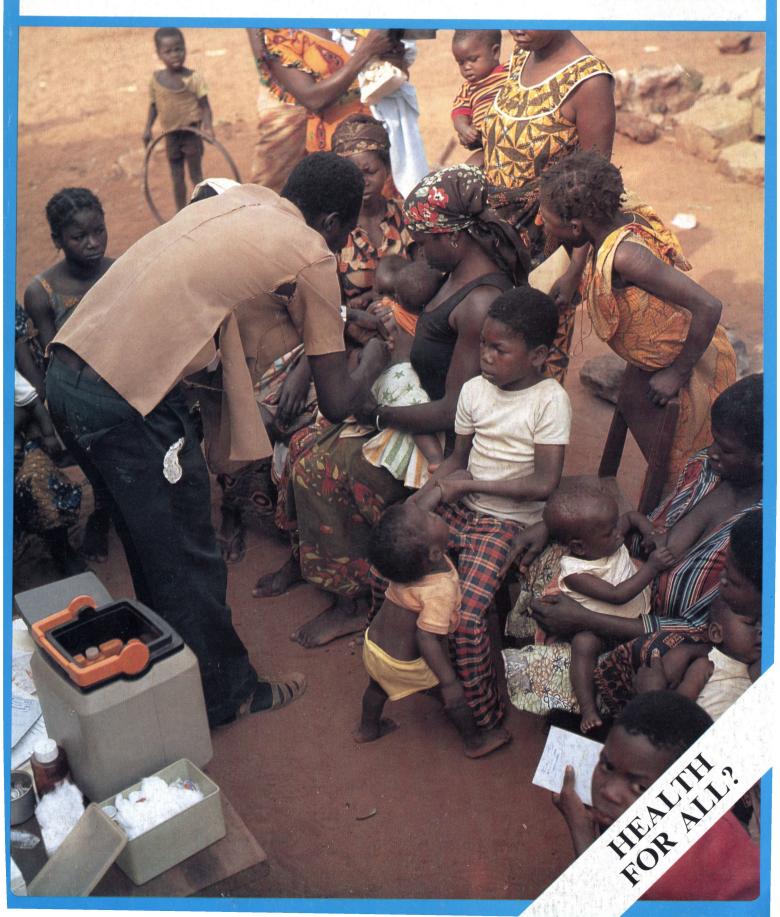
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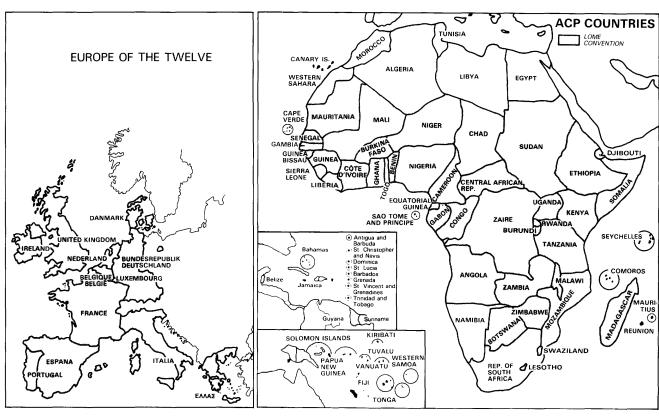
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MEETING POINT: Gro Harlem Brundtland



In December 1983, Norwegian Prime Minister Gro Harlem Brundtland was asked by the UN Secretary-General to chair the World Commission on Environment and Development. In April 1987, the Commission published its Report "Our Common Future", a long-term environmental strategy to achieve sustainable development by the year 2000 and beyond. In an interview with The Courier, Mrs Brundtland comments on the impact of the Report so far, highlights the notion of sustainable develop-

ment, and makes a plea for greater democracy at all levels of society, both in the developed and the developing world.

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COUNTRY REPORTS

GUINEA: How are things working out in Guinea, surely one of the African nations to which nature has been most kind, but which emerged enfeebled from 25 years of life under an authoritarian, and interventionist regime? Our report on Guinea looks at the efforts made in the past three years to reform and to open up its economy.



Pages 16 to 33



CAMEROON: For some years Cameroon has been self-sufficient in food and has now established the bases of a genuine industrial economy. It is one of the rare African countries which, despite the international economic crisis which has hit Cameroon, especially since 1985, has achieved recognition for the success of its agricultural policy. Cameroon's President, Paul Biya, and his Government still have a number of cards to play in overcoming the crisis and in the pursuit of their aim of opening up the country's democratic process. Pages 34 to 52

DOSSIER: Health for all?

"Health for all by the Year 2000". It was the slogan of the 1978 Alma-Ata Conference which ushered in Primary Health Care as the chosen health policy of the developing world. Now, with old diseases persisting and new ones emerging, the and health care 10 years on from Alma-Ata.



goal seems as distant as ever. Our Dossier looks at the state of health

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CDI Industrial Opportunities

OPERATIONAL SUMMARY (blue pages)

GRO HARLEM BRUNDTLAND

Prime Minister of Norway and Chairman of the World Commission on Environment and Development

"Growth... is not sustainable with present patterns continuing"



In December 1983, UN Secretary-General Javier Perez de Cuellar asked Norwegian Prime Minister Gro Harlem Brundtland to establish and chair a special, independent Commission which would address the "global agenda for change", the General Assembly had called for. The task of the World Commission on Environment and Development was to propose long-term environmental strategies to achieve sustainable development by the year 2000 and beyond, and to recommend ways for States to achieve common objectives that took into account the relationships between people, resources, environment and development. In April 1987, the 21-member Commission published its Report "Our Common Future": it focuses on population, food security, the loss of animal and plant species and genetic resources, energy, industry and human settlements - pointing out that they cannot be treated in isolation from one another.

The choice of Mrs Brundtland to chair the Commis-

sion couldn't have been more judicious — she is probably the only Prime Minister to have also been a Minister of the Environment. When presenting the Report to the UN General Assembly in its 1987 autumn session — in itself a demonstration that the linked issues of environment and development have risen to the top of the international political agenda — Chairman Gro Harlem Brundtland clearly stated it was "not a prophecy of doom, but a positive vision of the future". Her personal optimism is obvious in the interview she granted The Courier. It is in fact, just as the Report itself, a plea for sustainable development, a broad concept for social and economic progress. The Commission defined it as "paths of human progress that meet the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs." It is, perhaps even more, a plea for greater democracy at all levels of society, both in the developed and the developing world.

- ▶ Less than a year after its publication, how would you assess the impact so far of "Our Common Future" on the public at large? Do you feel it has started to bring about "changes in attitudes, in social values and in aspirations…"?
- Well I think it has started to bring those about but not necessarily up to now among the public at large, because it is not a process that can be turned on overnight. But to reach that

aim, you require awareness in the NGO community, the more the better, and among political leadership in nations. And of course in the press and the media. But bringing about changes in attitudes is a quiet, complex process, so this is a necessary step in bringing about what we have defined as being required. We know that this is a pre-condition and though you can reach it at grass-roots levels, at the same time if it doesn't come from pol-

itical leaders in as many countries as possible, then the wider process will not succeed. It is one which requires a lot of different angles in order to reach what is intended here.

"Basically we are speaking of democracy..."

► One could argue that in the South the problem is perhaps even more difficult since among the public at large, there isn't yet the kind of widespread grass-root environmental movement such as Greenpeace — that we have in the North?

- This is true and therefore we put a lot of emphasis on the need for public participation in general, because in order to see what is basically maldeveloped in local communities and local environments in the South, you need to involve people themselves or people close to them in their everyday life. So the move to increase grassroots participation in developing countries is essential. There have been, of course, for more than a decade or so, developments of this sort going on in parts of the South, and without them we will never succeed. Basically we are speaking of democracy, changing your own life and future, of involving all those concerned as part of the solution to any problem if it involves people at large. This one does, because there is no way to avoid environmental destruction without the public framework's decision-making and priorities being defined. So we need both to reach the top level in the South as well as making moves for wider public participation through grass-root organisations in the Third World.
- ▶ But it's known that the democratic process at least in its Northern conception is very often absent in the South.
- Yes, this is true and that's why it is even more challenging to try to help the process of involvement of greater parts of the public and the institutions in the South, because in all these areas it is a question of degree. You have countries in the North with very actively functioning democracies, with considerable public participation in these kinds of issues, but there are great differences even between our countries and I don't think there is any country in the world where people do not have any influence. 'Public attitude' has a meaning even in countries where there is no democracy in a formal sense, because all political leadership is influenced by the reality of what happens in their own area, their ability to come forward with a policy that can have a reasonable amount of support and public understanding. So I don't think there is a black and white situation here, but

that it is really a question of degree and we need to stimulate the process of democracy, because without it we will not have development for the benefit of the people and we will not take care of the environment for the benefit of the people.

Malfunctioning patterns of unsustainable development

- ► Contrary to the alarming 1972 "Limits to growth" report of the Club of Rome, you do not see limits to growth itself, but rather recognise that nature puts certain limitations on sustainable development. What is your vision of growth in the present world context, with all its balances and imbalances?
- Growth as it has been seen and as it has been based, generally speaking, both in the North and the South, is largely not sustainable with present patterns continuing. We describe in the Report what kind of patterns will not be sustainable but we don't try, nor would it be either possible or correct, to say that patterns in the South of such and such a nature are unsustainable and patterns of this sort in the North are not sustainable because again, even here, it is not a black and white situation. There are malfunctioning patterns of unsustainable development going on in both places, in different ways and to different degrees.

Of course you can focus the danger of the present patterns of agricultural production in the South as a major problem, the way it is being managed and distributed and the way people are involved in agricultural production. All these aspects have been dealt with in the Report, but there are obviously also, in the North, agricultural patterns, that are different, but that are as conducive to the negative global pattern as agriculture in the South. So in many of these areas there are vicious circles.

If we look at industrial production and pollution, they are a typical example of the same thing going on in the North and the South, though sometimes they are being practised in an even more unsustainable manner in the long term, in parts of the South because of the lack of framework and of restrictions on industrial production. We make it very clear that those patterns cannot continue because they

will, indeed, undermine the natural resources and the future of soils, water and air not just in the South but also on a more global level, and so the idea that you can move production of pollution to other parts of the world and avoid the danger, is just ignoring reality. Thus the methods of production and the necessary framework to avoid pollution, and the undermining of natural resources and human environment, will have to be profoundly changed in the years ahead. The patterns of today have to be changed by improving the technology, changing it, and putting more emphasis on research to find new types of production that do not cause damage to the same degree. You will find all this in the chapter on industry but also of course in the chapter on energy because that is a central element in industrial production.

I think it's the first time that energy has been put in such a comprehensive framework because we refer to energy as a part of natural resource management, economic and social development, basic human needs and the fact that energy first of all is needed for development but that it is also a potential danger to the environment. We have had a very comprehensive discussion on energy demand, on the fact that energy use has to be increased. We start by saying that increased use of energy, globally speaking, is necessary for development and for the environment because, although the distribution of the use of energy is completely skewed, the totality of today's use of energy is not sufficient to take care of a reasonable standard of living for the existing world population, not to say for the world population that we know will be there in the next 50 years.

Energy: no clear solution

But I feel the energy chapter of the Report is the only place where we very clearly say we do not see a solution. We generally say that, after having gone through all the facts and available knowledge in all parts of the scientific world and based on previous experience, solutions are indeed known and are at hand in most areas where the problems are accumulating. But in this area of energy we cannot go beyond definition even though it is the

key to development and even if the kind of energy and how it is used is the key to the environmental future. We say that we need growth, we say that the present patterns are not sustainable but we also say we cannot give the prescription on how we can bridge that gap. We believe that with considerable research effort in this area, not only within nations and research institutions as such but also with common determination globally, we need to find alternative energy sources that can reach that aim, because we all know that energy is the key to success both with regard to development and environmental concerns. We believe that it can be found in the use of a mix of different sources of energy and it can certainly not be found in just prolonging the present energy use pattern.

- ► "Our Common Future" is a call for an economic world order of a sort and a plea for a North-South redistribution of incomes and power. Little reference is made, however, to the often unbalanced power distribution within most countries of the South. According to you, how can a grass-roots approach to environment and development be brought about in the South?
- First I think one should say that we do refer to this in the Report and I personally have in statements to international conferences, in the OAU, in the United Nations, in India - I mean I am not only saying this in the North-alluded to the fact that many developing nations have a very great disparity between rich and poor. So there is obviously no solution to the future of the environment if we do not have a development pattern that also bridges the gap between the poorer and richer parts of society within nations and among nations. And you are right, you cannot avoid seeing, after having gone through all this basic experience and analysis, whether you are a conservative or a social democrat or you belong to the Communist party of the Soviet Union, that there is no future in a world with such enormous differences. There is no easy solution, so you are right: this analysis is very basic. It's not something that you start with. It was not an ideological point saying: 'we are for a more equal distribution of income between people as a principle'. I mean, this was not the

Commission's political angle but you cannot avoid coming to that conclusion after having gone through all the different key facts about environment and development. It leaves us with no alternative except what I referred to earlier about grassroots.

More aid needed

- ▶ Part of the response of the Group of 77 was fairly predictable: the South fears for additional environmental conditionality on its development and wants this to be compensated, if necessary, by increased funds from the North. What is your reply to this? How can their urgent needs for development be reconciled with an environmentally sound approach?
- Well, that's a very difficult question, because African leaders are acutely aware of the fact that they are, day by day, destroying and undermining their own natural ways and that conservation of nature and taking care of their resources are essential to their economic and social development. It is not that somebody is standing on the outside in a commission, preaching to them. I think more and more African politicians and African leaders are aware of the dangerous patterns that they are in, but they are in a situation where they have, in many places, little room for manoeuvre without outside help. This is why we state this so clearly. There is no way that the indebted African countries, who are in a vicious circle, can get out of it without the combination of national resources, economic and political planning and management coupled with increased resources and funds coming to them. This is why we of course advocate very strongly not only increased aid from nations that give too little but also from the global financial markets and institutions. With the environmental destruction going on, in addition to the poverty and hunger problem in Africa, I feel the reason for doing this is so obvious that you cannot avoid saying there must be increased environmental consideration in the practical management of daily politics in many African countries. But it must be combined with increases in both expertise and project

funding that can help them do this. We have to combine the two arguments.

The link between economy and ecology

- ▶ A few years ago in a similar interview Dr Tolba, UNEP's (1) Executive Director, said that what is needed for the Third World to become fully aware of the meaning of an environmentally sound development is to show them the economics of it. What are the economic benefits of an environmentally sound development?
- I think what has happened, also during working with the Report, is an increased awareness on this very point that you are losing economically by bad development or by malpractices with regard to environment and development and I think that comes out in many of the chapters of the Report. But we address both the North and the South in this issue because I have been through the same kind of experience with regard to several countries in Europe, when it was completely impossible 10 years ago or 15 years ago, to get them to acknowledge the fact that acid rain and strong pollution were the effects of industrial production and of automobile emissions. That it is not only a question of health, and indeed destruction of nature and forest and water resources, but it also has a dangerous economic side as well. The pollution goes directly onto concrete and metal. It destroys, attacks by acidity even the economic infrastructure that we are trying to build up in our own countries and I could see that gradually the economic argument made a certain kind of impact even in circles that were completely unwilling to listen at first. I think one has to work very strongly on the link between economy and ecology. And focussing on the economic side of this is very sound, because political experience and political management and people's aspirations and so on, are very often interpreted in economic terms and in terms that can be measured in some kind of economic framework so that the more we can translate the loss in the environment into economic losses, the more people will be able to get some understanding that we are also undermining our economy.
 - ▶ But is it feasible?

⁽¹⁾ UNEP: United Nations Environment Programme.

 Well, let's take energy. It was impossible 10 years ago to have industrialists realising that it was a good idea to put efforts into energy conservation. They were used to thinking that energy was something they needed for production purposes and the emphasis was not even on trying to minimise the amount of energy going into production. It was simply the case that it was something that they needed to use and it was not even worthwhile to work very deliberately on bringing costs down. But then you had a combination of ecology and the destruction of environment and even in solely economic terms, those firms were forced to change production methods in order to take care of the environment. They could point to the investment to reduce energy use as an economic justification and so now we have energy conservation gradually becoming part of energy policy and industry policy. You see, the more we can get this kind of resource management involved in general management the more a policy decision would help to make management decisions.

"... a fundamental and integrated part of total political and economic thinking..."

- ► Having read your Report one is certainly convinced that everything has an environmental impact but institutionally speaking, how difficult will it be to integrate environmental considerations into an overall economic policy?
- One has to systematise this and have systematic research and planning into the effects on the environment of certain types of projects and certain patterns of development. This has to be done in a systematic way in the same sense that we look back to how our societies changed during this century when other issues were on the agenda.

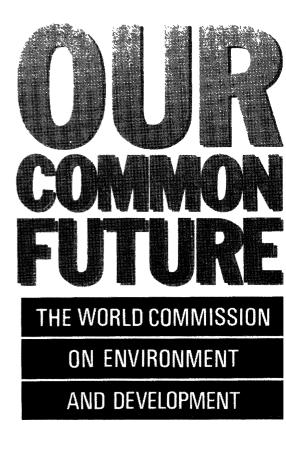
I often think about child labour. When this issue was discussed in this country around 1910 — that was when it really became a hot issue — industry said that in economic terms they could not afford to have regulations that said that young children or children below 15 or 12 years could not work in industry or mines because it would increase the cost of production. It was a political decision in people's minds

that 'we are not going to listen to this' and so a law was passed to say that it was not allowed to use children in the mines. In a sense it was then that it became something which was self-evident. When you plan mining industry today you don't plan for part of your production to be based on this kind of cheap labour. And in the same way, you cannot now plan an industrial plant if it is obvious that it will destroy the environment around that plant. Pollution which is of a certain magnitude and that somebody is going to have to pay for, needs translation into economic or practical terms that are accepted as necessary: regulations and frameworks and pre-conditions exist for that plant being allowed to enter into production. So it means that vou must have inputs from those who know this area. We must have legal frameworks, we must have incentives of an economic nature and all this must be dealt with in the management process and the decision-making process. And that means we need UNEP.

If we go from this to the international arena we need UNEP to be focussed on environmental issues, specialising in knowing what kinds of impact will come and how it could be avoided and how UNEP can help in spreading expertise on this issue. In addition we need to have a United Nations base in New York with the General Assembly and the Headquarters of United Nations, putting into the general political framework and economic considerations the environmental aspects as a fundamental and integrated part of total political and economic thinking in the same way as it would be in a government or in a firm. If the top leadership in an industrial firm, planning that firm's future or making decisions on a development project, do not have the input on this issue as part of their planning process, they will not be able to make the right decisions. They need specialists but they need to be aware that it is not a side-track which can be seen as separate from the totality of the project and plan that they make. If it is not implemented it will be more costly to solve the problem after the fact or as a kind of side issue because where this is not built in into the pattern as an obvious and self-evident part of general planning you will not get the optimum

Helping to build expertise

- ▶ What is your feeling about the approach of both bilateral and multilateral donors operating in the South. Do you feel they are sufficiently concerned about environmental matters?
- No, they are certainly not. And there are many reasons for this. It has not been clear enough, in the countries themselves, what danger they are facing. If they are not aware of the magnitude and the danger of this problem, they don't ask for aid and projects where these concerns are a major part of the thinking behind it. If it has been introduced by somebody from an NGO, or from an institution of the donor country it may have been looked upon as something which is more of their concern than that of the country that receives the aid. I think this is gradually becoming history. We are still in the phase where this is part of the reality but I think there is a transitional phase now when one realised that it is in the recipient countries' benefit that a reasonable amount of management also takes the perspective of the environment into account. I hope we'll see a turnround, in that recipient countries will be asking for more enlightened kinds of projects with a broader perspective of social,



cultural and environmental aspects. Because, after all, they want economic development that will be lasting and that will make people function and the environment function and thereby be a positive element in their national development.

I think this will happen via a normal process of discussion between recipient and donor countries, as I think has happened in other fields, discussing what is really in their interest, what kinds of plans are wanted, but they have to be in accordance with their own national planning and it has to be part of the recipient countries' planning and management.

