural Resources. Total estimated cost 14.181 mECU. EDF 9.8 mECU, Local 4.381 mECU. Construction of buildings and rice mill. For rice will, int. tender launched September '82. Supply of vehicles, agricultural equipment and machinery. Fertilizers: int. tender launched November 82. T.A.: EUROCONSULT (NL). Project in execution. 5th EDF.

SURINAME

Rice project at Coronie. Resp. Auth.: Ministerie van Landbouw, Veeteelt, Visserij en Bosbouw. Rice production developments. Study on the way. EUROCONSULT (NL). Project stage: identification. 5th EDF.

Surfacing of the road Alkmaar-Tamanredjo. Resp. Auth.: Stichting Plan Bureau. 1.850 mECU. Works: acc. tender launched November 82. Project in execution. 5th EDF.

★ **Improvement health services in the interior. Phase II.** Construction of a health training centre. Estimated cost 0,350 mECU. Project stage: identification. 3rd EDF.

★ **LTS - Geyersvliet.** Construction of school building. Lower level technical education. Estimated cost 2.8 mECU. Project stage: identification. 3rd EDF.

★ **Tapawatra Micro-hydropower project.** Project stage: identification. 3rd and 4th EDF.

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: short-list not yet drawn up. 5th EDF.

TANZANIA

Training of irrigation engineers. Resp. Auth.: Ministry of Finance. 0.920 mECU. Degree courses in irrigation engineering for 30 irrigation engineers. Training will take place in India. 5th EDF.

Lusungu-Bukombe road. Resp. Auth.: Ministry of Works. 20 mECU EDF part. Bitumen road of 127 km. Works: Int. tender foreseen 1st quarter '83. Supervision of work: GITEC (D). Seek for cofundings. Regional project. 4th EDF.

Technical teacher training college, Mtwara. Resp. Auth.: Ministry of Education. 1.4 mECU. Training facilities for technical teachers. Classrooms, laboratory and workshops, dormitories and sanitary block, administration. Total area 3 765 m². Equipment: int. tender with possibility of restr. tender or direct agreement depending on nature of supply. Supplies: restr. tender all in '83. 4th EDF.

Extensions to the Mbeya Water Supply System. Resp. Auth.: Ministry of Water, Energy and Minerals. 4.050 mECU. Construction of a collecting point, a pipeline, a pumping station, reservoirs. Supplies and site supervision. Works and supplies: int. tender launched November 82. Contract: Jennings and O'Donovan (Irl). 4th EDF.

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 '83. Supplies: int. tender in '83. Supervision of works: short-list already drawn up. 5th EDF.

Mwanza Water Supply. Resp. Auth.: Ministry of Water, Energy and Minerals. 11 mECU. Construction of a new water intake, installation of a new pumping equipment and treatment plant, laying of a new distribution pipelines. Works and supplies, int. tender foreseen early '83. Contract for supervision of works: short-list not yet drawn up. 5th EDF.

Kigoma Port. Resp. Auth.: Ministry of Works. Estimated cost 4.95 mECU. Project design: HAECON (B). Works and equipment: int. tender foreseen 1st quarter 83. Project on appraisal. 4th EDF.

TOGO

Adele Ranch. Resp. Auth.: Ministère du Développement Rural. 3.207 mECU, EDF 2.788 mECU, Local 0.419 mECU. Establishment of a cattle ranch for local supply of oxen, improved heifers and breeding bulls, surplus for local slaughter and market. Works: direct labour. Supply: graders and vehicles, int. tender, in '82. T.A.: Zooconsult (I). Project in execution. 4th EDF.

Strengthening and improvement of 4 roads. Resp. Auth.: Ministère des Travaux Publics, des Mines, de l'Energie et de Ressources Hydrauliques. 13.6 mECU. Aflao-Avepozo road (19 km) - Lomé-Kpaliné road (118 km) - Atakpamé- Blitta road (100 km). Avepozo-Aneho (30 km). Works: int. tender foreseen 1st quarter '82, conditional upon provisional finance. Date financial decision October '82. Supervision of works: STAIM (I). 5th EDF.

Rural hydraulics. Resp. Auth.: Ministère des Travaux Publics. Estimated cost 3 mECU. Construction of ±200 drills, supply of manual pumps and training. Date foreseen for financial decision, 2nd quarter '83. 5th EDF.

Credit to C.N.C.A. (Caisse Nationale de Credit Agricole) to develop actions in rural sector. Resp. Auth.: C.N.C.A. Estimated cost 2 mECU. Loans with favourable conditions. Project on appraisal. Date foreseen for financial decision January 83. 5th EDF.

TONGA

★ **Supply of a dredger.** Resp. Auth.: Ministry of Works. Estimated cost 0.500 mECU. Technical study: EUROCONSULT

(NL). Int. tender foreseen 1st half '83. Project on appraisal. 5th EDF.

UGANDA

Primary health centres rehabilitation. Resp. Auth.: Ministry of Health and Ministry of Works. 1.1 mECU. To improve health care in rural areas. Works: acc. tender. Supply: int. tender in '83. Project on appraisal. 4th EDF.

Karamoja Development Programme. Resp. Auth.: Ministry of Agriculture and Forestry. 4.4 mECU. Constructions and Civil works. Transport, Equipment, Supplies, Training. T.A. by Lutheran World Federation. Supplies: int. tender in July '82 for vehicles. Project in execution. 5th EDF.

Rehabilitation of the seeds industry. Resp. Auth.: Ministry of Agriculture and Forestry. 9.5 mECU. To increase production and distribution of improved seeds. Int. tender in '83. T.A.: Short-list already drawn up. 5th EDF.

Rural electrification project. Resp. Auth.: Ministry of Power and Communications. Estimated cost 5 mECU. Supply of 33 KV electrical distribution lines. Erection by direct labour. Project stage: identification. 5th EDF.

Animal Disease Control Project. Resp. Auth.: Ministry of Livestock and Fishery. Total estimated cost 11 mECU. EDF 7.3 mECU. Local 3.7 mECU. Re-establishment of veterinary extension service. Repair of cattle dips, spray races. Tse tse control programme. T.A. For medical products and vaccines purchase during first six months, restr. tender. For equipment material, transport, int. tender launched September '82. T.A.: short-list already drawn up. 4th EDF.

T.A. to the Uganda Development Bank. Resp. Auth.: Uganda Dev. Bank. 2 experts. 1 year, renewable. Short-list already drawn up. Project on appraisal. 5th EDF.

★ **Kampala City Roads.** Resp. Auth.: Kampala City Council. Estimated Cost 10 mECU. To rehabilitate selected Kampala roads. Works and supervision. Int. tender 1st half '83. Date foreseen for financial decision March '83. 5th EDF.

★ **Kampala Water Supply Rehabilitation. Phase II.** Resp. Auth.: Ministry of Lands, Minerals and Water Resources. Estimated cost 5.8 mECU. Works, supplies and supervision. T.A. Project on appraisal. 5th EDF.

UPPER VOLTA

Mine of Poura rehabilitation. Resp. Auth.: Ministère du Commerce, du Développement Industriel et des Mines. 4.14 mECU for assessment of the worker's town. Study on hand. Project in execution. 5th EDF.

Extension of Lycee Technique de Ouagadougou. Resp. Auth.: Ministère de Travaux Publics. Building of the boarding-school for 360 students. Works, supply of equip-

ments. T.A. Project stage: identification. 5th EDF.

Kompienga Dam. Resp. Auth.: Ministère des Travaux Publics des Transports et de l'Urbanisme. Cofinanced project. Estimated cost ± 102 mECU. Earth-dam construction, access road non asphalted ± 18 kms, two groups of alternators 7800 KVA each, transmission power lines. Works: restr. tender after prequalification. Prequalification done. Int. tender launched December '82. Project on appraisal. 5th EDF.

Development of the Douna plain. Resp. Auth.: Ministère du développement rural. Estimated cost 10 mECU. Irrigation and draining works, supply of equipments, inputs and T.A. Project stage: identification. 5th EDF.