If it is not seen to be helpful then it will not function as it should and will not provide the solution we all want.

Up to now, however, many places have not even tried. If they have no expert in the nation to evaluate the advice they get from environmental experts, then they are not in a position to implement it as part of their national policy. This is also why we advocate clearly that we must give institutions in the developing nations help, and help build the expertise they need in ways that are relevant to their process and their management system so that there is someone to speak to on the recipient side.

In different comments and questions being made about the Commission Report this fear of a new conditionality was mentioned. One also saw the interventions in the General Assembly of President Robert Mugabe and Prime Minister Gandhi - the same day the three of us spoke after one another on the same agenda. They hoped through their statements to make it clear that concern for the environment is our common concern and we cannot get away from it. We need help, yes, and we need this to be a common concern and so on, but we hope in turning this around that it is not seen to be a condition being put by the North to the South but it is indeed a condition for their own development. And so during the processes of the General Assembly, by many private discussions and increased knowledge of other reports as a whole, this question never became a problem and in the end we were very happy about the result of the General Assembly resolution and debate.

"Spaceship earth"

- ► To conclude, Prime Minister, what are the next practical steps to be taken by governments and donor agencies, as well as by recipient countries? What happens next or what should happen next?
- First that resolution hands over most to national governments and to the different specialised agencies and institutions under the United Nations



"... there is obviously no solution to the future of the environment if we do not have a development pattern that also bridges the gap between the poorer and richer parts of society within nations and among nations"

family to integrate sustainable development as part of their programmes, and that means that we'll now see a process of discussion in the different agencies within their specific area on how to change their plans and programmes to support sustainable development. This means that we'll have to return to this issue both after national governments have been working on making improvements and changes and research institutions have been doing the same, industry doing the same, we hope, and there are certain lines for industry to follow up on. Then it will all go back from the specialised agencies into the United Nations as such, to the General Assembly again next year and the year after. There is every reason to believe that there would be a further conference planned in some years, probably the

early 1990s. Several countries have confirmed being willing to host a big follow-up conference: Sweden has done so, Canada has done so, there are also I think a couple more.

- ► I would almost say "another UN world conference..."
- Yes, but if you do that and have a conference where at that stage, governments are coming together on the basis of the Report and the Resolution, explaining what they have done, we can promote a certain activity both in scientific institutions and in the NGO Community and international institutions.

I don't think it is without value because the preparation for the conference itself sets up initiatives and is an argument for improvement in itself, but also adds to the process, especially if it is a follow-up conference where certain things have been set up, where we can see what we have obtained and examine where we will go from there.

We will want to monitor what has been done and what areas are really turning out to be serious ones that nobody has done enough with. We have now, for instance, got the ozone agreement, which UNEP of course was so active in, which was finalised in Canada just before the debate in the General Assembly. That was not as good as we had hoped for, but it was an important step in making all countries responsible for limiting the amount of ozone going into the atmosphere - be they developed or developing countries. The balance between them, I think, points in the right direction since those with already a high level of ozone pollution have to have greater restrictions on their management and the future use of technology than those countries that now pollute little or not at all.

To find a global basis for management of common concerns was the specific result in an area which is one of the most dangerous ones, because the pollution of the atmosphere is menacing and there we really see that we are on 'spaceship earth'. There are limits to what that atmosphere can take. \circ

Interview by Roger DE BACKER

"Culture and agriculture" The ACP-EEC Cultural Foundation's Seminar in Amsterdam

It was not an easy subject to have chosen, but an elusive subject, one not readily grasped and which, if grasped, slipped all too readily away again. Because it was neither culture alone nor agriculture alone that formed the theme of the Foundation's gathering in Amsterdam, but the relationship between the two and the extent to which that relationship should or should not be meddled with in the name of Development. The seminar's approach was to look at the subject from all angles — as it related to land tenure, or to the formulation of agricultural development projects, or to appropriate means of communication or education in rural Africa. The role of women was given particular prominence. The advantage of this approach was that seminarists learned something about a wide variety of issues related (some, admittedly, rather tenuously only) to the main theme: the disadvantage, unquestionably, was that it rendered the meeting very heavy indeed on speeches and sadly light on true discussion.

The Foundation's Secretary-General — and principal driving force — Raymond Chasle, Mauritius' Ambassador to the EEC, had succeeded in assembling many of the leading lights of ACP-EEC cooperation — Ambassadors Sylla of Guinea and Sy of Senegal, for example — as well as a number of distinguished academics (anthropologists, agronomists, scientists...) as speakers at the seminar, together with a number of senior ACP civil servants or representatives of African regional organisations as participants.

It was Professor Abglemagnon, Director of the African Laboratory for the Coordination of Research and of Interdisciplinary Studies, who first described — in characteristically idiosyncratic terms — the African peasant's relationship with the earth. It was, he said, more than "a dialogue with mother earth"; it was "a relationship of commitment". The peasant in Africa "nurtures the earth, caresses it, impregnates it and causes it to bear fruit". The relationship was, he said, above all, one of love.

So be it. But, as other speakers were to point out, that relationship was becoming less one of man to the earth and increasingly one of women to the earth. Widespread migration of their menfolk to urban centres inside the country or beyond its frontiers, whether because of the diminishing returns on farming in countries such as Kenya, now experiencing pressure on

land, or because of the offer of work elsewhere (such as in the South African mines), was creating an agricultural sector increasingly dominated by women. Lesotho offered the most striking case in point, perhaps, but similar circumstances existed elsewhere in the continent. In Zambia, for example, where the menfolk were concentrated in the copperbelt, an estimated 60-65% of rural households were headed de facto by women. For cultural reasons a semblance was often preserved of men continuing to take the major agricultural decisions, but the reality was often different. (Mrs Safilios Rotschild, who made this point, indicated that similar social conventions existed in her own country, Greece). The nuance was of potential significance, however. Agricultural development programmes had to be sensitive, of course, to cultural practices, but also to changing social realities. Women could no longer be said to concern themselves exclusively with food crops as opposed to cash crops any more... Stereotypes no longer necessarily fitted the facts, and it was important for development that both national agricultural departments and donor organisations took these new realities on board.

Development — "good medicine"?

But was development "good medicine" anyway? While most speakers

welcomed the fact that - at last social and cultural factors were being taken into consideration in the formulation of development projects, one speaker, an anthropologist, questioned the usefulness of development itself. Was the push for Western-style development, founded on the conviction that material wellbeing is synonymous with happiness, what Africa actually needed or wanted? Tradition, though often perceived as such, was not necessarily a brake on development. (Neither were "less advanced" countries, Ambassador Chasle echoed, by any means "less advanced" than others - this was merely a label pinned to them by donor countries to define their economic status). On the contrary, the rural structures already existing - family networks, age groups and so on - could be forces for change for the better, and should be understood and used as such.

Traditional does not mean underdeveloped

The same presupposition that all that was traditional, all that was precolonial, equalled "underdeveloped", not to say barbaric, had persisted all too often in attitudes towards land tenure reform in Africa. In a paper entitled "Oublier Babel?" (Forget Babel?) based on a study of agro-land tenure reforms in 18 francophone African

"The decline of agriculture in Africa is attributed largely to the destructuring of peasant- and family-based agriculture"



States, Etienne Leroy, himself both an anthropologist and a lawyer, pleaded the case for what he called "a new myth", a new intercultural approach to land tenure reform which respected cultural diversity and recognised that each could have their own value.

"The concept of rural development must first be clarified through a sociological and even ethnological approach aimed first and foremost at giving due consideration to the particularities of each society. In this way can research be limited to a transposition of Western methods or the application of schemes of too general a nature.

We deem it essential that cultural originalities be respected when new technologies are being introduced and utilised. As far as the developing countries are concerned, a survey should be made of all the wealth directly derived from men and their life in society: This study of the human environment through sociology and ethnology will also allow for solutions to be envisaged to control the adaptations of a human surrounding some of whose habits will be upset by the direct and indirect effects of new technologies.

It is often felt that traditional agricultural methods are too primitive. Nevertheless, family agricultural production often ensures the most rational use of the soil and the highest agricultural output per hectare. It has been observed that there is a coincidence in the highest outputs of agricultural products and the size of the smallest agricultural farms in Africa, Asia and Latin America. The decline of agriculture in Africa is therefore attributed largely to the destructuring of peasant- and family-based agriculture".

Extract from "The Importance of Cultural Factors in the fight against hunger in the world" by H.E. Mr Raymond Chasle, Mauritius' Ambassador to the EEC

Profit, it was widely suggested, should cease to be the overriding concern in project formulation, and Title VIII of the Lomé Convention, one speaker believed, marked the end of this mentality. Economists, indeed, were very much the villains of this

piece. One speaker, describing very ably the cultural problems encountered in the management of irrigation settlements, was accused of "thinking like an economist"! Increased production had been the byword of agricultural development projects since the 1950s, and only in the 1980s were other, socio-economic aspects beginning to be granted any importance.

Interestingly enough, urban Africans - unlike the peasants - were frequently under the impression, also, that development was a matter of increased production. Thierno Kane, of CONGAD, a grouping of Southern NGOs, told the gathering the following enlightening story. Once, when his organisation had amassed some four or five million CFA francs, the question arose as to how the money should be spent. Mr Kane himself had taken it as axiomatic that it should be spent in some activity by which agricultural output would be stimulated, but the decision was not his alone to take and, in fact, he found himself in a clear minority. The majority of those concerned, peasant farmers themselves, had a quite different order of priorities: they wanted the money to be spent on building a wall around the cemetery, sure in the belief that before they turned to the needs of the living they should see to the needs of the dead. It was Mr Kane, also, who - in the Round Table debate on The Case of the Sahel which wound up the Seminar - pointed to certain cultural aspects of the giving of food aid. "It is cooperation", peasants would ask him, when distributing food aid during the drought, "or is it charity?" There was a question of dignity at stake, even amongst the needy.

Other speakers told of cultural matters relating to the rural world in genral, such as the shortcomings in the

Certain papers delivered at the seminar, on themes relating to village structures, land ownership, population, women, education and means of communication in rural areas and agricultural research or practices may be obtained from the Secretariat of the ACP-EEC Cultural Foundation, 30 Boulevard Poincaré, 1070 -Brussels. Tel. 523.07.08. (322)Telex 20465 Source B.

20th Century of the oral tradition, and the need for literacy campaigns, or for a rural press, preferably in the vernacular. Others spoke of the virtues of wider and technically improved rural radio coverage, particularly as a means

"Development experts are always comforted by the thought that they can attribute the failure of a project, which is technically sound on paper, to the perpetuation of traditions which make the people impervious to the seduction of modern techniques.

Generally speaking the notion of modernity is conceived as the mere conformity to cultural orders and systems of value peculiar to industrial societies, the reproduction of which, in a non-industrialised social group, should enable the members of this group to form attitudes favourable to the development of a modernisation process of the production machinery, which in turn will engender an industrialised society in the Third World, enjoying a standard of living comparable to that of market-economy states of Western Europe".

Extract from "Modernisation of Agriculture and Traditional Crops" by Prof. R. Anciaux, Université Libre de Bruxelles.

of communicating knowledge to the farmer. Mrs Myriam Bacquelaine, speaking of the "ruralisation of education" pointed to a certain disdain on the part of teachers for manual work, stressing the need, nevertheless, for practical training, particularly in agriculture. "At present", she said, "rural schools breed children who don't want to stay in rural areas".

Few, probably, by the end of the Seminar, would have radically altered their views on development - many of those present, after all, were professionally committed to it. Africa should not — and could not — spurn development in order to preserve, intact, its culture, but must develop in such a way that its beliefs and traditions are respected. On this there seemed to be consensus, and, though no longer a new perception, the Foundation will presumably be satisfied that its Amsterdam Seminar served to reinforce this conviction. o M.v.d.V.



To be an ACP Ambassador in Brussels

Last year, The Courier published a feature on the ACP Secretariat-General in Brussels (No 102, March-April 1987, pp 12-26) to give readers a better idea of the work of this organisation, which is one of the cogs — if we may say so — which keep the wheels of ACP-EEC relations turning. And there are other "cogs", important ones too: the ACP Ambassadors to the EEC, the vast majority of whom are based in Brussels. What do ACP Ambassadors do in the Belgian capital? Are they, as one of their number puts it so amusingly, just "well-dressed men who sip champagne?"

The Courier has decided to answer this question by introducing four Ambassadors who have agreed to be interviewed about their lives and their daily problems.

In this issue, Senegal's Ambassador Sy and Dominica's Ambassador Savarin start the ball rolling. Two of their colleagues will be interviewed in the next issue.

Seydina Oumar Sy: "A life shared between ACP issues and Senegalese affairs"

- ► Ambassador Sy, what are your most important duties as Senegal's representative to the European Communities?
- First of all, let me say that I am not just Ambassador to the European Communities. Of course that is the job that takes up almost 75% of my regular working hours, but I am also accredited to Belgium, the Kingdom of the Netherlands and the Grand Duchy of Luxembourg.

To talk about our activities with the Community — as you know, we are linked to the Community by an ex-



tremely important Convention, a fiveyear one, and we have to devise, or at all events submit to our Government, the position we will then have to share with all the ACPs if we are to have a common view of things when we meet the Europeans. Obviously, once the Convention is signed, there is a programme for Senegal's economic and social development and it is the Ambassador who has to look after it. So I am constantly in touch with DG VIII, the Development Directorate General of the EEC Commission, with all its departments and all its aspects, to get Senegalese matters to advance. That is really what an Ambassador's job is particularly if he is accredited to the EEC and he is an ACP. His life is shared between ACP meetings coordinating the positions of the countries of Africa, the Caribbean and the Pacific, and the purely bilateral work involving keeping his country's affairs moving.

- ► Can we go into the bilateral side of things further? Just how far can you go, bearing in mind the complexity of some of the questions on such things as financial and technical cooperation, trade issues and institutional matters? Do you have enough time? Is your team big enough for you really to handle the technical complexity of the dossiers properly?
 - As for the time you have to
- (1) See News Round-up in No. 107 of The Courier, p. XIII.

- find it. As for the colleagues I have some very good ones and I am happy with my team. They are each in charge of a particular sector and they have to tell me about any changes likely to affect — for better or for worse — my country, Senegal, and the ACPs in general. Once we have taken stock of the problem, we see who deals with it in the Commission and we talk with him or her first, instead of going straight up the hierarchy. I think it is better to talk to the person in charge of the dossier. He can tell you what the problems are and set out the data as he sees it and you can give him information and say how you see things. So there is a dialogue at every level and it is started by the Ambassador and his staffs and we are in constant contact with the Development Directorate General. When something is mainly dealt with by another Directorate General, then one of my staff deals with the dossier, under my supervision obviously, but, if necessary, in liaison with Dakar. And if need be, an expert comes over from Dakar to take part in the discussions.
- ▶ I understand you have a staff of six. That isn't very many when you think about the great diversity of questions there are to handle. Is it enough for you to play the part of a "bridge", a link between your country and the Community in Brussels, as you would like?
- No, it isn't very many, but we have to manage. Some of my collea-

gues who are Ambassadors of other ACP countries have even smaller teams and things are much more difficult for them. They are worthy of admiration, because they get the job done.

- ► Take a big programme like the Podor one to be run with 6th EDF funding are you monitoring this here at the Embassy?
- Of course. This dossier, in fact, was drawn up by the Ministry of Rural Development in Senegal and then forwarded to the Ministry of Planning which applied for financing from the Commission. It also passed on instructions to us on monitoring the dossier. Here in Brussels, the "life" of the programme and the way it develops are monitored by my economic adviser in the light of information from Dakar. If any particular problems crop up during implementation of the programme, Dakar will perhaps send over a technical team.

This project indeed has mainly given us problems with the Member States, not with the Commission. There were problems on the EDF Committee when the project was presented, but there weren't many with DG VIII. At the Commission, in fact, we tend to have problems with Directorates-General other than DG VIII as they are less *au fait* with the difficulties we have and aren't worried about ACP relations. This was the case with the aflatoxin issue and it is happening again with cadmium.

Frank discussions

However, I don't mince my words. I discuss frankly with my contacts... and sometimes we have some pretty disagreeable things to say to each other. Take the tax on oils and fats. The Commission calls it a "stabilisation mechanism" for oil and fat prices, but this is a euphemism. It is a tax, a tax on consumption, and it is of particular concern to us in Senegal because of the importance of groundnut production to our country and our peasants. And our exports come up against both tariff and non-tariff barriers, an enormous problem for Senegal which the Europeans have to wake up to and take account of.

► That's part of the dialogue, isn't it, but does it leave a scar on one or the other?

- No it doesn't, because, naturally, we can say all sorts of things to each other and use all sorts of arguments, but the quality of our relations with our partners in the Commission is such — and I am personally very attached to this - that it would be wrong to talk about scars. I know the people I deal with in the Commission well and I think they know me, too. I get on very well with them, but that does not mean that I go along with their positions or they with mine. But there is genuine friendship there which makes us tell the truth. And going beyond the technical side of the problem, there is the way you tackle it. This is very important. We and the Commission staff are friends. We have to respect each other and tell each other the truth — but in acceptable terms. This is a typical ambassadorial job getting the Government's feelings across in such a way as to safeguard the dialogue for the future.

To get back to the Podor programme, there was a certain amount of misunderstanding here, but we let time do the healing. We in Senegal have always been pro-dialogue. Unlike what happens in other international circles where everyone tries to outdo everyone else, the ACP dialogue with the Community is, I believe, unique in North-South relations - and even South-South relations too. It enables us to get results, because we can all say what we think, which is vital if you hope to agree with your partners one day. I know the Commission cares about our problems. It has just proved it with the special ECU 100 million programme for sub-Saharan Africa (1). But it also has its red tape which sometimes has to be cut through.

► You take part in ACP and ACP-EEC working parties as part of this dialogue, don't you? Which ones, and what do you discuss in them?

"Not just speaking for Senegal"

I am above all co-chairman of the sub-committee on Agricultural Cooperation and a member of the enlarged bureau of the ACP Committee of Ambassadors on which all ACP Chairmen of ACP-EEC sub-committees sit. And

of course I also attend to a number of ACP and ACP-EEC working parties and meetings, even if Senegal is not directly concerned, for I am interested in everything which has to do with the ACPs. It is perhaps interesting to know that, at these meetings, I don't just speak for Senegal, but for all the ACPs. When it comes to agricultural products, for example, I may well defend ACP interests on sugar although Senegal is not, or not yet, a sugar exporter. This obviously means I have to have these dossiers at my fingertips, although they may not relate to subjects which I might traditionally have dealt with. On the international scene, here and elsewhere, we developing countries are asked to practice realistic prices, and we do. But, curiously enough, the prices of our products on the world markets are dwindling and at the same time we are expected to pay our farmers a fair price. These two incompatible demands are a real problem — and it is a problem we are putting to the Community.

- ► Have you had the opportunity of dealing with one of Africa's major problems, that of debt? Or do you think it is better dealt with in the places we are always hearing about the Club of Paris, the Club of London, the World Bank and so on?
- There is more to it than dealing with the problem there... As you know, I am a Moslem, a practising Moslem, and the Koran says you must not overburden debtors and that repayments must be proportional to possibilities. I think this applies to our States' debts. They have to be given the time to meet their obligations without paying back more than they can actually afford. However, my impression is that the countries with debts are ready for dialogue but that their creditors are not, at least not globally. At the moment, we are paying back more than we receive. We are paying back enormous sums and they are spoiling our prospects of development. Development is being mortgaged and it is a threat to our stability.
- ▶ You are the doyen of the ACP diplomatic corps. Do you look upon this as an honorary position or does it carry responsibilities?
- My answer is based on our cultures which respect seniority. For-

⁽¹⁾ See News Round-up in No. 107 of The Courier, p. XIII.

mally, first of all, legally speaking, I am not the doyen of the diplomatic corps here in Brussels. That is the Papal Nuncio Pedroni. I am vice-doyen, although it is true to say that I am the Ambassador who has been here the longest. And because of this, my colleagues show me friendly respect, or respectful friendship, call it what you like, and come and ask my advice.

- ► So are you a kind of father confessor for your ACP colleagues?
- I don't take confession! They come and see me and talk to me about various problems and I give my advice. I am often asked for my advice. My colleagues tell me what is worrying them and this gives me a certain status, but that doesn't make it a right. You have to do things seriously but not take yourself too seriously. I base my opinion on my own experience, which is long, 15 years. It's a non-written past and it mustn't be institutionalised. It is a mark of personal consideration and I should like to thank all my colleagues for their confidence.
- ▶ Yet there are some intra-ACP problems that are difficult to solve. Without mentioning any names, can you give an example? And what do you think about the Lomé Convention?
- The biggest problem between us, the one which worries me most, is integration, regional cooperation. It is particularly difficult because there are so many sides to it political, economic, technical, administrative and more. Yet solving it, or getting some way towards a solution, would be solving many of our national problems. An effort has already been made along these lines and it absolutely has to continue.

But things have to be seen in perspective. What do I think about Lomé? The Convention and ACP-EEC relations, overall, are very positive. It is an excellent Convention. There are shortcomings, obviously, things that pose problems for us and we are anxious to solve them through dialogue. We want to improve implementation of these aspects of the Convention. But Lomé III is a fine achievement and it has to be preserved and strengthened to become a model for North-South relations.

Interview by M.-H. BIRINDELLI

Charles Savarin Ambassador of Dominica

- ► I understand that you used to have representation in London and work from there. Why was the Embassy moved to Brussels?
- Well, in the first instance, our major relationship with Europe has been with the United Kingdom because of colonial ties. When the UK joined the Common Market, our trading relationships were governed by decisions taken here, in Brussels, and it therefore became important for us to be located in the capital of Europe. As a member of the Lomé Convention ACP Group, we found that it would be better for us to relate with the ACP group of states, and within that group of states to relate directly with the EEC. Also in respect of our particular individual interests within Lomé, we found it necessary to be able to nudge a little bit when programmes and other matters in which we have an interest are being looked at. It is most helpful to be on the spot to be able to ask a question, get an answer, and perhaps ourselves be able to respond to questions that might arise so as to facilitate quick implementation.
- ▶ Does this mean that you still have to cover work in London at Ambassadorial level?
- No, I don't. What we have in London at the moment is a High Commissioner, who is resident in Roseau, the capital of Dominica, and we have a consul, who does a lot of our consular work from the Consulate in London.
- ► And what do you regard as the most crucial part of your work here?
- I think that what we want to ensure here is that our responsibilities to the Community under the Lomé Convention are adhered to and that there are no delays as a result of shortcomings on our part in giving effect to agreements between ourselves and the EEC. There is also the question of regional, i.e. Caribbean-wide and sub-regional (OECS) (*) interests to be pursued and, of course, Belgian/Dominican bilateral relations.
- ► What sort of logistical problems do you come up against in this respect? There is of course a big time difference...
- (*) Organisation of East Caribbean States.



- Well there is, first of all, the question of time zones. When we are up, it is still night-time in Dominica because we are five hours ahead here on normal time, and six hours ahead in summertime. So that creates a tremendous difficulty for immediate communication. Normal mail takes between six and seven days, one way, so that it can take over 14 days to for an exchange of correspondence. Then there is also the fact that we are a part of a sub-regional group, the OECS. We are also a part of CARICOM (the Caribbean Community and Common Market) and as a result there are some decisions which have to be taken at regional level. These are subject to a tremendous amount of discussion and that can sometimes be difficult.
- ► Some of the ACP countries, notably some Caribbean and Pacific countries, feel that there is perhaps little more than lip service paid to them in the Convention. Would you hold that view?
- First of all, I think that we have to recognise the facts of life. There are 66 ACP countries and some 44 of them are African. The African countries are larger in terms of their geography, and their population, as well as their global economy and market potential. Then there are many major international issues all centred on Africa: the questions of drought, desertification, and of land-locked continental countries; of debt and, of course, the questions of apartheid and South Africa; all these issues have a very high international profile.

The Caribbean and the Pacific, too, have peculiar problems, but problems that are not as internationally exciting as the major issues of Africa. They are the peculiar problems of size, of insular and/or archipelagic configuration, and although the Convention does make

mention in a number of places of the special problems of least developed, landlocked and island states, there is not what one would term a programme — or special provision — within the Lomé Convention which addresses the peculiar developmental problems of small island states. As a result the Caribbean and the Pacific regions are grouped with Africa and continental yardsticks are used in determining the viability and applicability of programmes and projects.

Our ACP and EEC partners have to get out of the continental framework and recognise that there are Member States with a population of 100 000, 200 000, 300 000, and a land mass of of 200, 400, 600 sq. miles. These are special problems, and one has to deal with them effectively, and have programmes and approaches that take into account their peculiar circumstances in terms of the cost of services per capita, the scale and volume of production, the cost of transportation, etc. One has to recognise the fact that expert services can only be applied to a very small number of people, because the nation state's total population is small and it becomes difficult to spread the expertise, the technology and the investment to benefit a mass of people larger than the national or island population.

I think it is because of this difference that sometimes it is said that there is more emphasis on the larger problems of the continent of Africa than on the equally important but perhaps not as high-profile problems that are those of the Caribbean and the Pacific. But I do not think that there is an intention in the Convention to be lopsided — I just think that in responding to situations one is obviously impressed and affected by larger problems and opportunities than by smaller ones - smaller in terms of scale and of the number of people affected. It's a matter of human nature. What is often missed when dealing with small states, however, is that their problems are solvable.

- ► Can you give an idea of how many civil servants are responsible for aid-absorption, for example, in Dominica?
- The Department of Planning has primary responsibility for coordinating aid-related matters, and because we have a very underdeveloped infrastructure, the Ministry of Communications and Works would be the major agency which would utilise developmental assistance,

together with the Ministry of Agriculture. I would say that in terms of decision-makers and technical personnel there is a small corps of about a dozen people.

- ► What are Dominica's views on the application of other Caribbean States to the Convention?
- I would prefer to look at the way the Caribbean states respond individually, rather than the way in which individual islands respond respectively to national programmes. We find that in respect of the regional programmes, there is certainly a different pace of response as opposed to national programmes. For instance, under Lomé I and II, 100% of the funds allocated to Dominica were committed and spent, and under Lomé III, 98% of the funds earmarked for Dominica have been committed and we are well on the way to spending all of it, so that by the end of 1988, I would expect 100% of the funds earmarked for Dominica under Lomé III would be both committed and spent. However, where the regional programmes are concerned, there are difficulties, and disbursement has not really begun under Lomé III for regional programmes. This has to do with the fact that these programmes are to be coordinated at a regional level, and therefore it is necessary for governments to come together, and to agree on the terms, areas, and sectors of priority, all of which involve major acts of compromise to find a programme which will benefit all states sufficiently.
- ► So the implication is that if there are any more Caribbean members and perhaps, particularly, any more where there is another language involved, it's going to complicate regional decisions yet further?
- With numbers, the larger the number the more complicated the decision-making process is. Nothwithstanding that, however, it is a fact that there are geographical, historical and economic factors which indicate that countries need to cooperate and coordinate their activities in terms of major programmes. In that regard the Caribbean has examined, for instance, the question of Haiti's application for membership of Lomé, and have decided that they would give full support to it. Haiti is a French-speaking country, Suriname is Dutch-speaking, and CARICOM the rest of

the Caribbean ACP Group — is Englishspeaking, so therefore we would be adding a third language to the two languages within the Caribbean. But Haiti also has observer status in CARICOM as does Suriname, so that even outside of ACP Lomé concerns, there is a recognition that some closer relationship and economic cooperation would be in the interest of all these island states. That includes cooperation with Suriname and Haiti, the Caribbean OCTs, and also, possibly, with the Dominican Republic. One has to take on board the fact that it will involve new areas of difficulty, but what one has to look at is whether it is reasonable to ignore the facts - the economic facts, the historical facts, the geographic and political realities. One has to seize the opportunities presented by the realities of a situation, adjust to the circumstances and to what needs to be done.

- ► You are relatively new to this kind of job. What do you find most frustrating about it?
- I have served some 17 years as General Secretary of the Public Service Union and three years as a Cabinet Minister. So clearly, when one moves from a situation where decisions can be taken and implemented to a situation where as with the Committee of Ambassadors - one examines a whole range of programmes, and problems, making recommendations, there are very few matters that will come before you that you can examine, decide upon and see implemented immediately. It is a different type of activity and when one comes to terms with that, then I think that the adjustment is not too difficult.
 - ► And the most rewarding part?
- Well, even if it does take time, it is rewarding when one is involved at the beginning in a matter which eventually comes to fruition. To have been involved with the birth of a particular idea, or programme, and to have followed it through, and eventually to see it implemented and grow. I think it's like in my first job, which was a teaching job - I taught for seven years. There you see a bewildered kid come in at a very tender age, and graduate out of school and begin to play a constructive part within society. One gets a certain satisfaction from having had a small part in preparing such persons for their eventual place in society. o

Interview by M.v.d.V.

Multidisciplinary keys to Africa's food problems

by Montague KEEN (*)

It has taken a long time, and at a heavy cost in money, resolution and confidence, for the developed countries to recognise and act on the dangers of the "specialist" solution to the problems of developing countries, but the gathering momentum of the multidisciplinary approach is at last achieving practical results.

By the slightly pejorative term "specialist" is meant the expert but blinkered diagnosis of any food-related problem whose solution generates unexpected difficulties which turn out to be worse that the problem to be solved. Africa is bestrewn with such examples: a depressing accumulation of well-intended, heavily funded, failures. And in few areas has this been more true than around the battlefields of crop protection.

It is probable that a higher proportion of the potential yield of crops and livestock grown or raised in Africa is lost through pests and diseases than in any other part of the world. The extent of this loss could be greatly reduced were western crop protection technology universally applied. But it is not, and is unlikely ever to be. Not only are the chemical products too costly, and the means to apply them safely still far beyond the great majority of peasant farmers who comprise the bulk of the population of nearly all developing countries: the efficacy of many pest control products is being regularly defeated by the speed with which resistant strains of pests, or weeds, build up.

Not only that: a successful assault against one pest is often found to have serious, unforeseen ecological consequences, particularly when it involves the elimination of beneficial along with pestilential species.

Nor is the struggle to contain the ravages of crop and animal diseases simply a matter of finding a new chemical compound. Over 20 years ago a distinguished Kenyan entomologist, Thomas Odhiambo, was arguing the case for a much broader, mul-

ti-disciplinary approach to the problems of insect pests in the tropics. Alarmed at the rise in the number of insects and spiders which were acquiring resistance to pesticides, and by the destruction of many predators and beneficial parasites, he seized on the capacity of insects to produce the mechanisms of their own destruction as justifying the creation of a new institution dedicated to integrated control methods of attacking the most serious pests of humans, animals and crops in the tropics. Thus was born the International Centre of Insect Physiology and Ecology, run almost entirely by African experts, funded by a wide range of international institutions, the EEC not least among them, and still directed by Professor Odhiambo.

Control of pests: a matter for different scientists

Social scientists and agronomists are playing an increasingly important role. The aim of discovering a silver bullet to eliminate a scourge like the tsetse fly, carrier of the widespread cattle disease of trypanosomiasis and the scourge of sleeping sickness in humans, is no longer considered realistic. Even the elimination of the tsetse in one area might lead to over-grazing by more and healthier stock quartered (as is increasingly the case in African rangelands) on less land.

The dangers of a unilateral attack on pests is illustrated by the sad history of the onion maggot, related by Dr Odhiambo's deputy director Dr Dehn Haynes, an American scientist. The parasite of this maggot used to live in cow droppings in and around the onion fields of Michigan. With increasing specialisation, the cows went into intensive feed lots, and there was no dung to harbour the parasites. The maggot thrived, and was controlled by an insecticide against which new generations of maggots have now built up resistance. Result: more maggots, ineffective chemical controls and no natural parasites.

Closer home is the example of the parasite which attacks pests in Zaïre's

grain crops. In order to survive until the next rainy season these parasites have to live inside the grain stores between one dry season and the next, and here they live off the pests which eat the grain. But during the last drought all the grain was eaten. Next season there were no parasites, so there followed a rapid build up of the pest.

Rather more profound was the evidence that the much publicised incompatibility between cash and subsistence cropping can sometimes be shown to be mistaken. In the Kisumu district of Kenya, where cotton is grown as the only cash crop, there has been a clash with the planting season for subsistence crops. The peasants accordingly planted the cotton in May instead of February or March, to leave enough time for them to harvest their own food crops. By May, however, the rains are over, and the cotton crop consequently suffered. But when they were persuaded to intercrop the cotton with maize, sorghum and cow peas, the results were significant: not only were the attacks of the cotton bollworm and the maize stemborer reduced, but soil fertility was improved (peas being a leguminous crop, leaving the soil enriched with nitrogen) and yields were better. The change - one which could be applied in many areas of Africa – helped the peasants to grow more and better quality cotton, and obtain money, while still satisfying their need for basic foods.

The wider implications of crop production work

This example is quoted by one of Africa's leading social scientists, Dr A Pala Okeyo, who is in charge of a small inter-disciplinary team at ICIPE (1) to examine the wider implications of crop protection work. She found, for example, that labour shortages at peak weeding periods were caused by the high incidence of illness among women in one area. The cropping programme, however, had been expertly designed to ensure an even

^(*) Agricultural journalist and farmer, specialising in the problems of develoing countries.

⁽¹⁾ ICIPE = International Centre of Insect Physiology and Ecology.



"The aim of discovering a silver bullet to eliminate a scourge like the tsetse fly... is no longer considered realistic"

flow of labour throughout the year. Dr Okeyo's team found a correlation between sickness and weeding patterns, the high levels of sickness during the wet seasons being related to the effects of malaria. The cropping programme had ignored this factor, and consequently had to be replanned to vary the labour demand pattern throughout the year. This was done by planting sorghum followed by cotton some months later, then cassava. This both spread the risks and maximised food security. It also helped to suppress pests in an area where the inhabitants could ill afford insecticides.

The best and most recent example of how closely social patterns interrelate with pest control and food supplies comes from south Nyanza, where "sugar has recently" been introduced on a plantation basis, at the expense of subsistence farming. Not long after the introduction of this cash crop came reports of malnutrition among women and children working in the area.

Called in to investigate, the ICIPE

team found that the spending patterns of the men, who alone received the cash rewards, did not place a high priority on buying food, since the provision of food was traditionally the women's role. ICIPE examined the sugar cane growing system to see whether there was scope for inter-cropping with subsistence foods without harming the sugar cane. They found that, by marginally widening the cane rows, and using new, quick-maturing varieties of maize, it was possible to grow and harvest a crop of maize and beans within three months. Preliminary results have shown that the cane, which takes 22 months to mature, was unaffected, and that it might even be possible to snatch two successive interrow crops before any adverse affect on the cane becomes apparent.

There have been other beneficial side-effects, however. By growing two of their three principal traditional crops, not only have the womenfolk harvested enough protein-rich foods to give them and their families a balanced diet throughout the year; they have also lessened the burden of interrow weeding, a task made all the more disagreeable through the absence of any financial incentive. By the intercropping system they have reduced the weed population as a result of both the leaf canopy provided by the growing crops, and by the straw remaining on the ground as a mulch after the crops have been harvested. Not only does this also conserve soil moisture; it adds nitrogen to the soil for the benefit of the sugar cane's expanding root system.

The significance of this modest change is far-reaching. It shows that cash/estate cropping is not necessarily hostile to the welfare of peasant communities. It illustrates the relevance of tribal customs in dealing with such apparently technical issues as cropping programmes or row crop spacing. And it relates technological advances (in this case the development of small but fast-maturing maize varieties) to the complex of problems associated with

crop production to take maximum advantage of natural but erratic rainfall patterns.

Security is the most important factor

Experiences like these have meant that ICIPE's work is increasingly orientated towards fitting crop production and pest control programmes into their ecological and sociological backgrounds. A recent survey showed that African farmers were not necessarily concerned with the variables to which research workers attached most importance. For the indigenous producer whose main worry is survival in the event of drought or plague, security is more important than the prospect of higher yields. And the prospect of higher yields from improved varieties or better husbandry practices may lack allure when the Government-determined reward for the product makes it hardly worthwhile bothering to grow. Field trials designed by ICIPE are now more concerned with timing, varietal selection, labour constraints, and the impact on health and nutrition among the workers' families.

Most of the practical work undertaken at ICIPE relates to the development of environmentally safe and technically feasible methods of disease and pest control which lean heavily on nature rather than the products of the chemical laboratory, important though these will long continue to be. The aim is to help resource-poor subsistence farmers who can neither afford nor handle pesticides. The three crops on which most attention is now concentrated are sorghum, maize and cowpeas, which are plagued by stem-borers (maize and sorghum) and pod-borers (cowpeas), together responsible for robbing millions of African families of enough food to avoid malnutrition.

The attack on pests and diseases is multi-faceted. There is research into the breeding of resistant plants, of the sort which ICARDA (the International Centre for Research into the Dry Areas) in Syria has developed in association with Egyptian scientists in the Nile Valley Project's broad bean variety which is substantially resistant to the attacks of the major parasitical weed *Orobanche* (broomrape). Changes in husbandry practices are investigated by the use of later sown or

earlier maturing varieties to lessen their attraction to insects, by intercropping with plants which have a deterrent effect on invaders, by effective weed control to kill alternate hosts, by crop rotations to prevent pest buildup, and by the destruction of crop residues. And most important, there are biological controls.

There is room for only brief references to the sort of laborious work this involves. Take the maize and sorghum stem-borer, one of Africa's most serious food crop pests: the aim here is to isolate the pheromone which can lead to its destruction. The Londonbased Tropical Development and Research Institute has already identified it in the Indian stem-borer, but ICIPE has found a number of minor differences between the two species, notably an entirely new sex communication system. The scientists are now examining the precise chemicals in the host plant which enable the borer to recognise it and be stimulated to lay its eggs on it. Once discovered and synthesised, the pheromone can be used to encourage borer flies to lay their eggs on an artificial surface coated with the egg stiumulating chemical. The larvae will be allowed to feed, and to imbibe a suitable hormone to sterilise them, before their release back into the world of maize and sorghum plants.

At the same time work progresses on exploiting nature's more brutal tooth-and-claw approach: finding parasites to eat or bacteria, fungi or viruses to attack the enemies of plants and animals. Among the most rewarding has been the discovery of methods to lure the tsetse fly to its destruction, and thereby reduce the incidence of trypanosomiasis. The urine of water buffalo has been found to possess an irresistible attraction to the flies; combining this scent with simple traps to catch and destroy them, it has been found possible to effect a considerable reduction in the tsetse population, and hence in the incidence of the disease.

Even more closely associated with the biological aspects of integrated crop protection is the Nigerian-based International Institute of Tropical Agriculture, IITA (1), which works closely with the Commonwealth Agricultural Bureau's International Institute of Biological Control, and its Nai-

robi biological control and quarantine sub-station. Major advances have been recorded in the importation, multiplication and dispersal of parasites, usually minute wasps, to feed on such crop pests as the cassava mealybug which has extended its ravages throughout much of tropical Africa. It has taken six years for the most effective parasite to be discovered in the remote part of central south America from where the cassava was originally taken to Africa, and only now is evidence accumulating that orderly distribution of the parasitic wasp, after an elaborate quarantining procedure in Britain, is effecting a marked reduction in the pest.

This is part of what has been described as the largest biological control programme ever mounted. The cost has already run into tens of millions of dollars, but the stakes are high: cassava is the basic food of millions of Africa's inhabitants, and the mealybug can wipe out a crop. Another important enemy, the cassava mite, belongs to the aracnid genus, and hence has no parasites, so the search is on for predators, usually other mites.