Volta valleys assessment. (A.V.V.) 2nd part. Improvement of the Mankarga development unit. Resp. Auth.: Ministère du Développement Rural. 4.450 mECU. Works: feeder roads, soil preparation, waterpoints, rural and social building). Monitoring and training for country-groupings. T.A. and supervision of works: Agroprogess (D). 4th EDF.

Young farmers' training. Resp. Auth.: Ministère du Développement Rural. 2.880 mECU. T.A.: works and equipment. Date financial decision November '82. 5th EDF.

★ **Rural credit for harnessing cultivation.** Resp. Auth.: Ministère du Développement Rural. 1.7 mECU. Line of credit to the "Caisse Nationale de Crédit Agricole". Date foreseen for financial decision April '83. 5th EDF.

WESTERN SAMOA

Oil and Cake storage and handling facilities for the copra mill. Resp. Auth.: Samoa Coconut Products Ltd. 0.850 mECU. Storage tanks for copra oil and handling equipment. Shed for storage of pelletized cake. Study for supplies: Proses (Malaysia) financed by ADB. Study to be done for sheds. Short list already drawn up. Supplies: int. tender 1st quarter 83. 5th EDF.

Sauniatu Hydro Electric Scheme. Resp. Auth.: Electric Power Corporation (EPC). Estimated Cost 7.1 mECU. EDF 4.1 mECU, EIB 3 mECU. Two power station of 1.75 MW each. Headpond, tunnel, penstock powerhouse with turbines and generators and transmission lines. Equipments, supervision of works and training. Design study completed by Mander, Raikes and Marshall (UK). Preliminary works and access road: on hand Main civil works: int. tender after prequalification. Prequalification: launched august '81. Int. tender: '82 and in August '82 for electrical equipment. Supplies: int. tender-launched March '82. Supervision of works: Mander, Raikes and Marshall (UK). in '82. 5th EDF.

VANUATU

★ **T.A. to Vanuatu Development Bank.** Resp. Auth.: VDB-Vanuatu Dev. Bank.

0.750 m ECU. Line of credit and T.A. Project on appraisal. Date foreseen for financial decision February 83. T.A.: Short-list already drawn up. 5th EDF.

ZAIRE

★ **Kinshasa Water Supply.** Resp. Auth.: REGIDESO. Study on the way by Bonifica (I). 5th EDF.

Akula-Gemena road. Resp. Auth.: Commissariat aux Travaux Publics. Upgrading and asphaltting of the road (115 km). Economic study: Bureau SPE (Local). Technical study: LUXCONSULT (Lux). Project on appraisal. 5th EDF.

Thé Butuhé. Resp. Auth.: Département de l'Agriculture (Commission Agricole du Kivu). Strengthening and prosecution existing projects. T.A. for management and trading. Project stage: identification. 5th EDF.

Mwebe-Batshamba Road. Resp. Auth.: Commissariat aux Travaux Publics. Part (81 km) of the national road Matadi-Shaba. Prequalification launched in July '81. Int. tender launched on 3rd quarter '82. Date foreseen for financial decision 1st quarter '83. Project on appraisal. 5th EDF.

Kalemie port rehabilitation. Resp. Auth.: Département des Transports et Communications. Estimated cost not available. Study on the way by CADIC (B). 4th EDF regional. Project on appraisal. 5th EDF.

Banana deep water port. Resp. Auth.: Département des Transports et Communications. Feasibility study: SEMA-TRACTION-NEL-OTUI (F.B.F.). 4th EDF. Complementary technical study: for the port (F+I), electrical (B), water supply (D), water research (EDF). Project stage: identification. 5th EDF.

Cacao-trees at Bulu. Resp. Auth.: CACAOZA-Département de l'Agriculture. Strengthening and continuation existing operations. Project stage: identification. 5th EDF.

Palm-trees at Gosuma. Resp. Auth.: PALMEZA-Département de l'Agriculture. Strengthening and continuation existing operations. Project stage: identification. 5th EDF.

Retraining of teaching and technical staff attached to the National Vocational Training Habitants. (I.N.P.P.). Resp. Auth.: Direction I.N.P.P. 0.73 mECU. Training, T.A. and supply of equipment. T.A.: direct agreement. Supply: int. tender in '82. 4th EDF.

Lubutu-Oso-Walikale Road. Resp. Auth.: Commissariat aux Travaux Publics. Prequalification launched January '82. Int. tender launched 4th quarter 82. Date foreseen for financial decision 1st quarter 83. 4th EDF.

Health centres equipment in 5 rural areas: Lighting and refrigerators with solar energy feeding. Resp. Auth.: Département Santé. 1.7 mECU. Supplies: int. tender launched November 82. Project in execution. 5th EDF.

Mine industry (copper-cobalt) rehabilitation. Resp. Auth.: GECAMINES. Estimated cost EDF part: 40 mECU. Supply of equipment: 8 int. tenders launched end of June '82. Date financial decision July '82. 5th EDF.

Butembo-Beni hydro-electrical development. Preliminary study done by Tractionnel (B) on local funds. Studies to be done: detailed economical and technical studies. List established. Project on appraisal. 5th EDF.

ZAMBIA

★ **Rural water supply study — 5 Townships.** Resp. Auth.: Ministry of Agriculture and Water Development. Engineering Design. Short-list not yet drawn up. 5th EDF.

★ **Rural water supply study. 4 Townships.** Resp. Auth.: Ministry of Agriculture and Water Development. Feasibility Study. Short-list not yet drawn up. 5th EDF.

Maize development project. Resp. Auth.: Ministry of Agriculture and Water Development. Total cost 6.54 mECU. EDF 5.55 mECU, Rocaf 0.99 mECU. Works: construction housing and office accommodation, marketing depots, feeder roads. Supply: 4 WD vehicles, motorcycles and bicycles. T.A. Works: acc. tender or direct agreement. Supplies: int. tender launched September '82. T.A.: INSTRUPA (D). 5th EDF.

Zambia Marketing and Trade Promotion. Resp. Auth.: Ministry of Commerce and Industry. Zambian Export Promotion Council. 0.795 mECU. Product Development and Marketing. Marketing management. Trade Fairs — Tourism planning and promotion. Contracts by direct agreement. 5th EDF.

Rice Development Project. Resp. Auth.: Ministry of Agriculture and Water Development. 4 mECU, EDF Part. Local 1.135 mECU. Works: access roads, marketing depots, housing. Supply of equipments, agricultural inputs, T.A. Supply of vehicles: int. tender launched September '82. Works: acc. tender or direct labour. T.A.: short-list already drawn up. 5th EDF.

Animal Vaccine Unit Production. Laboratory construction. Supply of equipment and T.A. Estimated cost 3.79 mECU. EDF 3 mECU, local 0.79 mECU. Project on appraisal. Date financial decision October '82. 5th EDF.

Mkushi electrification. Estimated cost 6.07 mECU. EDF 3.07 mECU. Cofinancing needed. Study on hand: MERTZ McLENAN (UK). Project stage: identification. 5th EDF.

Mine industry (copper-cobalt) rehabilitation. Resp. Auth.: ZAMBIA Cons. Copper Mines at Lusaka. Total estimated cost 85.346 mECU. EDF part 55 mECU. Supply of equipment: 15 int. tenders launched in July, August, September and November '82. For T.A. the Zambian Cons. Copper Mines will be in charge of recruitment of staff from EEC countries. 5th EDF.

T.A. to the Development Bank of Zambia. Resp. Auth.: Dev. Bank of Zambia. 0.54 mECU. Short-list already drawn up. 5th EDF.

Rural township Water Supply. Resp. Auth.: Ministry of Agriculture and Water Development. 5.200 mECU. Construction and supply of equipment and supervision of works. Works and supplies: int. tender on 1st half '83. T.A.: Short-list already drawn up. 5th EDF.

Mpongwe Development Project, phase 2. Resp. Auth.: Ministry of Agriculture and Water Development. (M.A.W.D.) 3.712 mECU. To complete and develop existing project. Works, supplies and T.A. Project on appraisal. 5th EDF.

ZIMBABWE

Educational Facilities and Equipment. Resp. Auth.: Ministry of Manpower Planning and Development. 3 mECU. Building of Technical College and supply of equipment and furniture. Works: acc. tender. Supplies: int. tender. 5th EDF.

Rural Clinics. Resp. Auth.: Ministry of Health. 4.5 mECU. Construction and equipment of 115 rural clinics and 230 staff houses. Works: direct labour or direct agreement. Equipments: int. tender. 5th EDF.

Coal study. Resp. Auth.: M.E.P.D. Cofunding EDF-EIB. EDF 0.500 mECU. EIB 0.4 mECU. Restr. tender after short-list. Short-list already drawn up. 5th EDF.

Development of accelerated resettlement schemes. Resp. Auth.: Ministry of Lands, resettlement and Rural development. Estimated cost 6 mECU. Infrastructures, agricultural activities, equipments and inputs. Project appraisal. 5th EDF.

★ **Rural Water Supply Study.** Resp. Auth.: Ministry of Water Resources and Development. Short-list not yet drawn up. 5th EDF.

Overseas Countries and Territories (OCT)

NETHERLANDS ANTILLES

St Martin Airport. Resp. Auth.: Departement voor Ontwikkelingssamenwerking. 7.292 mECU. Construction of new air terminal. Study and works. Study: execution, Flughafen Frankfurt (D). Works and supplies in '82: int. tender launched December 82. 4th EDF.

★ **Road Improvement on Bonaire.** Resp. Auth.: Departement voor Ontwikkelingssamenwerking. Estimated cost ± 1 m ECU. Project on appraisal. 5th EDF.

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. 0.85 mECU, EDF 0.73 mECU, Ministère Français de l'Agriculture 0.12 mECU. Modern abattoir to replace old slaughterhouses and improve hygienic conditions for meat provisioning. Capacity 2 000 cattle and 13 000 pigs per year. Works: int. tender 1st quarter '83. 4th EDF.

Gas-generators and electro-generators powerstations in the Touamotou Islands. Resp. Auth.: Assemblée Territoriale des Touamotou. 0.460 mECU. Supply of gas-generators fed with charcoal from coconut waste and coco-trees wood waste. Int. tender foreseen 2nd half 83. Date foreseen for financial decision 1st quarter 83. 4th EDF.

REUNION

Hydro-agricultural development of Bras de Cilaos. Resp. Auth.: Ministère de l'agriculture. 2.65 mECU. Installations of a first section of water-supply network. Supplies and ductlaying and accessories, int. tend. launched December 82. 4th EDF.

NEW CALEDONIA

Loyauté Islands water supply. Resp. Auth.: Direction Territoriale des Services Ruraux. 0.900 mECU. Constructions and drills and small water supply networks. Date foreseen for financial decision 2nd half '82. 5th EDF.

Reafforestation programme. Resp. Auth.: Territoire de la Nouvelle Calédonie des Eaux et Forêts. Estimated total cost 4.7 mECU. EDF part ± 3 mECU. Cofunding with France, CCCE (F) and Local. 3 000 ha plantation "Pin de Caraïbes" with all necessary infrastructure and investments. Project on appraisal. 5th EDF.

Veterinary laboratory and zoosanitary investigation. Total estimated cost 1.5 mECU. EDF 0.350 mECU. Territoire and FIDES 1.150 mECU. Project on appraisal. Date foreseen for financial decision December 83. 5th EDF.

CAYMAN ISLANDS

New airport terminal. Resp. Auth.: Public Works Department. Estimated Cost 876 000 ECU. Construction of terminal. Project on appraisal. 5th EDF.

TURKS AND CAICOS ISLANDS

Transport study, North and Middle Caicos. Resp. Auth.: Public Works Department. Nicholas O'Dwyer and Partners (Irl). 5th EDF.

Regional Projects

ETHIOPIA — SUDAN

Telecommunications project. Technical study done by U.I.T. Economical and commercial study to be done. Short-list not yet drawn up. 5th EDF.

O.C.A.M.

Building and equipment of Institut Africain et Mauricien de Statistiques et d'Economie Appliquée in Kigali. Resp. Auth.: I.A.M.S.E.A. Total estimated cost 4.8 mECU. EDF part 3 mECU. Pedagogical, administratives and hostel buildings (5,000 m²). Correspondent equipment supply. Project on appraisal. 5th EDF.

MEMBER COUNTRIES OF ECOWAS

Informations and investments promotion project. Resp. Auth.: ECOWAS Secretariat. 1.0 mECU. Actions to promote firm implantation in the West Africa countries. Project on appraisal. Date financial decision July '82. T.A.: SOFIDAK (ACP). 5th EDF.

MEMBER COUNTRIES OF ORGANISATION AFRICAINE POUR LA PROPRIETE INTELLECTUELLE (O.A.P.I.)

Building and equipment of Centre Africain de Documentation et Information en matière de Brevets. Resp. Auth.: O.A.P.I. 1.207 mECU. Construction of 1,358 m² of buildings, and supply of equipment. Works: contracts in awarding. Supplies: int. tender 2nd half '83. Project in execution. 5th EDF.

GABON — SAO TOME-PRINCIPE

Improvement of maritime communication. Resp. Auth.: Secretariat, d'Etat aux Transport et Communications. Estimated cost ±2 mECU. Purchase of ocean-going vessels. Project on appraisal. 5th EDF.

MEMBER COUNTRIES OF CEAO

ESITEX Segou (Mali). Resp. Auth.: CEAO Secretariat. Management training for textile industry. Complex construction in Segou. Supply of equipment. Project stage: identification. 5th EDF.

Ecole des Mines et de la géologie, Niamey. Resp. Auth.: CEAO Secretariat. Creation of a school for 350 students coming from CEAO countries. Estimated total cost 28 mECU. EDF 7 mECU. Cofundings with FAC-FAD-D. Project on appraisal. Technical and architectural studies: Groupement Potier et Ass. (F) and Goudiaby (ACP.). 5th EDF.

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-Rijkswaterstaat-Waterloopkundig Laboratorium Delft (NL). For Phase I - Phase II: Rhein-Ruhr (D). Project stage: identification. 5th EDF.

Agronomical study for the area concerned by the bridge barrage. Short-list already drawn up. 5th EDF.

GUYANA — SURINAM

Guyana — ferry-link. Resp. Auth.: Ministry of Public Works and Ministerie van

Openbare Werken. Link ferry on Corentine river. Study on the way by C.A. Liburd and Ass. + Sescon Group (ACP). Project on appraisal. 4th EDF.

TOGO — BENIN

Hydroelectric development of Nangbeto. Resp. Auth.: Ministère des Travaux Publics. Estimated cost: 170 mECU. Construction of a dam and a hydro-electric power plant of 2 x 30.7 MW. Foreseen funding: World Bank, EEC (EDF + EIB), France, FRG, Canada, ADB, UNDP. Feasibility study done. Project on appraisal. 5th EDF.

BENIN — IVORY COAST — NIGER — TOGO — UPPER VOLTA

Regional training centre for road maintenance in Lomé-Togo. (CERFER). Resp. Auth.: Secretariat CERFER. Training. T.A. and scholarships. Estimated cost 0.900 mECU. Project stage identification. 3rd, 4th and 5th EDF.

ZAIRE — RWANDA — BURUNDI

Study to integrate gas-generators for agro-industrial and plant wastes. Resp. Auth.: Electricité de Grands Lacs (E.G.L.) 0.300 mECU. Supply of 6 gas-generators. Two for each countries. Restr. tender launched on 4th quarter '82. 4th and 5th EDF.

Hydro-electric development «Ruzizi II». Resp. Auth.: E.G.L. Estimated cost: 60 mECU. Construction of a central hydro electric plant of 35 MW. Funding: EDF. World Bank, I, BDEGL, EIB. Civil works: World Bank. Alternators and electr. equipments: Italy. Houses: BDEGL, other equipment and supervision of work, EDF. For EDF part int. tender foreseen 1st quarter 83. 5th EDF.