In the last few years there have been concerted moves among research institutions and workers throughout Africa and beyond in two directions. One is intended to ensure a closer degree of co-operation to avoid duplication of scarce resources and to enable co-ordinated trial work to be undertaken on a regional or inter-continental basis. The other stems from a clearer understanding of the reasons why the cures devised in the past to so many problems of food production have altered the delicate ecological balance, or encountered hitherto ignored social, domestic or tribal customs and practices, or have simply failed to recognise the very considerable constraints which make an apparently sensible recommendation impractical. Rejecting the unspoken assumption that the indigenous peasant is ignorant, and hostile to new ideas, scientists are increasingly abandoning the arrogant assumption that the (usually western) expert knows best, and is studying problems with and from the perspective of those whose livelihood is most at stake and whose native experience and sense are assets to exploit rather than characteristics to M.K. spurn.

⁽¹⁾ See The Courier n° 106 (Nov.-Dec. 1987), p. 23.



Painful rebirth

"The agricultural policy followed for 25 years led to the collapse of farm exports, dwindling food crops, bigger food imports and a heavier financial burden on the State."

"Very poor educational coverage (27% in the primary school and not even 15% in the secondary) and all too few teachers and educators and those there were with only limited knowledge and experience and

a dramatic shortage of premises and teaching equipment. This was the situation at the beginning of the Second Republic."

"Health conditions in Guinea are worse than in most other countries in Africa. The poor life expectancy (39 years) is partly due to high infant mortality (around 186 per thousand), and partly to high morbidity.

(Extracts from official documents).

African capitals are often accused of being misleading showcases for their countries, displaying a veneer of brash modernism and offering services that disappear at the first suburbs. Conakry, on the contrary, is still a faithful reflection of all the decreptitude of Guinea. Buildings run with damp and walls have large patches of mould, cracked sewage pipes leak their stinking liquid almost into roads in the town centre, electricity supplies are constantly being cut and countless rusty old cars litter patches of waste ground. The tangible signs of dilapidation and age are everywhere, alas, and the one or two islands of prosperity the OAU conference room, one of the

best in Africa, and the 50-odd highclass villas for Heads of State — create no illusion.

Conakry, in the shade of its majestic, century-old kapok trees, has still the air of a town sunk in long decline and the impression of desolation is heightened by the ugliness of the coast, prickly with black rocks and shorn of the sand that has gone to feed the nation's building sites over the years.

Pitiful shipwreck

The disastrous heritage of the 26year reign of Ahmed Sékou Touré, the father of Guinean independence, is there for all to see in the spectacle of what the capital has become. And in the figures for the various sectors of the country's economy. Agricultural production took only two decades to collapse. The country was once self-sufficient in rice, but it now imports 80 000-100 000 tonnes every year. Fruit exports, particularly bananas of which 100 000 tonnes p.a. were once sold, have long since stopped and coffee, up to 20 000 tonnes 30 years ago, was down to the ridiculous level of 200 tonnes in 1984.

The state of the infrastructure is every bit as catastrophic. Almost all the roads need building or rebuilding and the country now only has a vast net-

work of battered tracks that the slightest downpour reduces to mud. As for the only railway — there is now little more than one train a week between Conakry and Kankan. Its workshops in the capital, an indescribable collection of ill-assorted equipment, are the most unexpected museum of rusty scrap iron and worth the detour.

This pitiful shipwreck that is Guinea, the only French-speaking country in black Africa to say "No" to the French Union proposed in de Gaulle's referendum in 1958 and thus the first to gain independence, is all the more striking for the wealth of its farming and mining which had made it the 'pearl' of the former French colonies. Administrators from all the other colonies used to bring their families to Dalaba, the little seaside resort in Fouta Diallon.

By saying "No" in 1958, Guinea made a startling entry into history, firing the enthusiasm of a whole generation of African nationalists, many of whom rushed to Conakry to serve the young revolution. Its leader, the young, charismatic and undeniably eloquent Sékou Touré, became the incarnation of the African pride and dignity that had emerged once more and one of the voices that counted in the climate of decolonisation of the period, alongside the Ghanaian Nkrumah, the Egyptian Nasser, the Indian Nehru and the Indonesian Sukarno.

Yet when he died 26 years later, on 26 March 1984, after a short illness, he left behind him a ruined and divided nation with nearly 2 million of its people abroad, a tired revolution tarnished by bloody purges and the atrocious deaths of leading figures (one of them was Diallo Telli, the former OAU Secretary-General, who died in the sinister Boiro prison) and a reputation within the hunum rights organisations as a pitiless dictator. Yet right up until the end, and even now, Sékou Touré was still the man of 28 September 1958 to many Africans. He was the man who gave them back their pride and made their voices heard on the international scene.

His funeral was followed by an exceptional gathering of Heads of State and other leading figures in Conakry. They included American Vice-President George Bush, French PM Pierre Mauroy, President Houphouët-Boigny

of Côte d'Ivoire, President Nyerere of Tanzania and President Kaunda of Zambia — proof of the consideration he still enjoyed at the time of his death.

Some of his economic failures, of course, were partly due to the conditions in which Guinea acceded to independence - something which the present régime recognises. The sudden departure of the colonial administrators, the destruction of their records, the drain on capital and the breakdown in trade indeed augured ill for the new state. But the need to start from scratch and build modern structures is not enough to explain the fact that the whole building collapsed like a house of cards the day after the architect's funeral. When the army which had perhaps never so deserved its reputation for keeping silent as it had in Guinea — took over on 3 April 1984, the Guinean revolution, based on rigid state control of the economy, had come to the end of the road.

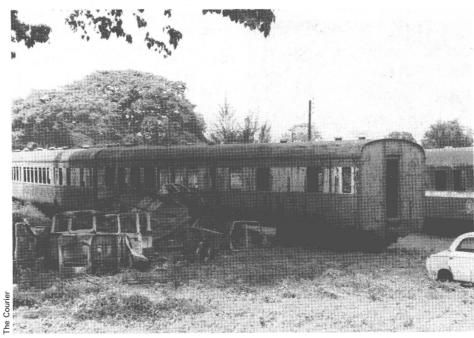
Monetary reform

Since then, the country has taken exactly the opposite course — particularly after a period of hesitation coinciding with a power struggle in the team of military leaders, a crisis which led to President Lansana Conté, getting rid of his former PM Diarra Traoré after an abortive *putsch* in July 1985. Gone was the planetary policy and the marathon meetings that

backed it up. Now, as Battalion Commander Jean Traoré, the Foreign Minister, stresses, "we have to gear all our efforts to raising the standard of living of the people instead of doing what we did before and creating an image that by no means reflected the reality of what was within".

The chosen remedy is the wellknown one of all economies in difficulty – a draconian programme of reorganisation under the aegis of the International Monetary Fund, with a strict reduction in public spending and State withdrawal from the productive sector. In Guinea's case, there was also an urgent need for banking and monetary reform as the syli, the local currency, had collapsed and was being exchanged on the black market at more than 10 times the official rate. The introduction of a new currency symbol, the Guinean franc, was made on 6 January 1986 on the basis of devaluation by about 1300% of the syli. It was followed by the closing of all the State banks, which had become veritable hotbeds of black market exchange whereby a few dignitaries were free to speculate with impunity on the difference between the real and the official rate of the syli. They were replaced by three private banks (branches of French institutions).

And on top of this, the Government decided to cut the subsidies on a whole series of products and services, which resulted in price increases —



Unbelievable scrap-heaps of rusty equipment in the railway workshops

GUINEA

which are far from reflecting the wage adjustments decided on at the same time. Imported rice went from 20 Sylis per kg (about CFAF 1.5 on the black market and more than 100 times less than in the neighbouring countries) to GF 80 and then GF 100. Petrol prices rose from 30 Sylis first to GF 115 and then GF 140 — and this was still half the price it was in Senegal or Côte d'Ivoire (1), a difference which fuelled a black market to the frontier nations. And electricity prices rose too.

Priority for agriculture

Other measures were taken alongside to encourage agricultural production, for, in spite of the country's mineral wealth, particularly gold and diamonds, which should mean it can balance its external books in the short term, agriculture has become the top priority - which Edouard Benjamin, Mininster for Planning and International Cooperation, a former World Bank official, and one of the men in charge of the nation's economic recovery confirmed. The Government "wants to put the emphasis on agricultural development". he said. "The policy of self-sufficiency in food is not a magic word we keep on repeating because it's fashionable. We have the sort of cereal potential whereby we can

⁽¹⁾ At the beginning of the year the price of petrol rose to GF250 a litre. The declared target is to increase it to GF350 before the end of 1988, a level comparable to that of the neighbouring countries.



Jean Traoré
Foreign Minister



Edouard Benjamin

Minister of Planning and International

Cooperation

both be self-sufficient and export to all the neighbouring countries too, particularly those which will not be able to produce enough of their own in the medium or the longer term. And we also have to develop our export agriculture to improve the trade balance with such things as coffee, bananas, fruit in general, palm oil and rubber".

Incentives for the rural world include the liberalisation of prices to the producer, which now reflect supply and demand, the abolition of the norms (the tax in kind which farmers and herdsmen had to pay under the old régime) and the removal of internal barriers and forced marketing, the source of so much abuse under Sékou Touré. Now the rural world can enjoy the fruits of its labours in peace. The restoration of this freedom, which people had stopped seeing as an fundamental right after a quarter century of coercion, had an immediate effect on the countryside. Agricultural production took off again, particularly the food crop side. The statistics are still unclear, of course, but other sources suggest an output of 500 000-600 000 tonnes of paddy rice and a similar boom in coffee where exports went up from the 200 tonnes of 1984 to 8000 tonnes last year. However, in this case, we have to be clear about what is an actual production increase and what is just a reduction in black market exports now that prices are more remunerative.

There is no doubt that there is a degree of euphoria among the peasants. The political leaders never tire of emphasising the fact that "the real country" is happy (and this means more than 80% of the population), as if to leave the civil servants on the sidelines and reduce their discontent to the percentage of the nation they represent. For the civil servants, the main beneficiairies of the old régime, are complaining. Staff have seen their purchasing power cut as subsidies have been removed. Gone is the rice at Sylis 20 per kg. Gone are the Conakry-Dakar and Conakry-Abidjan plane tickets at Sylis 10 000 (CFAF 1000, FF 20 on the black market) return and the foreign exchange mission expenses and the splendid speculation they made possible.

Guinean wages are, along with those of Zaïre, the lowest in Africa. Before the increases of 1 January, a top official in one of the Ministries only got GF 30 000 (CFAF 20 000 or FF 400), which was 10 or 15 times less than the going rate in Senegal, for example, although the main consumer goods cost about the same in the two countries.

There is apparently nothing unusual about the case I came across in a Guinea ministry — a man with two wives and a total of 13 children (three girls married and 10 still his responsibility) and a wage of GF 13 000. Breakfast for the whole family is just one GF 60 loaf of bread. When the month's supply of rice is paid for (GF 6500), there is practically nothing left for lamp oil for lighting at night. The children have had to leave school because their father couldn't afford the compulsory school uniform. And to think he practically made it, he sighs, bringing out a letter, meticulously folded as only the illiterate know how, saying he had been chosen to be part of a Guinean contingent working under contract on sites in Saudi Arabia for US\$1000 a month. Unfortunately, however, someone else was sent in his place at the last moment...

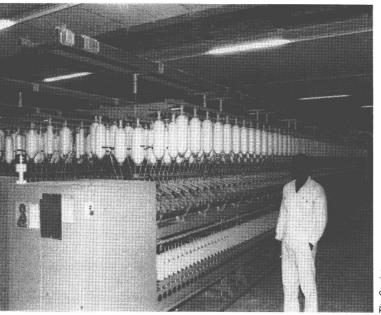
Reorganising the civil service

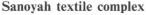
Guinea's civil servants are very badly paid. But even the bread-line wages will be disappearing in many cases if, as the Government has said, it prunes the staff by 30 000. Everyone agrees

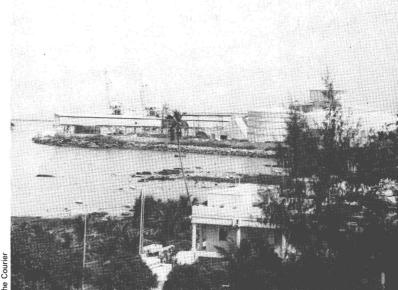
that the Guinean civil service is unnecessarily large. Anyone with a diploma could join under the old régime where mass education was the rule. "Everyone was in the civil service", said Captain Joseph Gbago Zoumanigui, former State Secretary for Fisheries (1), ironically, "even fishermen". The security guard was a civil servant in exactly the same way as the Director-General of Fisheries whose office he guarded". And how many are there now? The Secretary-General of the Ministry of Industry says 100 000 and the IMF says 75 000 and the Minister

which does not seem to have too many illusions about the 30 000 staff being laid off and may be content with only a third of that number. As Edouard Benjamin put it, "the timetable has not been kept to because, as the programme was implemented, we realised we had to help those leaving the civil service to switch over to other activities in production.

As soon as you try and help a large percentage of people to do something useful in the private sector, you realise that the structures aren't there, that there are no credit facilities, that there Until early this year, civil service wage increases depended on numbers being reduced, the idea being to keep the same overall wage-bill, raising the wages of those who stayed with the savings made on those who left. But in his new year speech, President Lansana Conté announced an 80% wage increase which, it is true, went along with a whole series of price increases (including petrol, which went from GF 140 to GF 250). But the civil service was not reorganised on 1 January as the Government's revised timetablie had suggested.







... and tanks at the National Hydrocarbons Board

The privatisation of the major state firms is slow

of Planning says 88 000. We shall never know exactly until the payslips are computerised. And if the figures are inflated to begin with, the staff cut could well be purely symbolic in that it would only reflect the real situation.

The Government has agreed to make civil servants take tests to determine their level — as not only are there too many of them, but they are often inadequately or badly trained as well. In some cases, the results have been announced, but it is obvious that this issue is a very difficult one because of the threat it poses to social stability (see interview with President Conté), so it has been decided to tackle it gently. It is already behind the timetable agreed with the IMF —

is no know-how when it comes to preparing and running projects. So we realised the time limit was not a reasonable one".

A body has in fact been set up to help former State staff settle elsewhere. This is the BARAF, the civil servant reconversion assistance office. So far, however, it has only dealt with 800 small-scale projects, about a quarter of which have been submitted for bank financing. And there are not many sectors suitable for SMEs, so the market is soon saturated. The first people, who went in for small-scale industrial baking a couple of years ago have made money, but everyone else is losing at the moment. And the same goes for the little brickworks and the cabinet-makers whose products line the streets of Conakry. And the private pharmacies which have sprung up everywhere recently.

State withdrawal from the private sector

There is another topic of burning importance in Guinea — the privatisation of the public companies and other concerns.

These firms, which are badly managed, are a considerable burden on the national economy. Some of them have already been put into private hands, with a preference for Guineans wherever they have the requisite capital and skill. Two agro-industrial units (producing tea and quinine), a printing works, a brickworks and a fruit juice factory have all been taken over by Guinean nationals. But they are not the biggest firms. In the latter case, the Government tends to be considering foreign investors - who complain that the authorities are slow and hesitant about approving take-over agree-

⁽¹⁾ Since the government reshuffle in January, he is Resident Minister for Maritime Guinea.

ments. But the authorities put the ball back in the other court by saying that it is the foreign investors who are failing to play the game by making offers that bear no relation to the value of the equipment and that their requests for monopolies and not to pay the take-over price immediately are exaggerated.

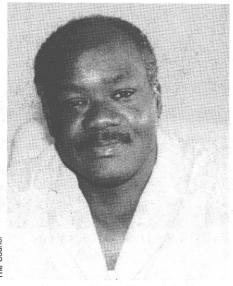
It is as if some would-be takers-over were doing no more than lining their pieces up and waiting to see what happens next. What else could explain the hesitations by the bidder for Sobragui, the brewery, (a sector which can hardly fail to make a profit in Africa) and this several months after ratification of the agreements with the State? The shares other investors have taken could well be called "feet in the

door", as their spearheads in Guinea mean they can get rid of the surplus production they sometimes run up in neighbouring countries. (Look what happened to the match factory).

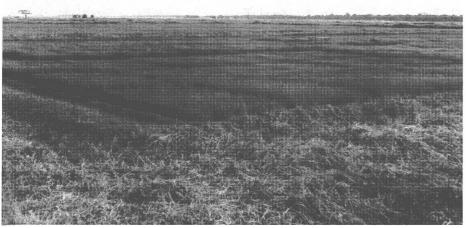
However, the Government is still determined not to rush into privatisation and to renegotiate the terms of transfer of some of these companies where they are deemed too unfavourable to the country. This explains why the affair of the Sanoyah textile complex, the pride of these State companies and concerns, which seemed almost certain to be taken over by the UCO/Schefer group, has not been finalised. But time is short. The factory which took something like ECU 40 million in investments over a period of 10 years has been at a standstill

of 10 years has been at a standstill

Dr Pathé Diallo
Public Health and Population
Minister



Joseph Glago Zoumanigui State Secretary for Fisheries



Output in agriculture, particularly rice, has got off to a spectacular start

since September. But the workers are still being paid although the machinery will rust if the situation goes on too long.

ONAH, the National Hydrocarbons Board, another big concern which could be privatised, should be taken over by a consortium of Shell, Total and Agip. There again negotiations are dragging. They have been going on for two years now — and the State is still footing the wage-bill.

The Guinean leaders are very disappointed that the people with the real capital are slow to respond to the liberal options of their régime. The institutional framework, particularly the new investment code, a mining code and a simpler tax system, is there. But the Minister of Planning and International Cooperation understands. "If I had been a private investor, I wouldn't have put a penny into this country in 1986 for the simple reason that the conditions were not right for an intelligent investment. The infrastructure wasn't there, there were frequent power cuts, the roads were deplorable, water supplies left a lot to be desired and the monetary reform had not yet borne fruit. However, there were plenty of improvements in 1987 and investors can now take a calculated risk in coming here".

But they have yet to arrive. Although the country is full of businessmen who are not really solvent. The régime's former number two, Commander Kerfalla Camara (1), ex-Permanent Secretary of the Military Committee of National Recovery, sarcastically dubs those who use the provisional agreements they sign with the State as a way of seeking financing "canvassers". And there are plenty of crooks seeking a fast buck who bring the most attractive of projects out of their impressive briefcases. Some of them have pulled off terrific coups in Guinea, the construction of the railway buildings being one of them. And those who were in league with the Governor of the Central Bank disappeared with a \$ 7 million advance.

Conakry's Hotel Independence is the headquarters of all these people. In November, I met a Frenchman who wanted to open a second-hand spare parts firm, a Belgian who was waiting

⁽¹⁾ President Minister for Upper Guinea since the cabinet reshuffle in January.

to clear his two containers of used tyres through customs, a Briton of Indian origin and his two Gambian associates who wanted to sell rice and sugar in Guinea, a Malian working for Arab interests seeking a contract to operate a gold mine and cement works and a former Ambassador of one of the countries of West Africa who had spent years in Brussels and who simply told me he was there "on busines". All these people are in contact with more or less well-placed Guineans who are keen to introduce them to the official who will see their project gets off the ground. There is an unhealthy climate of horse-trading in Guinea at the moment. As Edouard Benjamin says: "These people don't want to run any risks. They would like to invest and make a profit in the very short term without too much sweat. That's not what reasonable investors do".

Rehabilitate road infrastructure

Fortunately the country has official development assistance and the help of the international organisations, getting the attention its exceptional economic potential warrants. With FF 600 million of financial aid, Guinea was the French CCCE's biggest beneficiary in 1986. Last year it went into second place behind Côte d'Ivoire, although France has maintained its substantial financial effort. Japan has just granted Guinea a loan



More and more openings will be available in artisanal fishing, now being reorganised

of Yen 5.5 billion on IDA terms and Yen 600 million in grants as part of the special IMF Facility for Africa. The IMF-World Bank programme is for \$115 million p.a. for three years, two thirds of it to finance projects and a third to help the balance of payments. And under Lomé III, the Community has just committed an ECU 70 million programme centred on Maritime and Upper Guinea.

In rural development alone, promises of something like \$ 300 million in financing over three years were recorded at a donors' conference last year. The capital influx is such that many people are wondering whether the country can actually absorb it all.