RWANDA — ZAIRE

Methane gas from Lake Kivu. Resp. Auth.: CEPGL and Commission mixte de 2 pays. Pre-feasibility study done. (Studies 4th EDF). Feasibility study foreseen with EDF, EIB fundings: for 2 stations with upher unit, compressed gas and methane. Short-list on the way. Project on appraisal. 5th EDF.

NIGER BASIN AUTHORITY

Protection and reforestation in the "Haut Bassin Versant du fleuve Niger in Guinea". Works, supplies and T.A. Estimated total cost 1.5 mECU. Project stage: identification. 5th EDF.

MEMBER COUNTRIES OF CIADFOR

Extension of A.N.F.P.P. (Agence Nationale de formation et de Perfectionnement Professionnels) in Libreville. Extension and modernization and new complex building in Oloumi. Project stage: identification. 5th EDF.

Training instructors and printing specialists, production of the teaching material. Resp. Auth.: CIADFOR Secretariat. 1.45 mECU. Training, TA, supply of equip-

ment. Date financial decision October '82. 5th EDF.

SENEGAL — GUINEA

Tambacounda-Labe road. Resp. Auth.: Ministère des Travaux Publics. Upgrading and asphaltting of the road (455 km). Economic study: SONED (SE). Technical study to be done. Short list not yet drawn up. Project on appraisal. 4th EDF.

WESTERN SAMOA — FIJI — SOLOMON — KIRIBATI — TUVALU — PAPUA NEW GUINEA — TONGA

Renewable energy development project in the South Pacific. Resp. Auth.: SPEC (South Pacific Bureau for Economic Cooperation). 6.2 mECU. Creation of pilot units for ocean energy, gas, small stations 25 kW fed with wood waste. Photovoltaic generators 20 kW and wind-generators 15 kW. Prefaisibility study on the way: LAHMEYER and DORNIER (D). Works, supply and T.A. Supplies: int. tender 1st half 1983. T.A. end 82 or 1st quarter 83. Project on appraisal. 5th EDF.

TOGO — MALI — UPPER VOLTA — NIGER — CHAD

Agricultural products regional transit centre, in the Lomé port. Resp. Auth.: Ministère du Plan. Estimated total 7 mECU with cofunding. Technical and economic feasibility study: Bureau SATEC (F). Project stage: identification. 4th and 5th EDF.

SOUTHERN AFRICA

Foot-and-mouth disease prevention. Resp. Auth.: Development Committee. Study to be done: Feasibility. Short-list already drawn up. Project stage: identification. 4th EDF.

PACIFIC ACP COUNTRIES

Forum Fisheries Agency Headquarters. Resp. Auth.: South Pacific Bureau for Economic Cooperation (SPEC). 0.650 mECU. Creation of an international fisheries resources management agency. Works by acc. tender. Supply of equipment restr. tender. Supply of computer and data processing equipment, int. tender. 4th and 5th EDF.

Pacific Forum Line: containers. Resp. Auth.: S.P.E.C. Estimated total cost 4 mECU. Cofinancing with EIB. Purchase of 200 containers equipped with integral refrigeration units. Date EDF financial decision September '82. Int. tender launched November 82. 5th EDF.

BOTSWANA — ZIMBABWE

Regional project foot-and-mouth disease. Resp. Auth.: Ministry of Agriculture. Estimated total cost 24.51 mECU, EDF 12.8 mECU, GOB 8.167 mECU, GOZ 2.013 mECU. Supply of equipment and vaccines. Date financial decision October '82. 5th EDF.

FIJI — KIRIBATI — PAPUA NEW GUINEA — TUVALU

Telecommunication project. Resp. Auth.: S.P.E.C. 8.75 mECU. Supply and installation of 2 ground stations standard B for satellite. One in PNG the other in Kiribati. Equipment to extend telex service by satellite in Fiji and radio and telex equipment in Tuvalu. Int. tender launched October '82. Project in execution. 5th EDF.

SEYCHELLES — MAURITIUS — COMOROS — KENYA — SOMALIA — TANZANIA — MADAGASCAR

Telecommunications for airways in the Indian Ocean. Resp. Auth.: Civil Aviation Departments, Directions de l'Aviation Civile. 10.9 mECU. Supply and installation of telecommunication equipment. Technical detailed study: SOFREAVIA (F). Int. tender launched November 82. 4th and 5th EDF.

MADAGASCAR-SEYCHELLES

Ecole Maritime de Majunga. Resp. Auth.: Ministère de l'Education. 1.850 mECU. Managerial staff training for mercantile marine and fisheries. Supply of a school-vessel and equipment. T.A. 5th EDF.

ACP STATES

Assistance to the professional ACP-EEC organizations concerned by improvement of the production and products commercialization on foreign markets. Resp. Auth.: COLEACP-FEDEAU. And the association for the improvement of the commercialization of products like coffee, cacao, oleaginous and cotton. 2.770 mECU. 5th EDF.

SENEGAL — GAMBIA GUINEA BISSAU

Dakar — Banjul — Bissau Road. Resp. Auth.: Ministères Travaux Publics of the 3 countries. Asphalted road between Mandina Ba (Gambia) and Sao Vicente (Guinea Bissau). 129 km. Estimated cost 35 mECU. EDF 10 mECU. Technical study: Associated Eng. (I.). Project on appraisal. Works: int. tender foreseen 2nd quarter 83. 5th EDF.

MEMBER COUNTRIES OF CEAO AND CILSS

Construction of Centre Régional d'Énergie Solaire (CRES) in Bamako, Mali. Estimated total cost 22 mECU. EDF part. 3.0 mECU. T.A. and equipment. Project on appraisal. T.A.: short-list not yet drawn up. Date foreseen for financial decision 1st half 83. 5th EDF.

MEMBER COUNTRIES OF U.A.P.T.

★ **Satellite telecommunications project.** Resp. Auth.: U.A.P.T. Secretariat in Brazzaville. R.P.C. Parametric study on the way by national organisations of I, UK, F and D. Project stage: identification. 5th EDF.

MEMBER COUNTRIES OF ECOWAS

Wireless beam telecommunications. Resp. Auth.: Ecowas Secretariat. Estimated cost 32 mECU. EDF 5 mECU. Project on appraisal. 5th EDF.

EASTERN AFRICA 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-room, offices and housing. Project stage: identification. 5th EDF.

MEMBER COUNTRIES OF ASECNA

Air safety. Resp. Auth.: Asecna Secretariat in Dakar. 10 mECU. Supply and installation of flying assistance equipment for several airports. Int. tender launched November 82. 5th EDF.

DJIBOUTI — ETHIOPIA — KENYA — SUDAN — SOMALIA — TANZANIA — UGANDA

Prevention against noxious migratory animals in eastern africa. Resp. Auth.: Desert Locust Control Organization for eastern africa. Construction of buildings, storage, for pesticide, aircrafts, equipment for vaporization, vehicles and T.A. Total estimated cost 6.634 mECU. EDF 3.3 mECU int. tender for equipment hangar in Nairobi launched. Other int. tenders in 82. T.A.: Centre for overseas Pest Research (UK). 5th EDF.

KENYA — TANZANIA

Regional Health Improvement Project. Resp. Auth.: Ministries of Health. Estimated cost 1.6 mECU. Extension of the regional centre at Nairobi and construction of a centre in Dar-es-Salam, T.A. Works: acc. tender. Contracts: direct agreement. Date financial decision, October '82. 5th EDF.

ZAMBIA — KENYA — UGANDA — SUDAN

Field-oriented research on control of tsetse and livestock ticks of the International centre of insect physiology and ecology (ICIPE) Nairobi-Kenya. 4.4 mECU. EDF part 1.5 mECU. Cofunding with: UNDP-USAID-Switzerland and Netherlands. Supply of equipment and TA. Date financial decision November 82. 5th EDF.