There are some sectors, however, which have no problems of this sort. Health care is one of them. There is a major priority programme for the rehabilitation of health infrastructure which Dr Pathé Diallo, the Public Health and Population Minister, advocates with energy and conviction. Road building is another one. An emergency programme has already greatly improved Conakry's traffic and a huge primary network rehabilitation scheme is being run. The idea is to asphalt 1200 km of road, mainly the Conakry-Kankan highway which will be extended with the Mamou-Faranah-Kissidougou-Nzérékoré and the Coyah-Forécariah leg, and there are plans for 1900 km of rural tracks as well. The whole programme should mean a dense, properly constructed primary and secondary network in five years' time, making for easy access to the production areas and removing one of the barriers to realisation of the nation's immense agricultural potential.

Guinean agriculture has virtually unlimited potential for development. All the conditions are there — a huge amount of good arable land (an estimated 7.5 million ha in fact, barely a seventh of which is under cultivation at the moment and even then by nomadic farmers), plenty of rain (4500-1500 mm, according to area) and an exceptional hydrographical network. Guinea is often called the reservoir of West Africa because the region's two biggest rivers, the Senegal and the Niger, rise there.

There are four major climatic zones, each with its own particular agricultu-



Oil palm plantation in the Boké region

ral features. In Maritime Guinea, which gets the most rain, the land is suitable for swamp and lowland rice, coconut plantations, oil palms, fruit (bananas and pineapples) and market gardening. Middle Guinea, a region of hills and highlands, is best for maize, millet, sorghum, groundnuts and mangoes. And it is good for livestock too, herding being very common among the people, Peuls in the main, of the Fouta Djallon. There is herding in Upper Guinea too - cattle primarily, of which the nation has an estimated 1.3 million head — but this region of park and grassland savannah is best used for intensive rice crops. Estimates put the irrigable land in the valley of the Niger and its affluents at more than 90 000 ha. Forest Guinea is the fourth climatic zone, with three mountain ranges rising to an altitude of 2 000 m. Here there are much sought-after species, okoumé and acajou, for example, and the land is right for coffee and palm crops too and, to a lesser extent, rubber and tea.

"Geological scandal"

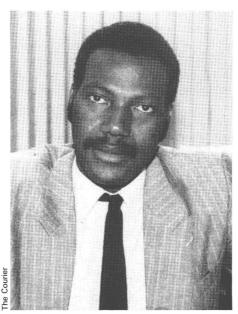
Add to all this a coastline and waters rich in fish — Captain Zoumanigi says that the artisanal fishing sector currently being reorganised brings in 30 000 tonnes of fish p.a. and the estimated trawling potential is around 200 000 tonnes of 50 or so marketable species — and you have a fairly complete picture of Guinea's wealth — but only in the primary sector.

Many a country has founded prosperity on fewer and less varied resources. But Guinea, a genuine "geological scandal" has what may well be even greater mineral wealth. It has bauxite — the only sector not to have been caught up in the general economic disaster and one which, by bringing in something like \$ 200 million every year, has made it possible to avoid complete collapse. Its known reserves (about 18 billion tonnes) are the biggest in the world and it has some of the highest-grade ore. The country exports its bauxite as it is and in the form of alumina (see article "Bauxite for the next 500 years").

The there are the iron reserves -6.5 billion tonnes - including the very high-grade (70%+) ore from Mount Nimba. The First Republic tried to get the European iron and steel industry interested in working it just as Brazil was launching its vast Carajas project - against which it campaigned, not without some justification. But it failed. The original project was rather costly, it is true, involving building a trans-Guinean railway to shift the ore to Conakry, but the present Government has taken the plans up again on a joint basis with Liberia, which has exhausted its own reserves but still has infrastructure which could be used to export Guinean ore.

The young Minister of National Resources, Energy and the Environment, Dr Ousmane Sylla, former head of department in Siemens, the German firm, is categorical about this. "In spite of the international steel crisis, there is every point in running this project. We have cut it down from 12 to 6 million tonnes p.a. at the first stage, although we can quickly move up to 9 million and then 12 million tonnes if the market is right. Production can start in June 1990 — if we manage to get the \$80-100 millionworth of investments we need".

Guinea also produces diamonds. The purity of its stones means the demand from the jewellery industry is heavy. The estimated reserves are 400 million carats, two thirds of them of gem quality, and large stones are found regularly. Only recently a 182.5 carat stone "disappeared" in incredible circumstances from the headquarters of Aredor, the mixed company re-



Ousmane Sylla

Minister of Natural Resources, Energy and the Environment

sponsible for the industrial exploitation of a 1.2 million carat deposit. Just a mishap, maybe, but one costing more than \$1 million nevertheless.

And there is gold. Guinea is where historians put the fabulous reserves of the Malian empire immortalised by Emperor Kankan Moussa's pilgrimage to Mecca in the 15th century. The Emperor is said to have distributed so much gold he created lasting inflation in Cairo. Today the gold is mined by independent, artisanal gold washers. Until recently, the metal they produced never got onto the official marketing circuits, but last year the State managed to buy one tonne of it through the banking institutions. "We have a project and production is due to start in the Siguiri region, the area with the biggest gold deposit, in July" Ousmane Sylla told me. "This is a joint venture with Union Minière and there are other plans for the regions of Dinguiraye and Kouroussa".

Changing outlooks

This is why no international expert has any doubts about Guinea's long-term prospects. "The future of Guinea is assured", one of them told me — provided it continues the drive to reorganise the economy. For its fabulous wealth has not prevented it from making the list of the world's least developed countries with a per capita GNP of \$ 300 — proof that potential

is one thing and realisation of it for the good of the community quite another.

With the political, even tribal, tension following the attempted putsch by former PM Diarra Traoré (the recent release of 60-odd political prisoners, including Sékou Touré's widow and son, are helping reduce it), the country is now also experiencing social tension as prices soar. The increases which followed the civil service wage rise at the beginning of the year are only the last episode. People demonstrated in Canakry against tradesmen who wanted their profit margins increased and suddenly pushed up the price of milk, bread, meat and rice. Shopkeepers were also accused of speculating against the Guinean franc, which is falling constantly against the CFAF. We are still a long way from the collapse of the Syli, but it has only taken two years for the Guinean franc to lose half its value. The old reflexes of an economy of shortage are reappearing and fraud, black market and corruption are with us once more.

In his Christmas speech, Robert Sarah, Bishop of Conakry, warned his flock that "the same temptations are emerging in relation to the common good, fraudulent profit, racialism and ethnocentrism, arbitrary behaviour and informing". Although the Bishop and many Guineans are calling for people to change their outlook, they realise, as does Edouard Benjamin, that it will not be easy. "It is far easier to change the countryside", he said, "than the prevailing mentality of more than a quarter of a century".

That is the challenge the Government has to pick up. The change must be wrought by men and women — who will not benefit from it in the short term and who have known nothing other than the régime that got everything wrong. It is by no means clear that they share Ousmane Sylla's conviction that "Guinea's wealth is not based on gold and diamonds, but on agriculture, work, management, ability and organisation".

But they should, in spite of the fact that, after 26 years of pointless sacrifice, they who grew up with the clamour of revolutionary meetings, have some justification for being sceptical about fine words. \circ

AMADOU TRAORE

"The investors who come here are not serious investors",

says President Lansana Conté

Since the death of Sékou Touré and the military coup d'état which followed his funeral on 3 April 1984, General Lansana Conté, a career soldier, has been in charge of Guinea. He holds all the power. He is President of the Military Committee of National Recovery, the country's supreme body, President of the Republic and Commander-in-Chief of the Armed Forces.

He gave this half-written, half-oral interview to

The Courier in mid-November. Some measures have been adopted since then—the 80% increase in civil service pay, for example—but other scheduled decisions, such as the pruning of civil service staff, have still not seen the light of day. The interview is still apposite, as it emphasises the Government's hesitancy in the face of the social implications of some of the choices it has to make.

- ▶ There has been a complete overhaul of Guinea's economic structures over the past few months. Is it right to assume that the major reforms you were aiming at have now been carried out and that there will now be a slowdown in the pace of change?
- Guinea has had a national recovery programme since 22 December 1985 and it covers every area of the nation's activity. We had to do three things: make Guinea a State of law; make the Guineans free and enterprising producers, and make the State a proper instrument of development.

But before this, on 3 April 1984, the Military Committee of National Recovery and the Government of the Second Republic placed the citizens, without any violence, in the rightful conditions of freedom that were snatched from them on 28 September 1958. This resulted, firstly, in the § abolition of the political prisons, the 2 barriers between the prefectures, and the "norms" (a kind of forced levy extracted primarily from farmers and herdsmen). Secondly, it gave a guarantee of basic individual liberty as represented by freedom of opinion and expression.

It provided for free movement of individuals and goods; the return of all goods confiscated on political grounds, and the proper opening of Guinea to the outside world.

These measures, the substance of national recovery, reconciled the Guineans and breathed fresh life into all sectors of the country's economic and social life. On 22 December 1985, for example, some far-reaching reforms were decided on, including the closing of the State banks where theft and cor-

ruption were the rule; devaluation of the syli and a change in the currency symbol; privatisation of commercial, industrial and agro-pastoral undertakings, which had become bottomless pits as far as finance was concerned; State withdrawal from the trading circuits, leaving Guineans free to open



their own firms; a cut in the excessive number of civil servants; definition of an economic policy placing priority on self-sufficiency in food in the near future and on social and educational projects, road and telecommunications infrastructure and microprojects.

The Government has gone for a society based on natural solidarity at the service of development as the way to make a success of this policy of getting production off the ground again. Rural and urban district councils have been set up so that people have a free hand in managing their own way of life.

The people are now free of any barriers to fulfilment of their spirit of creativity and enterprise and they have got down to work. And today, it

is reasonable to say that national unity, thanks to lack of fear, has been boosted as a result. To sum up, then, the overhaul in our country was not confined to the economic structures. It affected every aspect of our social life. We haven't done it all, of course, and we have to continue making an effort and correcting our mistakes.

"The first privatisations weren't well organised"

- ▶ You just said that some reforms are difficult to put into practice — the privatisation of State firms, for example...
- We do indeed have a lot of problems here. The investors who come here aren't serious investors. They are more like invaders. They aren't serious and in most cases they associate with Guineans who aren't serious either. So negotiations rarely end with anything positive.
- ▶ They also say that privatisation isn't going ahead because of all the red tape.
- That isn't right. We are going a bit more slowly now, it's true, but it's because we realised that the first privatisations weren't very well organised by the people who negotiated them. What we are trying to do now is see that privatisation is of benefit to the nation. If it isn't, the foreigners will always be the ones to benefit. They often try and lay down conditions that are difficult to accept, particularly when it's a case of creating a mixed company, and they usually ask not to pay the take-over value to the State at once but try and get it to agree to stag-

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ger payments over several years. This is why I am a bit slow at approving the dossiers as I can never come to terms with the idea that someone who wants to take over a firm won't pay the State at once. They want to pay with the profits they make from running the firm — in which case the State loses out as it doesn't have immediate use of the money to finance its activities.

- ▶ But there is very little room for manœuvre, isn't there, as the industrial installations are there and they have to be made to work, otherwise they will go rusty...?
- But they must also be saved without too much damage to the State. It is quite wrong not to pay, some of it at least, at once. This is why we are taking privatisation a bit more slowly. But all the dossiers are ready.

"Wages aren't enough to live on so everyone tries to get by"

- ► There is another big problem, isn't there pruning the civil service and putting up the wages.
- Pruning the civil service is one of our biggest problems at the moment. We couldn't stick to the timetable we had for it and things are rather difficult. Some people have to be laid off, of course, those who came in through the back door. And there are plenty of them. But we could have cut back faster if we had been able to avoid testing all the civil servants. We've got people who won't stop themselves taking things that belong to the State and they ought to be removed - instead of removing those who may not be that bright but are honest. We want work of a decent standard. We want competent civil servants. But we don't want them to steal our national heritage. Those who aren't competent may well get better. But those who steal will go on stealing. We have people who have to go because they aren't honest - which could be a big help in solving the problem of overstaffing. If we catch people stealing, there is no reason for forgiveness. But obviously we have to be a bit flexible because of wage levels, as civil service wages aren't enough to live on.

- ▶ Do you mean you don't always expect people to be at work?
- No. No, I don't. Wages aren't enough to live on, so everyone tries to get by. We are still a bit tolerant because the civil service hasn't yet been able to get the right sort of staff. Until we've managed to cut the staff, we can't put wages up. The whole of the budget wouldn't be enough for that.
- ▶ But doesn't your Government have to get rapid results when it comes to pushing up the people's purchasing power?
- I think all the documents can be ready by the end of the year. It's nearly all ready now. In January 1988 we expect to start giving the civil servants enough so they don't need to go in for those little thefts I was talking about. We will be able to do it if by then we have decided which staff are to be kept on. So wages could well go up from January onwards.
- ► Have your measures already borne the anticipated fruit? If so, what? And if not — and to use your own comparison — when can the long-neglected vehicle of the Guinean economy get going again?
- The vast majority of Guineans realise there is an effort to be made. In town and country alike they have put their shoulders to the wheel of productive work. This is particularly true of our peasants and our output of food, particularly rice, is expanding fast. It is the result of greater motivation on the part of the producers, of price liberalisation and, more particularly, of the adjustment of agricultural prices, which are now more remunerative. We have still a long way to go to selfsufficiency in food. But it's a comfort to realise that the people have answered the CMRN's call to return to the land en masse. Our recent tour of the prefectures of Upper and Maritime Guinea proved that the people are working on the programme of national recovery. The forthcoming rice harvests promise to be good in many prefectures.

It is no exaggeration to say that the rice plain development programme for the villagers combined with the perseverance of the peasants will make us self-sufficient in food in the near future.

We have reformed the banking system and adjusted the currency. We have simplified our customs tariffs, reformed education and reorganised our national legal system. All these changes — and they are not the only ones — had to be made to get our country on the road to proper development.

Other measures, slower ones that are difficult to put into practice and will only bear fruit in the medium and the longer term, are connected with State withdrawal from the economy and the privatisation of public and semi-public firms; administrative reform and the establishment of an efficient administration; rehabilitation of our infrastructure; the recovery of our manufacturing industry based on the development of smaller businesses.

Anyone familiar with Guinea prior to 3 April 1984 will see clear and very encouraging signs of economic recovery here.

- ► Which of the many reforms do you see as being the most important?
- All those we have carried out or are carrying out now are important. The recovery of the nation depends on them. But the most important ones are those that help with the rapid promotion of rural development. The choice of this as our top priority is dictated by the structure of the Guinean population, 80% of which is rural, and by our desire to achieve self-sufficiency in food and get onto the world agricultural export market.

"We are worried about social problems"

- ▶ You expected reform to lead to serious social problems, didn't you, but the people haven't reacted as violently as they have done in similar situations elsewhere. Is that the apathy of a traumatised people or is it a sign that the Guineans have grasped the fact that there is no simple answer to their problems?
- On 2 October 1958, the Guinean people won national sovereignty. Although the next 26 years were the dark days of independence, that page of our history has now been turned and, since 3 April 1984, Guineans have viewed the future with confidence and the resolute will to forge a strong and

prosperous nation. But we are worried about social problems. Everyone knows that we have vastly too many people in our civil service and they all want to stay there. There may well be social problems, because none of the people we are laying off today have any other means of survival. They stay in Conakry. Some of them work for g private firms, but there are others, on the other hand, who try and sneak into the civil service again. We are worried about the social problems that will inevitably crop up when we lay all these people off. Our State firms used to recruit people to keep one or two people happy, not in the interest of the service. Nowadays, the people who are taking these firms over, be they Guineans or foreigners, only hire the workers they need to keep the factories ticking over, which is perfectly reasonable. And two thirds of the staff are superfluous and they are going to find themselves out of work with nothing else to do.

- ▶ Unless they go back to the land?
- They can't all go. Some of them think it's degrading and others only want to do intellectual work. But some people, in the civil service especially, stay in town and invest in the country, setting an example in their villages.
 - ➤ Like you...
- That's different. It's something I've always liked. I've farmed every year since I returned to Guinea. But I've also advised everyone in the Government, all the top officials, to go back to their villages, not necessarily to settle, but so their relatives there feel they have children in Conakry who go and see them and understand their problems and help them to develop their villages. That is the appeal I made to all Guineans at home and abroad. We have to start by developing the villages. If they develop, they will be nice to live in — but they can't develop without the help of all their sons.
- ▶ The Second Republic doesn't seem to have had all the financial aid it hoped for, at least not in the early days. Are you more satisfied with external financing now?
- I should like to take this opportunity of thanking all the international financial organisations again, and all



Lansana Conté on a recent tour in the interior of Guinea

the bilateral cooperation bodies that give us support with our development drive. They have considerably increased their contribution to Guinea's external investment financing and we are pleased to say they intend to go on helping us — as was proven by the meeting of the advisory group for Guinea which met in Paris in March 1987 and the recent funders' conference on rural development.

- ▶ Why hasn't there been a massive influx of former Guinean emigrants? Would it be a good thing for them to return in the short term?
- It is wrong to say that Guinean emigrants haven't returned to the country *en masse*. Far from it. Lots of them have come back again since the régime changed.

Perhaps it would be a good idea to put the emigrants into categories to understand the objective reasons why the return in some cases is slower. A first category comprising traders, farmers, craftsmen, pharmacists, etc came home and didn't find it too difficult to start working here again.

A second category, students and people living on wages earned abroad, is less willing to come back. The latter find it difficult now to get a job in an economic environment where opportunities in the civil service are limited and wages very low in comparison to the country they are currently living in. And the students are hesitant because Guinean education, one of the main victims of the old régime, doesn't yet live up to expectations.

But for some Guineans abroad, there is no point in coming back yet. What we want is for them to come home sometimes to see what is going

on in their villages, in the Government and in the administration. They can all make a contribution in their particular field by giving the relevant advice. All Guineans are free to come home to Guinea today. But there is no way we can guarantee a civil service job to anyone who already has work outside. Some of them, of course, will immediately get work in the civil service because they have certain qualifications. I have just asked President Abdou Diouf to let Guinea have a top official who was working in Senegal, and he is already back and on the job. These are very rare cases. We should have liked all the Guineans currently abroad to come home, but some of them want to be needed before they return. That isn't what we want. We want them all to contribute to our development in their particular fields without expecting the Government to take everyone on in the civil service, which we don't have the means of doing.

- ▶ A lot was said at one stage about Guinea coming back into the franc zone. Are you in favour of this? Are your relations with France and WAMU⁽¹⁾ such that this is something you can think about?
- Guinea is in an area, West Africa, where the States have excellent cooperation relations through the different institutions they have set up and belonging to one of them by no means signifies being carried along by the partners. An economically strong Guinea would be useful to the Union. For the moment, the aim of the national recovery programme is to get the economy back on the rails so the country can make its contribution to promoting progress and prosperity for the people in our sub-region.
- ▶ It wasn't long ago that you told the Guineans not to worry as you wouldn't let Guinea be recolonised. Was there a risk that it would be? What did you mean?
- Our people, with its great tradition of hospitality, is jealous of its freedom and independence. It has never looked upon any form of colonisation as a *fait accompli*, which is why it opted for national sovereignty very early on, back on 28 September 1958.

⁽¹⁾ West African Monetary Union.

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When I was laying down the new guidelines for the progress and prosperity of the nation in my programme speech on 22 December 1985, I felt I had to reassure the Guineans that nothing would harm our national sovereignty. At the time, there were Guineans at home and abroad who criticised the Government, accusing it of having sold out the country to the French. The French Ambassador contacted me several times, as he was concerned about threats to his compatriots. I calmed him down and told the Guineans to stop worrying as the Government would never sell out the country for money. It was a response to the rumours going round the town that the presence of the French was a danger to us, that I had 400, 600 even, French military advisers when in fact there were only a few French instructors, not more than 40 altogether, and they weren't with me either, as they were training our security battalions. So it was to put the Guineans' minds at rest that I talked about that on 22 Decem-

- ► Isn't one of the main aspects of your policy to reconcile all Guineans?
- Indeed it is one of our priorities. We are campaigning for national reconciliation and unity at every level which is why we have toured the interior of Guinea where the population, peasants, is much sounder than in the towns. The path to national unity in the country may be slow, but it is steady. And we expect success with the civil service too, as people are gradually realising the need for national unity. Without it, we cannot make a success of anything.

"Guineans were so traumatised that they are still frightened to speak out"

- ▶ What are the different stages in the process of national reconciliation? Does it involve analysing everything Guinea has done since independence and the place of the former President?
- I don't like talking about the former President, as you know. I prefer to talk about the former system. What happened wasn't necessarily all the fault of the late President. It was the system that conditioned people to

act as they did. Some of them acted off their own bat, in the name of the system, and that is still going on in some cases today. The old system put the people back to back and it was so strong that you couldn't, say, speak your mind or even tell your own wife vour secrets in case she denounced you. We want Guineans to have confidence. If you're frightened, you can't say what you think. But we want Guineans to speak their mind, to express themselves without fear. But they still don't believe they won't be arrested if they do. They were so traumatised that they are still frightened to speak out. They prefer to whisper in secret rather than make their opinion on any given subject public. First of all, we want to create this climate of confidence. When the people have confidence, they will say what they think and we shall then take the decisions that will help them unite. Today. I think, it is easier to achieve this with peasants than civil servants, because the civil servants are the ones creating most of the problems.

- ▶ Guinea got the Club of Paris to reschedule its debts a few months ago, didn't it? But it also has debts with the socialist countries, particularly the USSR. How big are your Soviet debts? And do you intend negotiating to get them rescheduled too?
- Our debt to the Soviets has been estimated at US \$300-400 million about a third of Guinea's total external debt. The servicing of the Soviet debt is up at around US \$40 million p.a. and part of it is paid for with bauxite from the Kindia Bauxite Board. It has to be rescheduled because of the burden it places on the national economy and we are negotiating now with this in mind. A Government mission will be going to Moscow for this purpose soon.
- ▶ The USSR, you said, has always been paid in bauxite. Will this continue?
- The trade practices between the Soviet Union and Guinea are the result of the historical and political circumstances of their relations in the early '60s. Over the years, the clearing system has been used in an attempt to reflect the interests of the two parties and the USSR has delivered capital goods (machinery, trucks, agricultural

machinery and so on) and everyday consumer goods (fuel and oil, building materials) and Guinea, having no means of external payment, has delivered not just bauxite in return, as people have thought, but agricultural products too, coffee and palm nuts and more. This system, like other systems, obviously has its drawbacks and its advantages and each side will be looking at them and deciding on the best way of developing their economic and commercial relations to the mutual benefit of the Guinean and Soviet peoples.

On 3 April 1984, Guinea went resolutely liberal and this will guide it in determining the policies and practices that will best safeguard its interests.

- ► Guinea has always had relations of confidence with the European Economic Community — even when relations with some of the Member States were strained. What does it expect from Lomé III?
- Guinea-EEC relations have always been good, as you say, even when there has been tension with one or two Member States. There is nothing surprising about this because the philosophy behind Lomé, the Convention which governs ACP-EEC relations, is to ignore political choices.

This is how Community aid to Guinea has been able to increase constantly since our country's accession to the Convention on 28 February 1975.

And what do we expect from Lomé III? The answer to this is in the indicative programme of financial and technical cooperation which Guinea and the EEC concluded in May 1986.

Since you work for *The Courier*, you no doubt know the figures. But I should like to say that this major EDF funding will mainly be going to back up my Government's drive to run a priority policy of rural development, with 80% of the programme resources being invested in integrated rural development schemes.

Then, in addition to the national programmes, there will be the regional cooperation schemes Guinea has submitted to its partners in the EEC. It is important to realise that one of the merits of Community aid is that it is used as the ACP countries want. o

Interview by A.T.

Bauxite for the next 500 years

"There is bauxite beneath you from the start of the grassy highlands east of Boké, 60 km from here". Although he has been in the region for 10 years now, Jean-Pierre Moritz, until recently head of the Sangaredi mine, is still amazed by the extent of the reserves worked by CBG (Compagnie des Bauxites de Guinée, a mixed company of which 51% of the shares are held by Halco, a consortium of all the big aluminium firms bar Alusuisse, and 49% by the State of Guinea). To the uninitiated, bauxite looks just like laterite.

And indeed the two are very similar, the difference being that bauxite has lost its iron and laterite its alumina.

Sangaredi, or "elephant plateau", is the biggest bauxite mine in the world, the sprightly Belgian engineer from Charleroi told me. "It is about 2.5 km long and 2 km wide, a single 250 million tonnes deposit, which isn't common. The ore is in layers of up to 36 m thick and they are cut into horizontal 12 m slices like a cake. That is unusual too, as bauxite layers elsewhere in the world are 5-8 m thick".

These blocks of earth piled up by the mechanical digger are bauxite — and one of the richest ores in the world. (Below) Jean-Pierre Moritz and some of his men at Sangaredi



And last but not least, the ore is pure so this is the richest deposit in the world. It is 60% recuperable alumina, with peaks of 63%, and it it easy to handle — unlike the rich ore you get in other countries".

"Guinea has the best bauxite in the world", confirmed Alistair G. Beck, the Canadian head of Kamsar, where Sangaredi ore is crushed and dried. "And they say it has the biggest reserves in the world too, although it's difficult to say whether it is better than Australia in this respect. When you've counted to 4 billion tonnes, you don't really worry about whether its 4 billion or 5 billion. There are enough reserves for the next 400 to 500 years at the present rate of mining. That's really what matters".

Guinea produces about 14 million tonnes p.a. from three sites — Kindia, which is run by the Kindia Bauxite Board and produces an annual 3 million tonnes which all goes to service the nation's debts to the Soviet Union, Friguia, run by a six-company consortium led by Péchiney and exporting about 500 000 tonnes of alumina every year, and Sangaredi, where the CBG mines an annual 10 million tonnes of ore.

Sangaredi, which started up about 10 years ago, now brings in most of Guinea's foreign exchange, since the Friguia alumina plant is running at a loss as its installations are old and production costs too high compared to prices on the world market. A diagnosis by an engineering consultancy suggested financial and technical reorganisation of the company and Guinea has just applied for Sysmin assistance to do this.

The Minister of Natural Resources, Energy and the Environment, Ousmane Sylla, is now planning to run similar studies throughout the mining sector so, as he put it, they can "go through activities with a fine toothcomb and evaluate their effect on the national economy". CBG is being investigated at the moment. Last year, there was a real tussle between the State and the consortium led by the American Alcoa and the Canadian Alcan. The point at issue was the special tax on bauxite exports which assures the country a stable income of around \$150 million, even if the world price, over which it has no influence, drops.

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View of the bauxite processing installations at Kamsar

It is indeed because of the very depressed market that the consortium wanted to cut its payments for 1986 and 1987 by \$50 million. But faced with refusal by the State - which had already earmarked these sums for its structural adjustment programme the consortium asked for abolition of the special tax from 1988 onwards. A compromise solution emerged from the arbitration the two parties were ultimately forced into and, while the tax has been maintained, it is now tied to the world aluminium price. If Guinea is to maintain its revenue, CBG has to increase its output, as prices are dropping. "It won't be easy", said Ousmane Sylla. "It will all depend on the world market. But we hope that if we do lose revenue it won't be much".

Energy, the weak spot

The other answer would be to capitalise on Guinea's bauxite locally by processing it into alumina or aluminium on the spot. The original plans for Sangaredi at the end of the '50s included building an alumina plant at Boké and a feasibility study was run in 1957. But the idea was dropped when the alumina industry collapsed at that time. Jean-Pierre Moritz is convinced that Guinea's long-term future lies in making alumina and if possible aluminium too, for the time will come when bauxite will no longer be transported.

Sangaredi ore can stand up to long journeys because it is very high grade. But in just over 10 years, the deposit will have run out and mining will have to shift 4 km further on to Bidi Koum where the ore is only 53-54% recuperable alumina. "Alumina can be tranported much better", Moritz told me, "which is why at a certain moment the world aluminium industry has gone through a wholesale decentralisation process and alumina plants have left the industrialised countries to set up in regions that have cheap energy and are as close as possible to the deposits".

And energy is Guinea's weak spot. The country was unable to take avantage of the fashion for large-scale projects in the early '70s to develop its immense HE potential or build, particularly, the dam over the Konkouré — which is too expensive to do now. "If we had the Konkouré now", Ousmane Sylla said, "we would have turned our bauxite into alumina and aluminium. But there is hydro-electric potential at Boké, so why not produce alumina? We are thinking about it very seriously in the Government".

But this means solving the investment problem. As Alistair Beck said, "Three or four years ago, an alumina plant cost something over a \$1000 per tonnes of annual capacity. So a 800 000 tonnes a year plant is going to be more than US\$ 800 million; today significantly more than that because

the US dollar has declined in value. The financial return you have to obtain is something in the order of, let's say, \$80-100 a tonne just to cover your investment. You'll have \$25 per tonne for labour, the energy component is something around \$40 per tonne; that's already \$165 and we haven't yet bought the caustic or indeed the bauxite itself. Today alumina sells at \$150-160 per tonne, which is why there are very few plants that are making money now on their investment".

If prices are dropping, demand is unchanged, in spite of the increasing emphasis on recycling. According to Mr Beck the USA, the main market, produces 65 billion aluminium cans of which 60% are recycled. Although the weight of these cans has halved over the past 14 years, the demand for aluminium is still around 13 million tonne p.a., which is 75-80 million tonne of bauxite. He also said that there is no reason to expect any major upheavals in the aluminium industry as it is adapting to competition from plastics and carbon fibre by developing new alloys, particularly with lithium.

So Guinea, with five centuries of reserves, has time on its side. The only problem is that the Guineans have heard that their country is a genuine geological "scandal" so often that they are impatient to reap the benefits of the treasure that nature has put beneath their feet. \circ A.T.

Profile

Area: 245 900 km²

Population: 5.7 m (1983) 6.1 m (1985): source Guinean

Government (GG)

Growth rate: 2.8 per annum

Rice production: 420 000 tonnes (1982), 396 000 t (1983), 403 000 t (1984), 470 000 t (1985: source FAO), 500 000 t to 600 000 t (1987): source: estimates IMF/World Bank

Coffee: 1 234 t (1982), 200 t (1983), 200 t (1984): source EEC, 8 000 t (1987): estimates IMF/World Bank

Bauxite (in '000 t): 10 097 (1981), 10 210 (1982), 10 987 (1983), 11 201 (1984): source EEC

Alumina (in '000 t): 680 (1981), 549 (1982), 569 (1983), 589 (1984): source EEC

Diamonds (in carats): 70 598 (1982), 37 554 (1983), 170 072 (1984): source EEC

GNP per capita: US \$266 (1986) source G.G.

Imports: (CIF in millions of SDR) 378.2 (1981), 344.4 (1982), 355.6 (1983, 402.7 (1984): source EEC; US \$ 472 million (1986): source G.G.

Exports: (FOB, in millions of SDR): 418.3 (1981), 402 (1982), 469.2 (1983), 536.5 (1984): source EEC; US \$ 536 million (1986): source G.G.

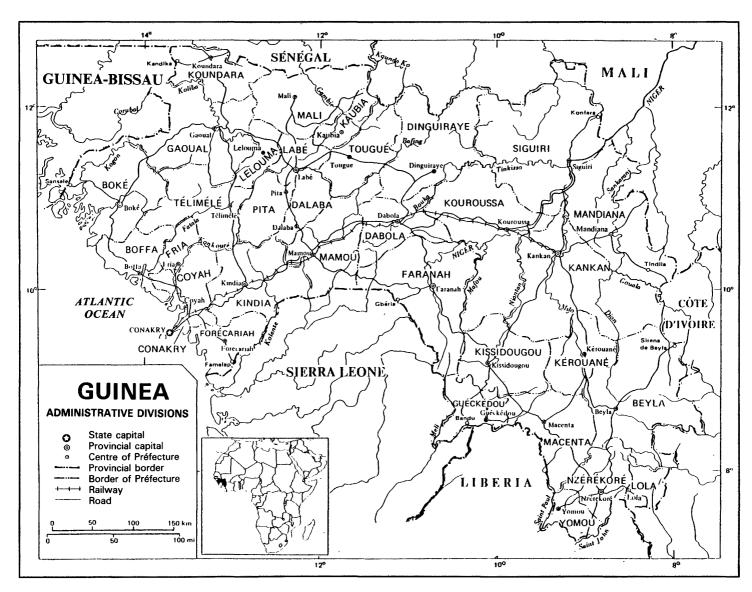
Balance of payments: (millions of SDR): -92.1 (1981), -39.8 (1982), -80.8 (1983), -9.2 (1984); - US \$ 35.5 million (1986): source G.G.

Roads: 14 000 km of classified roads, 1 145 km of asphalted roads and 9 000 km of non-asphalted roads: source G.G.

Vehicles: About 25 000 vehicles: source G.G.

- 2 deep sea ports: Conakry and Kamsar; numerous little ports on the coast
- 1 international airport: in Conakry; landing strips in the interior.

Railway: One railway linking Conakry to Kankan, 450 km long. Another exists between Sangaredi and Kamsar, 135 km long, and is used mainly for the transportation of bauxite ore.



EEC-Guinea cooperation

by Jean-Pierre RIEGEL (*)

Although Guinea became independent in October 1958, it was not until Lomé I that it indicated its intention of opening relations with the European Economic Community, a move that more or less coincided with a desire for bilateral involvement with each of the Member States.

EEC-Guinea cooperation has expanded and diversified constantly since.

In addition to the national indicative programmes (ECU 64 m under Lomé I, ECU 80 m under Lomé II and ECU 114 m under Lomé III), there has been food aid, emergency aid, African regional cooperation funds and EIB loans, while SYSMIN transfers (to rehabilitate and diversify mining) and cofinancing with NGOs are about to be allocated.

All this makes the European Economic Community one of Guinea's biggest funders, alongside the countries belonging to the World Bank, whose contributions have risen greatly over the past two years.

Typical of EEC cooperation over this period of a little more than a decade (1977-87) is the emphasis on economic and social equipment, training and rural development. However, the way it was done changed considerably between Lomé I and II and during the course of Lomé II and III to reflect changes in strategy and the upheavals to which Guinea is prey.

Lomé I and II

Industrial facilities

This is an area in which the EIB is active and, in Guinea, large amounts of EDF financing have been paid over (in the form of grants and soft loans) in view of the priority which, until recently, the authorities had on boosting the nation's manufacturing potential.

Renovation of the Sanoyah textile plant alone took almost half the credits allocated to Guinea under the 4th EDF and a percentage of the 5th, making the plant energy-independent and encouraging operation by a group of

(*) Economic Adviser at the EEC Delegation in Conakry.

businessmen who may well now buy the concern.

Another firm, Soguiplast, which produces plastic goods, has also been rehabilitated and seen its capacity expand thanks to help from the same source. A similar privatisation process has since begun.

In addition to these two major projects, the 5th EDF indicative programme provided help for smaller businesses, supplying the means of operation and experts and setting up a line of credit to encourage both the promotion of craftsmen and small rural producers and the transfer of civil servants to private enterprise.

Rural development

This had almost a third of the financing under Lomé I and II, although it was distributed very differently in each case. The bulk of resources under the 4th EDF went to fit out rural engineering brigades — whose effect on agricutlural productivity was slight, as indeed was the more modest operation to support district agro-pastoral farms, another expression of the State's hold over agriculture at that stage.

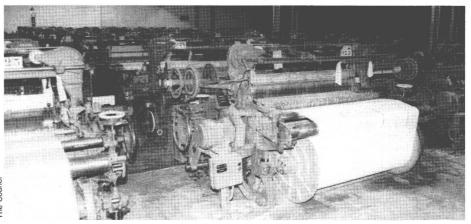
Fifth EDF schemes were more specific in aim and better distributed. They involved developing food and cotton output, running village water engineering operations, providing back-up facilities for the industrial fishing sector and microprojects and they were more successful, by and large, although initially they did come up against the constraints of an economic and institutional environment that was not conducive to individual initiative.

Training

Alongside the programme of study grants and courses and the training section that most projects contain, a number of specific operations were run here.



Renovation of the Sanoyah textile plant alone took half the 4th EDF funds and part of the 5th. The machinery has been at a standstill for several months now and a take-over is being sought.



The main idea was to offer support — technical assistance, equipment and materials — for the Maritime Vocational Training Centre and to rehabilitate the National School of Engineering, where three workshops were renovated and logistical and technical backing given with teacher training.

Credit remaining from the 5th EDF has recently been channelled into a major study of training requirements in relation to employment, in the short and the longer term, and this should help lay the foundations for educational planning.

Health

Health centres were fitted out under the 4th EDF and the emphasis on this sector increased under Lomé II, primarily with renovation of the Ignace Deen Hospital and the opening of an Institute of Pediatrics in Conakry. Training in maintaining equipment and improvements to the Ministry of Health's study potential were also covered, two technical assistance posts being provided for this purpose.

Urban development

The 5th EDF saw the introduction of a major regional urban planning and territorial development operation aimed at ensuring that villages in the interior are properly equipped and developing in a balanced manner so as to stop people moving away to Conakry.

Lomé III

The total amount of the new Convention, ECU 114 m, comprises ECU 96.5 million-worth of grants, ECU 5 million-worth of special loans

and ECU 12.5 million-worth of risk capital (managed by the EIB, not the Commission).

These funds, to be spread over five or six years, are to be broken down according to the indicative programme of Community aid signed in Conakry on 24 May 1986. Distribution closely follows the economic and social policies of the Government, strongly concentrating on rural development (80% of resources), with the remainder going to health, technical and vocational training and the promotion of SMEs.

The focal area

Political rehabilitation of rural development as the driving force of the economy, of the village community as the basis of organisation and of the peasant smallholder as a productive unit, combined with various State

Ambassador Ibrahim Sylla^(*) says Guinea offers many opportunities

Guinea, with its 6.5 million inhabitants and an area ten times the size of Belgium, is both "the reservoir of West Africa" and a genuine "geological scandal" because of its wealth of bauxite, diamonds, gold, nickel, granite and more. It is also a land of livestock and forests and it has major assets when it comes to fighting underdevelopment.

Since 3 April 1984, it has been resolutely committed to taking up the major challenge of development, with State withdrawal and freedom for private enterprise. There have been far-reaching institutional reforms to encourage private initiative and create the sort of climate that is conducive to investment and a structural adjustment plan is being run with the help of the World Bank and the International Monetary Fund. So Guinea is at last taking practical steps to capitalise on its vast potential and overturn the unacceptable paradox whereby it is one of the richest countries in Africa but one of the poorest countries in the world!

The country itself must be encou-

(*) Guinea's Ambassador to the EEC and Benelux and outgoing Chairman of the ACP Committee of Ambassadors. raged to make a considerable effort, which should be backed up by international cooperation. The West, which has been virtually absent from Guinea over the past quarter century, could be a driving force for rural development, fight the deterioration of the ecosystem and invest more in mining, industry, fisheries, transport, communications and other services.

It can intervene in many fields. Investing in Guinea is making a reasoned bet on the future of a country blessed by nature.

The appeal to foreign investors should not be taken as an open invitation to "cowboys" without the capital or technical know-how. The idea is not to attract people who are working alone or for others in the hope of making a quick profit for themselves alone.

We want people with capital who are seeking serious outlets that will increase their assets and contribute to the economic and social recovery of the country offering this opportunity. Guinea is the land of opportunity and there is an interim development plan to guide people to the sectors where they are most competitive. And going beyond this flexible



plan, there are other sectors of the economy just waiting for credible partners to flourish, because needs are greater than financial resources everywhere.

The European Economic Community realised this and has increased the amount allocated for the aid programme from ECU 64 million under Lomé I and ECU 80 m under Lomé II to the ECU 114 m (96.5% grants) of Lomé III. But non-programme resources and cofinancing must be boosted, too, and more support given to NGOs involved in Guinea. As a privileged partner, the EEC should also make a greater contribution to mobilising extra financial resources to ensure that Guinea's immense potential can be realised in practical terms.

GUINEA

withdrawal and liberalisation measures, were an excellent basis for defining the framework for EEC assistance in this sector.