MEMBER COUNTRIES OF SADCC (South African development coordination conference)

Faculty of Veterinary Sciences University of Zimbabwe. Total estimated cost 9 mECU. EDF part estimated at 5 mECU. Construction of a new veterinary faculty as a regional institution within the existing university of Zimbabwe. Works and supplies. Project stage identification. Study on the way by Ove Arup and Partners (ACP). 5th EDF.

★ **T.A. for the SADCC Secretariat.** Resp. Auth.: SADCC Secretariat in Gaborone. Bot-

swana. 2 m ECU. Advisory Staff, consultancies, support staff. Decisions for contracts will be signed between SADCC and CEC. Project on appraisal. Date foreseen for financial decision January 83. 5th EDF.

MEMBER COUNTRIES OF CARICOM

Development of the regional trade promotion services in the Caribbean region. Resp. Auth.: Caricom Secretariat. 1.8 mECU. T.A. project. Contract: direct agreement. 5th EDF.

Assistance to Caribbean Agricultural Research and Development Institute (CARDI). Resp. Auth.: CARDI Secretariat. EDF part 3.035 mECU. T.A. equipment and training. T.A.: Short-list already drawn up. 5th EDF.

Windward Islands Fishing Boat Project. Resp. Auth.: Caricom Secretariat. Estimated cost 0.345 mECU. EDF part 0.275 mECU and 0.070 mECU from sales of boats. Equipment and TA for the construction of about 100 fishing boats and workshop installation. Project on appraisal. 5th EDF.

Regional hotel trade school at St. Lucia. Resp. Auth.: Caricom Secretariat. Estimated total cost 0.900 mECU. EDF 0.200 mECU. Work financed locally. EDF part: supply of pedagogical equipment, furniture and 1 vehicle. Project on appraisal. 5th EDF.

★ **Regional Poultry Project.** Resp. Auth.: Caribbean Food Corporation (CFC) and Government of Barbados. Total estimated cost 4.147 mECU. EDF 2.823 mECU. Constructions, equipments and T.A. Date foreseen for financial decision February '83. 5th EDF.

LIAT — Equipments and T.A. Resp. Auth.: Caricom Secretariat and Caribbean Dev. Bank. Estimated cost 5.215 mECU. Aying assistance equipment. Project on appraisal. Date foreseen for financial decision January '83. 4th EDF and 5th EDF.

Regional Tourism Promotion Programme. Resp. Auth.: Caricom Secretariat. Caribbean Tourist Association. 5.100 mECU. Studies T.A. marketing and tourist promotion. Short-lists not yet drawn up. Date foreseen for financial decision January '83. 5th EDF.

★ **WISCO Project.** Resp. Auth.: Ministerial Standing Committee of CARICOM. 6.3 m ECU. Purchase of 2 second-hand cargos—containers, vehicles, T.A. and training. Int. tender for cargos launched December 82. 4th EDF.

TANZANIA (BURUNDI — RWANDA — ZAIRE — ZAMBIA)

Tanzania Railways Corporation Project (T.R.C.). 10 mECU. Maintenance and improvement of the railway. Works, supply of equipment. Supply: int. tender 1st half '83. Supervision of works: short list not yet drawn up. 4th EDF.

BURUNDI — RWANDA — TANZANIA — ZAIRES — ZAMBIA

Dar es Salam port project. Improvement of the transit goods handling facilities, for the Central Corridor transports. Supply of equipment and T.A. Estimated cost 2 mECU. Project stage identification. 5th EDF.

TANZANIA — UGANDA

Transport project Lake Victoria. Improvement of the existing wagon ferry terminal facilities in Jinja, Mwanza, Bukoba and Musoma ports. Estimated cost 2 mECU. Project stage identification. 5th EDF.

MEDITERRANEAN COUNTRIES

ALGERIA

Scientific cooperation programme with O.N.R.S. and trainers' training. Resp. Auth.: Ministère de l'Enseignement Supérieur et de la Recherche Scientifique (M.E.S.R.S.) 4.3 mECU. Scholarships, T.A. experts and supply of equipment. For scientific equipment int. tender foreseen in '83.

Rural managers' training. Resp. Auth.: Ministère de l'Agriculture, de la Révolution Agraire et des Forêts. 4 mECU. T.A. with trainers and technical equipment. Supplies: direct agreement. T.A.: short-list already drawn up.

Contribution towards the extension of two training centres for fishermen (Annaba and Beni-Saf). Resp. Auth.: Ministère des Transports et de la Pêche. Secrétariat d'Etat à la pêche. 0.6 m ECU. Supply of pedagogical equipment and T.A. Supply: int. tender. launched in November '81 T.A.: IDROCONSULT (I).

CYPRUS

Nicosia drainage system, phase II. Resp. Auth.: Nicosia Sewage Board for southern area, Dept of Water, Geology and Mines for northern area. Total estimated cost 11.12 mECU: EEC 7.5 m (Commission 4.5 m, EIB 3 m) local contribution 3.62 m. Supplies, works and TA, acc. procedure for public works. Date financial decision November '82.

EGYPT

Soil improvement programme in Kafrel-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 Kafrel-Sheikh Governorate. Short-list not yet drawn up. Date financial decision November '82.

Improved of agricultural input storage facilities in the Daqhalia Governorate.

Resp. Auth.: Principal Bank for Development and Agricultural Credit. EEC Contribution 6 mECU. Construction of 13 new ware houses on prefabricated steel of 1 700 m² each providing a total capacity of 27 000 T. Works: int. tender end '82. Date financial decision July '82.

Helwan waste water Project. Resp. Auth.: Cairo waste water organization. Estimated Cost 125.04 mECU. EEC Contribution estimated 31.54 mECU. Netherlands 4.32 mECU. Construction of a sanitation system within an area of 9.500 ha. Collector mains, pumping stations and treatment works. Works and supplies: int. tender 1st half 1983.

Intervention programme for investments promotion and for cooperation at companies level. Resp. Auth.: Ministry of Economy and External Trade, Ministry of Industry and Mineral Resources. 2 mECU. T.A., training and investment promotion. Project on appraisal.

Egyptian Renewable Energy Development Organisation. EREDO. Resp. Auth.: Egyptian Government. Estimated total cost 10.74 mECU. EEC contribution 7.7 mECU. Construction and equipment for the centre. Works and supplies: int. tender in '83.

JORDAN

2 Trade Training Centres (TTC). Resp. Auth.: National Planning Council (NPC) and Vocational Training Corporation. Cost estimate 1.2 mECU for EEC. The TTCs offer apprenticeship in cooperation with local trade and industry. One TTC for about 400 boys at Zarqa. One TTC for about 400 girls in Amman. Buildings to be financed by Jordan. Training and TA programmes also. Study to identify and define project, TEMA Consultant (I). Supply: int. tender for Zarqa launched February '82. Project in execution.

Faculty of Engineering and Technology. University of Jordan. Resp. Auth.: Ministry of Education. EEC-Contribution: 6.68 mECU. Supply of Laboratory and workshop equipment and T.A. over 5 years. Jordanian Government will finance buildings. Supplies: int. tender launched June '82. T.A.: Contracts in '81 and '82.

Jordan Valley Transplant Production Unit. Resp. Auth.: Jordan Valley Authority. Estimated total cost 2.210 mECU, EEC part 0.95 mECU. Supplies, construction greenhouses, irrigation. T.A. Supply: int. tender, launched June '82. T.A.: short list already drawn up.

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 ±50% of total cost of the project. Project on appraisal.

Aid for the Union Nationale de Crédit Coopératif (UNCC). 1.4 mECU. Line of credit to the UNCC and T.A.

Document automatization for the Chambre de Commerce et de l'Industrie de Beyrouth (CCIB). Resp. Auth.: C.C.I.B. 0.24 mECU. Supply and T.A. For equipment int. tender in '82 or '83. Date foreseen for financial decision 2nd half '82.

MALTA

Coastal maritime radio station. Installation, building, supplies and operational link-up, training. Estimated cost 1.75 mECU. Date financial decision November '82.

Upgrading St Lukes's Hospital radiology department. Training, TA and supply of equipment. Estimated cost 1.23 mECU. Date financial decision November '82.