There are four parts of varying importance — two regional rural development programmes, one in Maritime Guinea and the other in Upper Guinea (ECU 40 m and ECU 30 m respectively), a microproject programme (ECU 6 m) for the other regions and an agro-industrial rubber and palm programme in the forest area. The two rural development programmes are, in fact, outline programmes which will be run with annual or bi-annual estimates to ensure maximum flexibility.

They cover two of the country's four natural regions and will reach almost every area that affects the dynamics of growth, either directly or indirectly, by contributing to the wellbeing of the people through production support, village water engineering schemes, communications, health and social infrastructure, the protection of natural resources and so on. Responsibility for all this will be in the hands of existing projects and structures, NGOs or local units backed up by technical assistance. The whole thing will be coordinated at central level by an interministry committee, with the help of two coordinators.

The microproject programme will be in the hands of a technical assistance team of five specialists, with 5th EDF financing. A first allocation, of ECU 2.1 m, is being paid over at the moment. The range of operations is wide, covering such things as artisanal fishing, bee-keeping, herding, market gardening, village water engineering, agricultural produce processing, renewable energy, roads and social infrastructure.

The Commission's position on any involvement in the rubber- and palm programme in the Diéké region can be set out in the course of 1988 once the initial results have been assessed.

Health

The specific schemes here involve continuing with the renovation of the Ignace Deen Hospital begun under Lomé II. A second phase, worth ECU 9.4 m, covers further rehabilitation and modernisation, the supply of hospital equipment, establishment

Lomé III commitments (ECU)				
Amount of financing for the indicative progr	amme			
- Grants		96 500 000		
- Special loans		5 000 000		
		101 500 000		
- Risk capital		12 500 000		
		114 000 000		
Total commitments			,	
- Paid over by 30 September 1987 71.7	• •	72 735 000		
- Scheduled by 31 December 1988 97.0	%	98 435 000		
Timetable for Financing Decisions				
	Final	During		
	decision	1988	Gradual	
Focal sector		***************************************		
Rural development programme (Maritime Guinea)	40 000 000		_	
 Rural development programme (Upper Guinea) 	30 000 000		×	
 Microproject programme 	2 100 000	3 900 000		
 Agro-industrial programme 		5 000 000		
Outside focal sector				
- Health		9 400 000	,	
 SME promotion 		4 100 000		
- Training	-	1 500 000	1 500 000	
- Technical cooperation	C00.000	1 200 000	1,000,000	
• TA	600 000	1 300 000	1 000 000	
• TE	35 000	500 000	565 000	
	72 735 000	25 700 000	3 065 000	

of a medical and maintenance technical assistance team and more advanced training for staff.

Technical and vocational training

The training and employment study which should be available before the end of the first quarter of this year will provide the elements of appreciation needed to produce a programme for this sector. It already looks as though the range of subjects (currently three) offered by the National School of Engineering will be extended with 5th EDF financing.

Regional cooperation

Guinea's geographical position, its relief and its hydrography, together with the considerable solidarity it has generated, make this aspect of the Convention important.

The country has a key part to play in the campaign to fight desertification and protect natural resources in West Africa, the Fouta Djallon massif, for example, being particularly prone to erosion and the destruction of plant cover. Three programmes are getting EEC support (5th and 6th EDF regional funds) — development and protection of the Fouta Djallon massif and the catchment basins of the Niger, development of the River Gambia, particularly the upper reaches, and surveillance of the Sahel's renewable natural resources by remote sensing with the help of the Community Research Centre at Ispra.

On the health front, Guinea is already involved in the regional onchocerciasis control programme, phase three of which (1986-91) has financial support from several donors, the Community included.

Other sectors, such as sea fishing, air security and road communications, will also be getting resources from the Lomé III regional funds.

Sysmin

At the end of 1987, the investment programme of Friguia, the first alumina plant to be set up in Africa and now needing rehabilitation, was deemed eligible for Sysmin assistance.



EEC-financed schemes in Guinea, 1977-87 Lomé I and Lomé II

Indicative programmes			
Rural development	ECU		
Agriculture	million 15.2		
 Fitting out of rural engineering brigades Districts agro-pastoral farms 	2.5		
- Kankan-Siguiri agricultural development	8.1		
- Agricultural microprojects	0.8 0.1		
Agricultural plant study Maritime Guinea (air cover) study	0.1		
- 6th EDF rural development study (Maritime Guinea)	0.4		
 6th EDF rural development study (Upper Guinea) Agro-meteorological technical assistance 	0.2 0.1		
- Microproject technical assistance	1.0		
- Technical assistance and coordination (rural development programmes)	0.3		
Water engineering			
Village water engineering Water engineering microprojects	3.5 0.9		
- Water engineering interoprojects - Siguiri boreholes	1.7		
- Technical assistance with developing water points (SNAPE)	0.3		
Fishing			
- Guinean fishing company (Soguipêche)	8.7		
- Fisheries master plan study	0.2		
Livestock - Herding study	0.1		
Industry and energy	V**		
- SANOYAH textile plant	43.3		
- SOGUIPLAST plastics factory	20.9		
 Assistance for SMEs Mamou and Kankan water supplies 	5.1 0.3		
- Konkouré dam study	0.2		
- Tinkisso I dam study	0.2		
Housing and urban development			
 Urban planing microproject Assistance with the development of secondary towns 	0.2 5.9		
Urban development and housing study	0.1		
Education and training			
- Secondary Polytechnic Institute, Conakry	1.1		
 Faculties of agronomy Educational microprojects 	1.0 0.3		
Maritime vocational training centre	4.8		
- Rehabilitation of the National School of Engineering	2.3		
Training—employment study Study and course grants	0.3 0.6		
Health	0.0		
- Health centres	2.2		
- Health microprojects	0.3		
Renovation of Ignace Deen hospital Institute of Child Health	6.0 2.0		
- Technical assistance for the Ministry of Health	0.9		
- Technical assistance with training and health equipment maintenance	0.7		
Outside the indicative programme			
Exceptional and emergency aid			
- Exceptional aid, 1978	3.0		
 Emergency aid for drought, 1981 Emergency aid for Gaoual earthquake, 1983 	0.5 0.1		
- Emergency aid for refugees, 1984	0.5		
Interest rebates			
- Interest rate subsidy on the Friguia I loan	0.4 1.1		
- Interest rate subsidy on the Friguia II loan	1.1		
Risk capital — Industrial study	0.2		
- BICI-GUI special loan	0.6		
BICI-GUI conditional loan Mount Nimba iron feasibility study	1.5 0.3		
House things not tousionly study	Ų.J		

The actual amount is yet to be specified, but we know that about three quarters of it will go to the factory proper, while the rest will probably go to attendant collective investments and economic diversification operations.

EIB schemes

The Bank financed six operations in Guinea under Lomé I and II. They were worth a total of about ECU 15 million.

The first two, from own resources, covered Friguia, the firm mentioned above, which mines Fria bauxite and turns it into alumina. An initial loan of ECU 4.40 m was intended to help modernise the factory and bring down costs, particularly energy costs. The second, ECU 7.50 m, was to finance installations to improve the alumina and bring it up to international standards. So, in spite of a difficult economic situation, the demand for and prices of Guinean alumina rose.

The Bank also helped with studies and risk capital, in particular with the subscription of shares for Bicigui as part of the drive to reorganise the country's banking system at the end of 1985 and with cofinancing the final feasibility studies for the Nimba mountain iron ore mining project in 1987.

EIB intervention under Lomé III has yet to be defined.

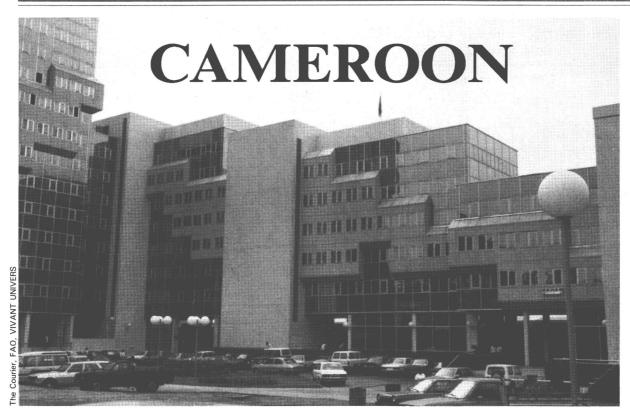
Assuming the Mifergui-Nimba project goes ahead fast, there is no doubt about Bank involvement in the financing. And a further loan for Friguia, to complete the Sysmin credits, is also on the cards.

Mining is not the only sector to benefit here. Other operations involving urban water engineering, telecommunications and energy are also likely to be the subject of Bank commitments.

Fishing agreements

Two agreements with the Community have been signed so far, one for 1983-86 and one for the three years following that.

In return for the fishing rights granted to European vessels in Guinea's territorial waters, two lots of financial compensation (for ECU 2.1 m and 8.6 m) are paid into the national budget. The agreements include special provisions on research and training for which additional allocations are made. O





Trump cards for the crisis

Cameroon never makes the headlines in the foreign press. This is no doubt due to the leaders and their particular kind of government, although information and the media are by no means neglected. Far from it.

Cameroon's political, economic and social history make it one of the most fascinating of the countries of Africa. A quick look at the map shows that it is in a geopolitically important position at the crossroads of six countries (Nigeria, Chad, the Central African Republic, Congo, Gabon and Equatorial Guinea) and that, to a certain extent with its part of Lake Chad in the north, it shares a natural frontier with Niger too.

It is nearly as big as Spain, is 475 422 km² in area and has a population of about 10.5 million (1986) a large proportion of whom, as is usual in Africa, are in the 20-25 age bracket.

Independence was on 1 January 1960, a unique event in that Cameroon is the only member of French-speaking Africa not to have been granted independence but to have seized it — which is partly behind the firm nationalism which some less informed observers see as "stand-of

fish" or "touchy" but the Cameroonians see as reflecting genuine national pride.

The Republic of Cameroon, the first independent State of Africa in the '60s, has been through various stages in the forging of its geographical and political unity. In 1961, it became a federation when the western part of the country previously under British administration joined the newly independent State. This lasted until 1972, when it was replaced by the United Republic of Cameroon, which lasted until 1983.

Developments since 1960 also reflect the country's bilinguialism. Both English and French are spoken, a unique situation in Africa and rare elsewhere in the world, Canada being one of the few States like it. And as a former German colony (until the end of World War I), Cameroon is in a small category that includes only three other nations of Africa — Togo, Tanzania and (the not yet independent) Namibia.

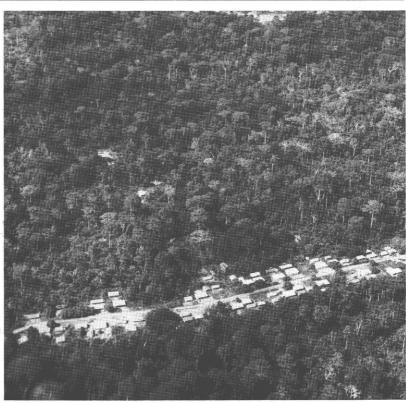
This, then, is the country that Paul Biya, the second President of the Republic in Cameroon's recent history, has led since November 1982.

The economy

A look at the larger towns -Douala, Yaoundé (the political and administrative capital), Bafoussam, Garoua, Maroua and Bamenda shows the considerable economic progress that Cameroon has made over its almost 30 years of existence in spite of the internal political problems that dogged the years after independence and the international economic crisis the effects of which have been felt, somewhat tardily, but nonetheless harshly since 1985. So what potential and economic policy options have enabled the country to have a proper national economy and, in spite of the difficult international economic situation, to be one of the most promising countries of Africa today?

Its wealth is its people, of the there is no doubt, with their entrepreneurial spirit and perseverance. But it is also the diversity of its terrain, its natural attributes and its climate, which make it a "mininature Africa", with tropical forests in the east and along the coast, highlands in the north, savannah in the west and the wooded hills in the south. This variety has enabled it to succeed with its traditional farming





Some faces of Cameroon — the city (Douala, looking towards the port), farming (growing rice in the north) and forests (in the east)

and modern methods too, with the introduction of new vegetable and fruit holdings as part of a tropical fruit development plan which includes common species (pineapples, avocados, paw-paws and guavas) as well as new ones obtained through grafting. This has been helped by the agricultural research the public authorities have always seen as vital and of course to the country's largely decentralised agricultural education, all of which is aimed at making agriculture the basis of the Cameroonian economy. This national policy — the green revolution introduced some 15 years ago was the real catalyst and one which the present Head of State has made constantly more dynamic — has made for broad self-sufficiency in food throughout the territory by avoiding large pockets of famine and the pressure of demand from the population of the urban areas around which production units, or "mideviv" (food crops development missions) have been set up to cope with any breakdown in supply.

Alongside this food sector, in which smallholdings (with about 90% of production) dominate, is a sector of intensive cereal production over vast areas, backed up by international technical cooperation and State assistance

through development companies. The main crops here are maize, sorghum, soya and rice (see article on rice).

The modern sector of Cameroon's agriculture is primarily concerned with export crops. They include, in addition to those already mentioned, tea (2 700 tonnes marketed in 1986/87) and rubber, which was introduced several decades ago and is grown on an industrial scale, particularly in the south-west and along the coastal provinces producing something like 14 414 tonnes p.a. Other important cash crops include bananas (about 56 000 tonnes), although there has been a slump here, However the Government has signed a major cooperation agreement with Del Monte, an American firm whose main operations are in Latin America and which specialises in growing and marketing the product internationally, in the hope of getting banana production, one of the country's three big export earners prior to independence, back on its feet. There is also sugar cane, which is grown over something like 30 000 ha and produces almost 85 000 tonnes of sugar p.a. The sugar industry, like many another, often suffers from poor management and huge numbers of staff up and down the production

chain and this means there is no certainty of achieving the objective of producing more than 85 000 tonnes of refined sugar. So a domestic shortfall is on the cards if demand grows at the approximately 6% forecast by the VIth five-year plan. Palm oil and the attendant by-products should also be mentioned. This is one of the bestorganised sectors technically speaking, although it is having the same sort of problems as the others and progress towards the projected 122 000 tonnes of oil (as compared to the 76 000 tonnes currently obtained from the almost 65 000 ha of plantations) is slow. In spite of a vegetable oil market that is well enough supplied - largely because of the 11 000 tonnes of cotton oil that comes onto it every year the Government puts the domestic demand for food and industry by the end of the VIth Plan, in 1991, at 170 000 tonnes. The palm programme destined to meet this will be associating the private and public sectors and creating and extending 20 000 ha of plantation.

What is more important than all this is the fact that Cameroon is the world's fifth biggest cocoa producer (123 000 tonnes in 1986/87, an 8% increase over the previous year). Pro-

gress, however, is relative, since there has been a roughly 30% increase in the area under cultivation, but the results are promising when it comes to the VIth Plan forecasts and obtaining the projected 145 000 tonnes in 1990/91, with the anticipated 3% growth p.a.. This is thanks to the accompanying (tracks and plant health cover) schemes being run in the cocoa development sector, the extension of village plantations and the creation of new ones and the renewal of old cocoa trees. Cocoa, together with coffee (Cameroon is Africa's second biggest exporter, with 139 000 tonnes 1986/87), is of the great importance to the nation's economy and trade balance. Besides the trends in the oil sector, it is dwindling cocoa and coffee revenue that is particularly to blame for the difficulties facing the Cameroonian economy. Although there is a national commodity marketing board which guarantees product quality and packaging, negotiates the best possible prices on the international market and provides financial protection to shield the producers from fluctuations in world prices, this variation has involved an almost 50% drop in the overall commodity earnings and the selling price of cocoa, for example, dropped from CFAF 950 to CFAF 330 per kg from just one year to the next. It would have been reasonable to hope that falling cocoa, coffee and cotton prices (see article on cotton) would ultimately have been offset by exports of other commodities such as timber. Cameroon has many species of tree, including some of the rarest, particularly those sought after for naval construction, and timber exports, which are also on the decline, amount to about 110 000 cubic metres of logs p.a.

Another important sector is fishing. There are modern refrigeration facilities in the specialised section of the port of Douala able to handle 60 000 tonnes of fish and shellfish. Cameroon's shrimp (1), some of the finest in the world, is exported, mainly to the USA, Japan and Europe and to the neighbouring countries, too. The fishing industry with a 100 000 tonne



Traditional farm methods in the west.

The Government's objective is to modernise agriculture

haul in 1986/87 is on the port of Douala - which handles the bulk of the nation's sea traffic, with an annual turnover of something like 4 million tonnes. Having seen its activities expand considerably over the past 15 years, thanks to the progress of the Cameroonian economy, the port is now one of the most important in Africa. It has about 4 km of quays, a freight zone as a priority for Chad and the Central African Republic, two landlocked members countries of UDEAC and large-capacity containers, and the Government wants to expand port activity by installing mineral and fruit terminals. The present banana port at Bonaberi, on the left bank of the Wouri by the Atlantic, is the only way out to the sea for Cameroon's export fruit. But these major installations are currently under-utilised because of the economic crisis, which has considrably reduced export and import activity and brought down the State's customs revenue. However, the Government intends to go on preserving and modernising the ports, and building some more (at Kribi, in particular) to keep the Cameroonian economy's basic infrastructure for development.

In 1982, the insufficient development of public facilities, particularly in communications and transport, was a considerable handicap for the national economy. But, since 1983, investments in the sector have increased threefold at least and the Government intends maintaining the trend with what is called economic and social integration infrastructure. The idea, said Equipment Minister Herman Maimo and the nation's Planning Ministry, is to have routes that will open up the many economically important regions, the east, the centre-east and the south (particularly, by building roads between Yaoundé, Ayos and Abong-Mbang, and between Kribi, Ebolowa and Sangmélima), the north (Garoua and Gachiga) and the extreme-north (Madaga to Yagoua). In the two latter provinces, better communications would mean that more could be made of the TransCameroon railway, which currently has its terminus at Ngaoundéré. Heavy goods could go by rail, thereby improving the financial performance of the railway. At the moment, loading and unloading from Ngaoundéré onwards to join up with roads to the landlocked countries of UDEAC is reducing the extent to which Chad and Central African Republic use it for certain categories of freight.

Development of the cocoa and forestry area in the east, for example, which also has worthwhile mining and herding potential, will depend on the speed with which roads can be built, the Equipment Minister said. His idea is that "road infrastructure is a basic way of stimulating development" and that "the Government will insist on this" and other priorities.

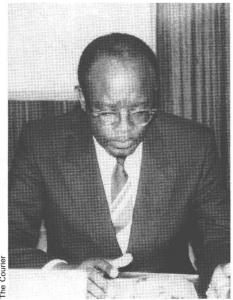
Public health and training are also priorities and the State has channelled a considerable amount of financing into them. Since 1983, the Head of State said in October last year, work on building or completing large hospital centres has been speeded up to

⁽¹⁾ Cameroon ultimately kept its name — which comes from *Rio dos Cameroes*, (shrimp river), the term the Portuguese navigators gave to the southern part of the country when they landed in the 15th century.

cope with the health problems in the fast-growing towns and the country-side to avoid the people having to go en masse to one or two major hospitals. In addition to the university hospital in the capital and other very well-equipped (although poorly maintained) hospitals, the Government has put up new, modern, large-capacity hospitals which will be opening soon.

"More than 4000 new classrooms" have been provided in education and training over the past four years. They are not enough, it is true, given the extent of the need generated by a veritable baby boom over the past two decades, but the effort put into meeting it is considerable. Nevertheless, in education, the content is still better than the container. And here, Cameroon, like most African countries, has a long way to go to rehabilitate its education and training system and reverse the current balance. That is to say, it should go for quality rather than quantity and aim high to get the best managers it can, in every sector, to lead the developing economy through both crisis and change.