MOROCCO

Intervention for Laboratoire Officiel d'Analyses et de Recherches chimiques de Casablanca. Resp. Auth.: Ministère de l'Agriculture. 1.200 mECU. Equipments: int. tender in '81. T.A. and training. T.A.: ICON INST. (D). Project on appraisal.

Interventions for Laboratoire de Technologie des céréales de Rabat. Resp. Auth.: Ministère de l'Agriculture. 0.790 mECU. Equipment, T.A. and training. Supply by restr. tender or direct agreement. T.A.: short-list not yet drawn up.

SYRIA

Scientific and Technical Cooperation with CERS. (Centre d'Etudes et de Recherches Scientifiques.) EEC part 4.820 mECU. Studies, T.A., training and supply of scientific equipment. Last int. tender launched January '82 for teledetection.

Assistance to the Damascus and Aleppo Intermediate Institutes of Technology. (CIIT.) 4 mECU. Supply of equipment, T.A. and training. Supply: int. tender launched end of November 82.

TUNISIA

Sewerage scheme for 17 towns. Resp. Auth.: Office National d'Assainissement (ONAS). Estimated cost 40 mECU, EEC 24 mECU, Local 16 mECU. Improvement of the sewerage system (mainly for sewerage and rainwater) for 17 towns. Service mains extension, building of purification stations. Study: to define programmes and prepare the implementation project: SAFEGE (F). Funding phase 1 end 1980 (12 mECU). Phase 2: 1st quarter 1982 (12 mECU). Works: 9 int. tenders, several lots launched in July '82. Equipment: int. tender launched November 82.

Expansion of industrial development activities. Resp. Auth.: Ministère de l'Industrie, des Mines et de l'Energie. Agence de Promotion des Investissements (API) and the Banque de Développement Economique de Tunisie (BDET). 0.630 mECU. TA and

studies. Contracts by direct agreement in '81 and '82.

Participation to create 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 3.870 mECU. Supply of equipment, T.A. and training. Supplies: int. tender for Menzel-Bourguiba launched October 82. T.A.: A.A.B. (D). Project on appraisal.

TURKEY

Beypazari Lignite Project. Resp. Auth.: T.K.I. Estimated Cost 55.7 mECU. EEC 22 mECU, Local 33.7 mECU. EEC part: Equipment supply for: development, mechanised face, conventional face and auxiliary. Equipments: int. tender in '83.

Electricity Transmission Line Project. Resp. Auth.: Turkish Electricity Authority. (TEK). Estimated cost 72 mECU. EEC 16 mECU. Upgrading of existing transmission lines and supply of equipment. Construction of new transmission lines. Italian aid foreseen for 5.2 mECU. Supply and works: int. tenders in '83.

Beypazari Lignite Project - T.A. Resp. Auth.: T.K.I. 2.6 mECU. T.A. with 7 experts. T.A. and training in '83.

Non-associated developing countries

ANGOLA

★ **Rehabilitation of ARAN and SOMAR Fish Processing Plants at Moçamedes.** Resp. Auth.: Ministerio das Pescas. 2.250 m ECU. T.A. and equipment for SOMAR and equipment, supervision of works and T.A. for ARAN. Date foreseen for financial decision end 82, beginning 83.

MOZAMBIQUE

★ **Artisanal Fisheries Development.** Resp. Auth.: Secretary of State for Fisheries. 2.958 m ECU. Provision of fishing material and other supplies for artisanal fisheries. T.A. Date foreseen for financial decision end 82 or beginning 83.

BANGLADESH

Tea rehabilitation project. Resp. Auth.: Bangladesh Tea Board (BTB). EEC 6.6 mECU, UK and Local 55.68 mECU. Purchase of machinery for tea factories. Call for quotation in EEC member states and Indian subcontinent in 1982 and '83.

Cotton Development project. Resp. Auth.: Cotton Development Board. Estimated Cost: 13.5 ECU. EEC 6.5 mECU, Lo-

cal 7 mECU. Supply of equipment, T.A. Works. T.A.: Agropgress (D). Supply int. tender in '83.

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. 4th quarter '82.

Building of storage for fertilizers. Resp. Auth.: Bangladesh 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.

Bhola Irrigation Project. Resp. Auth.: Bangladesh Water Development Board (BWDB). Estimated total cost 44.4 mECU. EEC 3 mECU. Parallel cofunding with A.D.B. (Asian Dev. Bank). Works, equipment and supply of vehicles, pumps and fuel. T.A. and training. Date foreseen for financial decision December '82.

BHUTAN

★ **Plant protection services.** Resp. Auth.: Ministry of Development (Agricultural Department). 3.4 mECU. Building of laboratories, equipments training and T.A. Works: acc. tender. Supplies: int. tender or direct agreement. Date foreseen for financial decision December '82.

BURMA

Palm oil development. Resp. Auth.: Ministry of Agriculture and Forest. Estimated cost: 16.3 mECU. Financing: EEC 4.9 mECU. Switzerland and local 11.4 mECU. Expanding production for domestic consumption. Supplies and T.A. Supply: int. tender '82 and '83. T.A.: shortlist already drawn up.

Pump Irrigation. Resp. Auth.: Ministry of Agriculture and Forest. Estimated Cost: 31.5 mECU. ADB 19 ECU. EEC 5.5 mECU. Local 7 mECU. Works: irrigation and related facilities. Supply of equipment and T-A. Works and supplies: int. tenders following EEC and ADB procedures. Supply of pumps: int. tender launched November 82. EEC part.

INDONESIA

Baturaden Dairy Development. Resp. Auth.: D.G. for livestock services. Estimated cost: 8.385 mECU. EEC 4.4 mECU, Italy 0.410 mECU. Construction, infrastructure, supply of equipment, T.A. Works and supplies: int. tender 1st half '83. T.A.: IFA-GRARIA (I).

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 scheme, establishment of a water-management training centre, and establish-

ment of climatological stations. T.A. Works: acc. tender.

★ **T.A. to Bank Indonesia for SEDP II.** Resp. Auth.: Bank Indonesia. Total estimated cost 12.5 mECU. EEC 8.3 mECU. Local 4.2 mECU. Expatriates and local consultants. T.A. and training in Bank Indonesia regional offices to implement Bank's large ongoing programme of small-scale credits. Consultants will be contracted by Bank Indonesia, after approval by the Commission, on the basis of tender or mutual agreement procedures. Date foreseen for financial decision December '82.

★ **Pilot Project for Artisanal Fisheries in East Java.** Resp. Auth.: Directorate General of Fisheries (DGF). Total cost 4.880 mECU. Parallel cofinancing with Italy. EEC 3.178 mECU. Italy 0.876 mECU, Local 0.826 mECU. Works, equipment and supplies. Works by direct labour. Supplies: int. tender and direct agreement. Supply of refrigeration equipment: Italy. T.A.: direct agreement. Date foreseen for financial decision December '82.

INDIA

Cyclone Protection Shelters, Tamil Nadu Phase III. Resp. Auth.: Directorate of Town and Country Planning. State Government of Tamil Nadu. 1 mECU. Works: Acc. tender. Date financial decision November 82.

Cyclone Protection Shelters, Andhra Pradesh, Phase II. Resp. Auth.: Cyclone Rehabilitation Housing Project. State Government of Andhra Pradesh. 3 mECU. Works: Acc. tender. Date foreseen for financial decision November 82.

PAKISTAN

Emergency Programme-drinking water supplies for refugees areas (NWFP). Resp. Auth.: UNICEF. Estimated Total Cost 6 mECU. EEC 2.7 mECU. Cofinancing with Unicef. Supplies, drilling works, T.A. Supplies: int. tender. Drills: acc. tender. Works: direct labour.

Solar energy for rural areas. Resp. Auth.: Ministry of Petroleum and Natural Resources (DGER). EEC 1.8 mECU. Supply of solar power stations. Int. tender foreseen 1st half 83.

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: after int. tender prequalification. Works and supplies in '83.

SRI LANKA

Integrated rural development in the Mahaweli Ganga region. Resp. Auth.: Mahaweli Development Board (MDB). Estimated cost 9 mECU, EEC 2 mECU. Development of 2 326 ha irrigated land and rehabilitation of 1 910 ha deteriorated land. Socio-economical infrastructure to allow settle-

ment of 12 000 rural families. TA: FAO. Project in execution.

Eastern Region rehabilitation project. Ministry of Coconut Industries. EEC 3 mECU, Italy 0.375 mECU, small UK and FAO contributions, balance up to 7 mECU financed by Sri Lanka government. Rehabilitation of coconut plantations devastated by a cyclone and diversification of agriculture in the same region. Feasibility study financed by Italian bilateral aid executed by AGROTEC (I). Works: direct labour. Project in execution.

THAILAND

Cooperation training and marketing. Resp. Auth.: National Economic and Social Development Board (NESDB) and Bank for Agriculture and Agricultural Cooperation (BAAC). EEC 3.037 mECU. To provide training facilities for the personnel of agricultural cooperatives and equipment for cooperative marketing unit. Int. tender in '83 for supplies. T.A.: Clear unit (UK).

Rubber smallholdings yield improvement. Resp. Auth.: Rubber Research Centre (RCC). Ministry of Agriculture and Cooperatives. EEC 1.8 mECU, Local 1.8 mECU. To introduce and popularize new tapping techniques to improve the yield of old rubber trees before their felling. TA: Harrison Fleming (UK). Supplies: int. tender launched November 82. Tenders in mid '83, '84.

Seed production centre for the Southern Region. Resp. Auth.: Ministry of Agriculture, Estimated Cost: 3 mECU. EEC 2.2 mECU. Construction of a centre for the production and distribution of improved qualities of rice seeds. Equipments and T.A. Works and infrastructure: acc. tender. Equipments: int. tender in '83. T.A.: Euroconsult (NE).

Oilseed Crop Development Programme. Resp. Auth.: Ministry of Agriculture — Oil seed Project Steering Committee. Total estimated cost 4.2 mECU. EEC 3.3 mECU. T.A. and supply of equipment. Date financial decision October '82. T.A.: Short-list not yet drawn up.

★ **Sukhothai groundwater development.** Resp. Auth.: Ministry of Agriculture — Royal Irrigation Department (R.I.D.). Total cost 25.600 mECU. Parallel cofinancing with UK. EEC 13.40 mECU, UK 1.30 mECU. Local 10.90 mECU. EEC contribution: pumps, vehicles and instrumentation, casing, screening and PVC piping and short term T.A. Int. tender and direct agreement. UK contribution full cost of longterm and shortterm T.A. for project guidance and supervision. Local: works except drills, T.A. local costs and operating costs. Date foreseen for financial decision December '82.

THE PHILIPPINES

Crop protection Programme. Resp. Auth.: Ministry of Agriculture. Estimated cost: 8.596 mECU. EEC 3.5 mECU, F.R.G. and Local 5.096 mECU. Strengthen and expand the existing crop protection service.

Works and supplies (vehicles and equipment). Way of execution to be determined.

Palawan Integrated Area Development. Resp. Auth.: National Council on Integrated Area Development (NACIAD). Total cost 78 mECU, EEC contribution 7.1 mECU, ADB 43.05 mECU and GOP 27.85 mECU. Small-scale irrigation works, agricultural intensification and diversification, livestock, transport development, health facilities, training and monitoring. Project duration 1982-1988. Works: partly int. tender, partly direct agreement or acc. tender. Supplies: int. tender or direct agreement. Administrative arrangements, excluding EEC int. tenders, concern full responsibility of ADB. T.A.: short-list already drawn up.

ASIAN DEVELOPMENT BANK (ADB)

Study programme — ADB. Resp. Auth.: ADB. EEC 1 mECU. Studies in the Asian non associated countries. Contrast awarded after int. tender concerning EEC consultants and non associated eligible consultants.

ASEAN

Scientific and Technological Cooperation Programme. Resp. Auth.: ASEAN-Committee on Science et Technology (COST), EEC 2.8 mECU. Training, T.A., Studies, seminars. During 2 years starting from 4th quarter '81. Contracts for T.A. and studies will be negotiated by the Commission of EC after agreement with COST.

Regional collaborative programme on grain post-harvest technology. Resp. Auth.: Sub-committee on Food Handling (SCFH). Cost 4.3 mECU. EEC 4.3 mECU. T.A., training and research. For supplies: int. tender or direct agreement to be determined. T.A. to be decided by S.C.F.H. Short-list not yet drawn up.

DOMINICAN REPUBLIC

★ **T.A. for agrarian reform and integrated rural development.** Resp. Auth.: Instituto Agrario Dominicano (I.A.D.). Total cost 13.6 mECU, EEC 12 mECU, Local 1.6 mECU. Infrastructure, equipments, T.A. and training. Supplies: int. tender or acc. tender or direct agreement. Works: direct labour or acc. tender. T.A.: direct agreement. Date foreseen for financial decision December '82.

OLADE (LATIN AMERICAN ORGANIZATION FOR ENERGY DEVELOPMENT)

Pre-feasibility study for geothermics in Haiti. Resp. Auth.: OLADE. EEC 0.530 mECU, Haiti 0.070 mECU. Contracts by direct agreement following EEC regulations.

HAITI

Integrated rural development of Asile region. Présidence de la République. Estimated cost: 12 mECU. Foreseen financing: EEC 5 mECU, IDB 7 mECU. Feeder roads, rural monitoring, irrigation, social infrastruc-

ture. Works by direct labour. Supply: int. tender in '82 and '83.

★ **Integrated rural development of Jeremy region.** Resp. Auth.: Présidence de la République. Total cost 7.4 mECU, EEC 6.6 mECU, Local 0.800 mECU. T.A. works, equipments and training. T.A.: contracts made by the Commission after government agreement. Supplies: int. tender. Works: direct labour. Date foreseen for financial decision December '82.

HONDURAS — COSTA RICA

Regional grains stocking and trading programme. Resp. Auth.: (Banco Centroamericano d'integracion economica). Total cost: 21.43 mECU. Financing: EEC 1.80 mECU, IDB 15.18 mECU, BCIE — BANAFOM — CNP 4.45 mECU. In Honduras building of 6 complementary grain-stores, in Costa Rica 7 grain-stores with a capacity of 46 000 tons (total). IDB envisages partial reallocation of Costa Rica project for Nicaragua.

NICARAGUA

★ **T.A. for agrarian reform and integrated rural development.** Resp. Auth.: Ministerio de la Agricultura e de la Reforma Agraria (MIDINRA). Total cost 12 mECU. EEC 9.8 mECU. Local 2.2 mECU. Infrastructure, equipments and T.A. Equipments: int. tender. T.A.: direct agreement. Date foreseen for financial decision December '82.

★ **Waslala regional development.** Resp. Auth.: MIDINRA. Total cost 8.5 mECU. EEC 3.5 mECU. Local 5 mECU. Road infrastructure and social. Supply of agricultural equipment. T.A. Roads by direct labour. Supplies: int. tender or acc. tender or direct agreement. T.A.: direct agreement. Works: direct labour or acc. tender. Date foreseen for financial decision. December '82 or January '83.

Crop development. Resp. Auth.: Ministerio de la Agricultura e de la Reforma Agraria (MIDINRA). Total estimated cost 19.930 mECU. EEC 7.400 mECU. Studies, monitoring, training, supply of equipment and T.A. Supply: int. tender or acc. tender according to importance or urgency. Contracts: direct agreement by MIDINRA on short-lists from Commission of EC.

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 financial decision December '82.

BOLIVIA

Irrigation Programme Altiplano-Valles (Cochabamba). Resp. Auth.: Service National de Développement Communautaire (S.N.D.C.). Cost: 9 mECU. EEC 2 mECU, KFW (F.R.G.) 6 mECU, Local 1 mECU. Construction of small dams and irrigation canals. Works by direct labour. (Outstanding project).

EQUADOR

Foderuma (rural micro-projects). Resp. Auth.: Ministère de l'Agriculture. Total cost 3.4 mECU. EEC 3 mECU. Local 0.4 mECU. Works, supplies (tractors, lorries, motor-cultivators, waterpumps) training and T.A. Supplies: int. tender in '82. T.A.: direct agreement.

HONDURAS

★ **T.A. for agrarian reform and integrated rural development.** Resp. Auth.: Instituto Nacional Agrario (I.W.A.). Total cost 17.7 mECU. EEC 16.9 mECU. Local 0.8 mECU. Infrastructure, supplies, equipments and T.A. Works by direct labour or acc. tender. Supplies: int. tender or acc. tender or direct agreement. T.A.: direct agreement. Date foreseen for financial decision December '82.

COUNTRIES MEMBERS OF PACTO ANDINO

Technical cooperation (industry and economical 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 Commission of EC.

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

Commission of EC and decision by the Junta.

Energy cooperation. (Analysis and planning). Resp. Auth.: Junta del Acuerdo de Cartagena. Total estimated cost 0.66 mECU. EEC 0.50 mECU. T.A. and Training. Date financial decision October '82.

Applied agricultural research (maize and corn). Resp. Auth.: CIMMYT (Centro Internacional de Mejoramiento Maiz y Trigo) Mexico — Decentralized actions in the andean region. Research and training. 2 mECU. Date foreseen for financial decision December '82.

COSTA RICA

★ **T.A. for agrarian reform and integrated rural development.** Resp. Auth.: Ministerio de la Agricultura. Total cost 25.8 mECU. EEC 18 mECU. Local 7.8 mECU. Infrastructure, equipment and T.A. Works by direct labour or acc. tender. Supplies: int. tender or acc. tender or direct agreement. T.A.: direct agreement. Date foreseen for financial decision December '82.

CENTRAL AMERICAN ISTHMUS (HONDURAS — PANAMA — NICARAGUA — COSTA RICA)

Support for peasant producer association. Resp. Auth.: Instituto Interamericano de Ciencias Agrícolas (I.I.C.A.). Total cost 2.9 mECU. EEC contribution 1.6 mECU. Parallel cofinancing with the French Republic and the governments concerned. T.A. and training. T.A. contracts decided by IICA on basis EEC short-list.

YEMEN ARAB REPUBLIC (YAR)

Seed production project. Resp. Auth.: central Agricultural Research Station (CARS). Total cost 6.600 mECU. EEC 5.200 mECU. Construction of 5 centres, supply of equipment, T.A. and training. Works: acc. tender. Supplies: int. tender or direct agreement according to importance. T.A.: K.W.S. (D).

YEMEN (PEOPLE'S DEMOCRATIC REPUBLIC)

★ **Flood damage reconstruction Dhalla.** Resp. Auth.: Ministry of Agriculture. Irrigation Department. 2.5 mECU. Reconstruction of flood damaged irrigation systems and open wells. Installation of flood-warning system. Supply of equipment. T.A. equipment: int. tender T.A.: on proposal of the Commission after agreement by PDRY Government. Date foreseen for financial decision December '82.

ALL NON-ASSOCIATED DEVELOPING COUNTRIES

Administration of Aid — Consultancy services and monitoring. Resp. Auth.: EEC Commission. 2 mECU. Recruitment individual experts, or consultancy firms for diagnostics, projects appraisal, follow up and technical and administrative monitoring of execution.

Studies and technical assistance. Resp. Auth.: Interested countries and EEC Commission. 1.5 mECU. To finance studies and T.A.

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Paris, France — 225 pages — 1981

Jacques Attali has pioneered new and fruitful paths to music (*Bruits*) and medicine (*I'Ordre cannibale*) and here he gives us his major work on economic theory.

We must make a list — hitherto non-existent — of all existing theories about the crisis. They are, he says, all true, so long as they inspire policies which the powers run all over the world.

Attali explains these theories by dividing them into three schools of thought, for he believes we are living in three different kinds of reality at the moment. There is change and regulation, where the crisis is only an imbalance. There is production, where the crisis reveals the contradictions that are the driving force of history. And there is the new world which is taking shape before our eyes, organization, that the author wants us to discover. Order is the fragile outline of forms and the crisis is an almost permanent redrawing of the outline, he says.

It is a world of tolerance but there is a danger of totalitarianism after the crisis. But he believes there are ways of breaking out of the stifling circle of dictatorships. The choice, he says, is between solitude and creation and "suicide and seduction".

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Year Book of Agricultural Cooperation 1981 — Plunkett Foundation for Cooperative Studies, 31, St Giles, Oxford OX13 LF, UK — 286 pages — 1982

The Plunkett Foundation was established as an independent charitable trust in 1919 (by Sir Horace Curzon Plunkett, the Irish pioneer of agricultural cooperation), since when it has promoted the study and development of agricultural cooperation throughout the world. It is unusual in being as much concerned with development work at home, in the UK, as in the ACP countries, especially since Britain's accession to the EEC has obliged UK farmers to adapt to new conditions.

The foundation has run training and education programmes in some

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25 countries in the last six years and also acts as a clearing-house of information on cooperatives. In this respect, its year book saves a trip to the foundation's library in Oxford, to the extent that it packs a great deal of up-to-date information on agricultural cooperation into 18 articles and provides indexes to the previous year books from 1927 onwards.

All the articles are written specially for the year book, by authors of various backgrounds. ACP examples include cooperatives in Zimbabwe, livestock marketing cooperatives in Botswana and a general view of the promotion of housing cooperatives in Africa. The book is clearly laid out, although printed in reduced typewriter characters which do not make for the easiest of reading, and clearly indexed. Although well-supported by facts and figures, it is valuable as an analysis rather than a mere report and covers a wide range of aspects, including the law and credit, of a variety of cooperative experiences.

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Costis STAMBOLIS — **Renewable energy sources for developing countries** — Heliotechnic Group, 10 Barley Mow Bassage, Chiswick, London W4 — 258 pages — £ 12.50 — 1981

Published six months after the United Nations conference on new and renewable energy sources in Nairobi, Kenya, this book joins the growing list of books on this subject. It is no doubt welcome, even only to help remind economic planners of the importance and potentialities of these limitless sources of power.

Renewable energy, far from being a Western ploy to halt the development of the Third World as most critics charge, is indeed a serious proposition for developing countries, not only because of decreasing reserves of conventional energy sources and their rising costs, but also for environmental considerations as well as availability of the sources.

If industrialization and urbanization are synonymous with a good standard of living in Western opinion, notwithstanding the resultant environmental pollution, a good standard of living in the developing countries can be attained without necessarily industrializing and urbanizing. As Stambolis point out in his introduction to this book, what can be defined as a good standard of living in North America and Europe may not be acceptable to an Indian and an African, whose cultural environmental and social milieu are completely different". This is not to say that the Third World do not need to develop. It does. The concise question is the type of development and the technologies applied to achieve it.

It is with this in mind that thorough analyses are made in this book of the planning, building and economic aspects as well as applicability of the sources of renewable energy mostly available in the developing countries.

THE COURIER

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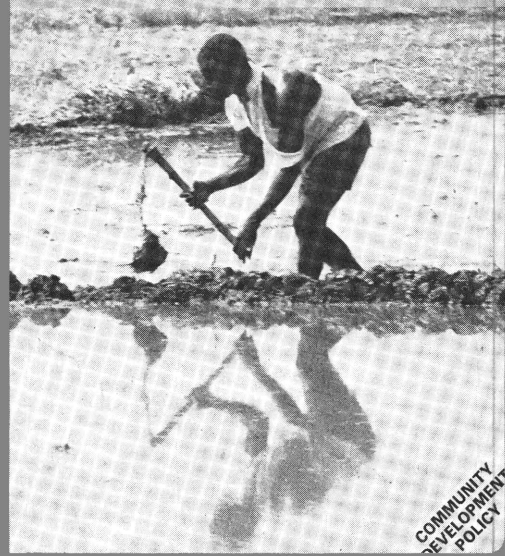
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