The economic and social facilities and the considerable drive to catch up on the public building front, particularly in the capital, Yaoundé (which is already being called the future Brasilia of Africa), will result in large amounts of State financing going on importing materials for public works and the construction industry. This is something that led the weekly "Marchés Tro-



Herman Maimo, Minister of Equipment. "In spite of the crisis, we must continue to set up our communications infrastructure" to make for the general economic development of the country

picaux" to say that, "sellers may be jostling each other at the doors of Cameroon, but the same cannot be said of the investors" (19 December 1986). The euphoria in the building and public works industry, although with a lesser increase (8%) in 1982-85 than the 25% of 1980-81 (when the IVth Plan was being completed), was not a great deal of help to industry and manufacturing (13% GDP), it is true. It is capital-intensive and makes a rather small contribution to exports, savings and job creation, although

things improved in 1984/85. There are about 40 000 SMEs at the moment with about 10 staff each on their payrolls

Besides, the growth of the public works sector also encouraged certain categories of the population to go for luxury products, particularly non-utility cars. This was one of the causes of banking problems and it shook the confidence of the investors - to whom President Biya appealed on 15 October 1987. Confidence in the State of Cameroon should be rekindled, he said, by the Government's "will" and by the "effort" it was putting in to paying the State's debts. For the Yaoundé authorities, this commitment is one of the keys to the battle against the economic crisis - which to some observers looks more like a "crisis in the public finances" (which depend on oil revenue) in comparison with food crops, an ever-prosperous sector which generates big surpluses, particularly of cereals.

Falling oil prices combined with prolonged depreciation of the dollar led Cameroon into economic crisis in 1986. And it got worse in 1987. An estimated 80% of the CFAF 340 billion earmarked for investment in the State budget (CFAF 800 billion in 1986-87) came from oil revenue which dropped by about 60% in 1986 (almost \$ 1 billion). This decline in the oil earnings that mean so much to the budget resulted in a reduction of CFAF 150 billion in the 1987/88 national budget over the previous year. The situation could well continue unless other sources of income are found or the economic recovery programme bears fruit.

Cameroon's oil production, something like 9.2 million tonnes in 1985, will, available data suggests, be dropping in the coming years and, at the present rate of extraction and processing, reserves could well run out in the medium term (see inset).

So Cameroon, with a per capita GNP of \$ 1 100, has, as President Biya said in 1987, "been losing CFAF 200-300 billion-worth of its usual income" every year. And not just because of oil. It will be faced with a difficult crisis and the Cameroonians will "have to realise that only stringency will enable them to come out on the other side". Paul Biya mentioned some of these measures, more or less conventional



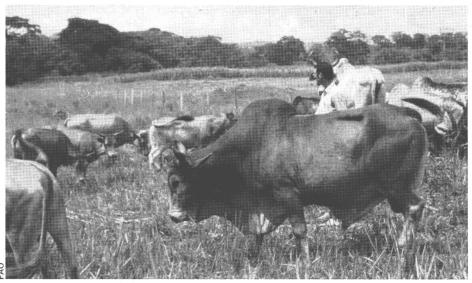
Cameroon's markets are still well supplied... although purchasing power has dropped

ones, from the panoply of anti-crisis recipes. They included budget austerity, reorganisation and rationalisation of State and semi-State firms, an anti-corruption campaign, the lightening and modernisation of the administrative apparatus, the recovery and diversification of national production etc, all of them highlighting the extent of the crisis and its lasting nature.

Explaining the measures

Facing up to the crisis starts at home. Basing himself on this universal truth - and on the fact that the Cameroonians, rightly or wrongly, firmly believe that, with will and their work, they can, initially at least, make a lot of progress - Paul Biya, a teacher at heart, explained the various measures, starting with austerity. "When someone usually has an income of 100, and lives off it, he should adjust his standard of living downwards so it costs, say, 70", he said. The Government put this into practice and decided on a drastic reduction in State spending, closing down economic missions abroad, the necessity and efficiency of which were not proved, and withdrawing various advantages enjoyed by staff in the civil service and semi-State sector - and they were considerable for a developing country, even an oil producing one. It restricted the numbers and indiscriminate usage of administrative vehicles (hence saving on fuel and maintenance), most of which were auctioned. It controlled telephone calls in the administration, putting a ceiling on the cost of calls and cutting down on the number of people who could make them. And it ran its "Antilope" operation (analysis and computer and logistical processing of State staff) to check on the actual number of civil servants. This revealed a great deal of fraud and made it possible to count "1000 to 2000 staff" eligible for retirement in a drive to lighten the administrative structures.

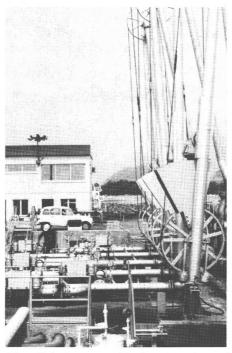
These austerity measures are obviously reflected in the 1987/88 budget. They should make for better management of both the administration and the State firms — whose huge



Livestock, agriculture's weak point. The President of the Republic has promised to cut frozen meat imports to get animal production off the ground again

staffs and total unconcern with profitability made them veritable bottomless pits for the treasury (1).

The public economic sector consists of about 60 companies engaged in a variety of fields established under the legal rules for private companies. They are an increasingly heavy burden on the public purse and contribute in only a limited way to economic growth. Presdient Biya has made their restructuring and new legal status one of the priorities of his economic policy (2).



The oil industry at Limbe. A variety of products and an annual processing capacity of 2 million tonnes of crude

These firms will be reorganised, "privatised" or transformed. A "green bank", an agricultural credit bank in fact, could be set up to replace Fonader (the National rural development fund) and give the agricultural policy its rightful importance as a priority, of which agro-industry is one of the pillars.

The restrictive measures have not been to everybody's taste, of that there is no doubt. But the Head of State and the Government were unwilling to take the easy way out by waiting for other people to suggest how to solve the crisis. "We do not want to give the impression that foreigners are the only key to the success or the only reasons for the failure of our policy", said a leading Minister in the present Government, suggesting that "public opinion is pro the measures the Government has taken".

However, it is worth noting that this public opinion is wondering about the way they are being applied by a cumbersome administration and much red tape and being openly and increasingly critical. Paul Biya was asked about this in his speech on TV on 15 October when he said that "no-one is forced to be in the civil service", although "if you are, you have to abide by the rules". And also its mission. The role of the administration is in

⁽¹⁾ The overall operating deficit of these firms was around CFAF 160 billion (\$ 425 million) in 1983. Although figures for subsequent years are not yet available, State subsidies to the public and semi-public sector are expected to be CFAF 150 billion (\$ 366 million) in 1984.

^{(2) &}quot;A Presidential Office for the Stabilisation Plan" was created during the government reshuffle of December 1987. Among other things its task will be to investigate the structures and rôles of these public companies in the Cameroonian economy.

The first election in the "Democratic Process"

In October 1987 — for the first time since 1958 — the people of Cameroon were able to choose from a selection of candidates in order to elect their town councils. These elections were the first practical exercise in the democratic process which the Head of State, Paul Biya, advocated when he came to power six years ago.

The electoral campaign was waged with enthusiasm - in Douala, a town of major economic importance, and in certain provinces, it proved particularly vigorous, as in the 1950s. In the capital, Yaoundé, it was less so. It is a question of local "particulars" or the stakes involved. The general progress of the voting operations throughout the country could be termed "a success", apart from one or two "irregularities" at local level here and there. The day after the elections, which were held on 25 October, the Cameroonians seemed generally pleased with the outcome. A great deal more than the elections themselves was at stake in the context of the "new policy" they could mark a step towards a pluralist democracy in Cameroon. The importance attached to the elections and the Cameroonians' "good



President Paul Biya

behaviour" also reflects their desire to prove that they are ready for a responsible democracy.

The President had pointed out that, "for the political life of the country, the elections on 25 October were an important stage in the process of achieving democracy", and should in fact "progressively and pragmatically lead to democracy", which involves not just the possibility of freely choosing one's leaders but of being able to dismiss them just as freely, and also the acceptance of majority rule". Paul Biya then asked the Cameroonians to "show a sense of discipline and to demonstrate to Africa and the world that they were fully worthy of the democratic process he was offering them". The message was well received.

There were, however, certain pockets of resistance to change, stemming not so much from fear of the new "political deal" as from natural conservatism. Parliamentary elections will be held this year along the same lines.

Certain observers are sceptical about Africans' ability to build a pluralist democracy. Is not the prime merit of the Cameroonian President the fact that he has reaffirmed his intention of pursuing his objective of democratisation despite the economic crisis? Perhaps he sees this as the surest way of improving moral standards in public life and managing the economy properly, these also being essential conditions for democracy.

fact decisive in any economic policy, particularly in times of crisis. The confidence that the Head of State is expecting from foreign investors will depend on the confidence shown by the nation's economic operators — whose enthusiasm also depends on administrative facilities. For development is the combined result of front-wheel drive and a boost from the back. "The success of anti-crisis measures is tied up with proper application and with the efficiency of the administration", a bilateral cooperation officer in Yaoundé said. The value of a text is the quality of its implementation.

Cameroon, the IMF and international cooperation

Cameroon is not against the IMF and it was by no means on a whim that the authorities decided not to ask

for immediate help from the Fund to tackle the crisis. There were a number of internal economic facts to take into account "Cameroonian realities", for example and the importance, paradoxically, that the Government attaches to IMF action. "International support is both necessary and vital to our treasury and to finance our development projects", they said in Yaoundé,... 'although we do not want to act under the pressure of events. The Head of State is not closing the door to the IMF, obviously. He does not take a "dogmatic approach" to the problems of the economy and international cooperation, whose help is both "useful and indispensable" to the solving of the crisis and the pursuit of Cameroon's development.

However, although there was what might be called a "misunderstanding" between Yaoundé and the IMF, it could have been triggered by an analysis of the effects of IMF medicine in other countries. "The IMF uses the same recipe everywhere, without seeking any popular support... which the Fund tends not to get but which Cameroon thinks is an important part of the policy of the Head of State and the Government". There is no ill will towards the IMF, a member of the Government assured me. Calling it in does not always means accepting its humiliating terms, added a bilateral cooperation organiser from a North American country. "The important thing is how".

Clarification of relations with the IMF was all the more important, as they seemed to "determine" the extent of the aid from "certain friendly countries". But international cooperation, which is diversified, involving bilateral and multilateral aid and spe-

cial financing organisations, is a significant aspect of Cameroon's economic development policy.

Relations with the Community

Cooperation between the Community and the ACPs is governed by the Lomé Convention. But the first cooperation agreement with the European Community, then comprising only six countries, was signed in the capital of Cameroon in July 1963 and renewed in 1969. Since then, Cameroon has been active in the relations that have been developed with Europe, now the Twelve.

But what does cooperation between the Community and Cameroon look like?

"Lomé III is a fine instrument", said the Minister of Planning. Community aid is not one of Cameroon's biggest contributions, but it is seen as qualitatively one of the best — al-



Banks and ministries in Yaoundé

though there is some criticism about implementation and the higher "recurrent costs" attendant on the difficulties arising from "overlapping responsibility" and the unsuitability of the structures that administer the aid (see article on EEC-Cameroon cooperation).

"What we need is a little more flexibility in implementing development projects", was suggested at the Agriculture Ministery.

Yet in spite of a profound economic crisis, Cameroon is still a sound partner in international cooperation, they say in Yaoundé. It is one of the least vulnerable countries in Africa and has a relatively small external debt (about CFAF 1035 billion) in comparison to the nation's wealth, representing a debt service of 30% of export revenue. These recent essential data, which show the country could still merit high confidence by funders, explain the authorities' insistence on not seeking a moratorium on their public or private debts for the moment. "Rescheduling the debt is of less significance and limited scope", they say in Yaoundé, and the State will continue to "honour its international financial commitments".

So Cameroon has many more assets than other African countries to tackle the crisis. It has real and potential means, a necessary internal stability, a certain consensus as to the socio-economic development model and the psychological support of the people for the recovery measures, which are all trump cards. All that remains to be done is to mobilise them — and to give national and international partners more reason to believe in the Government's economic policy. O

LUCIEN PAGNI

Oil and the Cameroonians

Oil appeared in the economic life of Cameroon in 1978, only three years after the sudden fivefold increase in the price of the "black gold". Oil, which had brought in \$210 million in 1980, expanded to provide \$670 million-worth of net revenue (CFAF 316 billion) for the nation's balance of payments in 1985. This was 52.2% of exports of non-oil products and services, as against 16.5% in 1980.

Oil, almost a taboo subject, soon imposed itself on the minds of the Cameroonians. "We have oil so we are rich...", was on the lips of every social class, in spite of the fact that top State officials had taken the precaution of always coming down on the side of agriculture rather than oil revenues, which were always "invisible", non-budgeted earnings. But the revealing signs of the manna were there, for better or for worse, as the well-known guitarist Eboa Lotin put in his song "The nouveaux riches".

The international economic situation, *inter alia*, was quick to bring disenchantment and a falling dollar

accompanied a decline in production. Cameroon's 9 million tonnes of 1984 went to just above 8 million tonnes in 1986 and optimistic estimates suggest that oil production will gradually dwindle further to something like 3 million tonnes in 1994 — unless (hypothetical) fresh fields are discovered, something the Government is encouraging by backing prospection with new tax conditions that are very attractive to the oil companies.

If the anticipated decline does occur, net oil revenue will go from the \$991 million of 1985 to around \$520 million (CFAF 175 billion at the supposedly constant dollar rate for 1988 of CFAF 335).

The economic and financial crisis has been with them for three years now and the Cameroonians react, according to their temperament, by complaining or not caring. One consolation, and not a bad one, however, is that they seem to be turning the corner of the post-oil era better, with the emphasis on agriculture and rigorous management all the greater. \circ

L.P.

The priorities of the VIth Development Plan

Interview with Sadou Hayatou

The Plan is the machinery of Cameroon's economic programming. This is the country's sixth five-year programme and the Ministry of Planning is a governmental institution whose overall picture of the way the infrastructure and economy should be organised ultimately goes a long way to determining the country's physiognomy. The Cameroonian plan is an incentive, of course, but the development part of it in particular may speed up the national economy by improving the infrastructure more and faster.

There is no point in producing unless you can sell. And you cannot sell unless you get the goods to the consumers. This is how certain aspects of the interaction of infrastructure and the level of production in agriculture, industry and services can be explained.

The Minister of Planning Mr Sadou Hayatou(!)

The Minister of Planning, Mr Sadou Hayatou⁽¹⁾, former Director-General of an important private international bank, answered The Courier's questions about the Plan being implemented now and over the coming few years.

- ► What, Minister, are the main priorities of Cameroon's 6th Development Plan?
- Cameroon is a big country. Its potential resources are considerable and its varied climate and vegetation are major assets for our development and we have to organise the exploitation of them, giving each of our provinces a chance to play its part. The aims and ambitions of planning, you might say, are to try and build up and harmonise the different sectors of the economy as far as possible and this is what the major priorities of the 6th Plan are aimed at. Roughly speaking, \$\\ \End{array} there are five different sectors, starting with the rural sector. The Government thinks rural development is vital because we have to consolidate our selfsufficiency and make sure that we can go on setting up agri-food industries - which have to be guaranteed their supplies of raw materials. And we also have to maintain and expand Cameroon's position on the world commodity markets.

What we want to do in agriculture is go on modernising our farms to boost productivity. And we shall give a fresh stimulus to herding by improving our grazing land and the health of the animals.

The 6th Plan also places great emphasis on industry, as indeed our other Plans did. We believe we must integrate our various industrial units more and promote our smaller businesses — as it is properly designed and properly managed small and medium-sized businesses that make it possible to create



Sadou Hayatou

proper national industry that is stronger and better able to provide support for the creation and development of processing industries and technologies for the country's raw materials.

The third main priority of the 6th Plan is the communications infrastructure, which is important for two reasons. First, we have to improve our internal links and our national integration and, economically speaking, make it easier to sell products from one area to another.

The fourth priority is to raise the standard of living of the people by getting rapid urban development under control and providing properly thought-out socio-economic and cultural facilities.

The fifth priority, and the top priority even, is education and the accent

here will be on technical education, further decentralisation of the universities and establishing specialised infrastructure.

- ► What is the economic and social advantage of the "integration" infrastructure?
- It is fundamental to the development of any country - particularly our countries of Africa, the Caribbean and the Pacific with their lamentable lack of transport and communications infrastructure - when it comes to generating and developing economic activity where there was none before or where natural conditions are not, on the face of it, suitable. Transport, communications in general, are a sine qua non of investments in a country because the fluidity of traffic and the speed of trade between the areas of production and the consumer markets, both at home and abroad, depend on them. Ever since independence, Cameroon has been building infrastructure, which is very expensive of course, but essential to ensure our economic and national integration.

Our external development partners understand our concern here. And I should like to take this opportunity to say once more how much we appreciate the considerable part the European Development Fund has played in modernising our transport infrastructure, building the TransCameroon and realigning the Douala-Eséka stretch. The railway is a good example of integration infrastructure that brings the longitudinal regions of the country together. There is no denying that economic activity has expanded a lot in the areas crossed by the TransCameroon - which is also a key to our

⁽¹⁾ Finance Minister since the December 87 reshuffle; (Interview conducted in October).

trade with our two (Chad and CAR) landlocked neighbours in UDEAC.

Our every effort now is geared to getting more capital out of this investment and trying to increase the possibility of horizontal use of the railway with road links to far-off economic zones — as well as avoiding another type of exodus to the new stationtowns along the track. This, of course, is a priority operation and Paul Biya, our Head of State, often says how important it is for complete national integration.

I should like our cooperation partners, particularly the EEC Commission, to understand how important we think the infrastructure issue is and to back us in our drive to improve this sector of development.

- ▶ World prices are not good, but the basis of Cameroon's export trade is still coffee and cocoa. How does the Government plan to cope with this in the medium and the long term?
- The Government is running a policy of agricultural modernisation, as I said just now, as it wants to boost productivity and thus output. One of the aspects of modernisation is mechanisation of the nation's mediumsized farms.



A street in Douala, the thriving business and commercial city now experiencing serious planning problems

The Agricultural Bank, a new finanial institution, will be offering help to individuals and groups in the agricultural sector. All these measures should result in the emergence of a strong agricultural sector which will help us set up a national agri-food industry. That would be a first-class way of div-

ersifying our exports on solid foundations.

- ▶ What do you expect the international negotiations on raw materials to do?
- One of the basic causes of the economic crisis in the countries of the Third World is the constantly declining prices of their export products raw materials, that is to say. At the same time, the imported manufactures which we often need for development are getting more expensive all the time. So the resulting situation is no good to us and we feel that the industrialised countries should join us in a closer look at the constantly worsening problem of trade between the developing and the industrialised world. What we have to do is revise the world economic system so there is more justice and fairness between the partners. I think that if the developing countries could get remunerative prices for the commodity exports it would be a more beneficial sort of aid.
- ► How will the 6th Plan be financed?
- The total sum involved here is CFAF 6 000 billion a considerable amount and the State will be providing the bulk of it. In terms of percentage, we expect national resources to cover 76.7%, 42% of it from the public sector and 34.7% from the pri-



"Linking the country's provinces by sure means of communications" — here the Ngaoundéré-Maroua highway which has been a real stimulus to regional economy



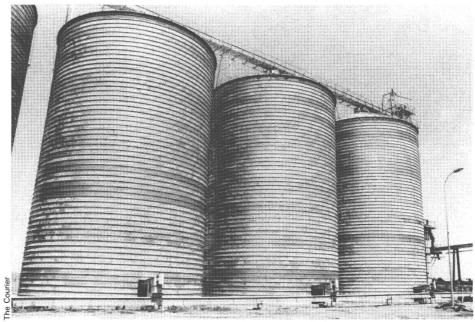
Dschang, in Western Province, is one of the tourist and agricultural centres of Cameroon, which depends on access routes and settlements for its development

vate sector. But as we still have to find the rest, we intend asking our foreign partners for 16.3% from official aid and 7% from the private sector. That is how we hope to finance the Plan and make a success of it. The present economic situation does not look encouraging, but we have to make an effort by working more and managing our resources better. That is the only way we can succeed.

- ▶ Some consumer products, rice, palm oil and so on, cost too much to produce in comparison with world prices. How does the Government plan to reduce these costs and make the nation's products competitive?
- We have planned schemes to reorganise our public and semi-public firms and make them more efficient. This will mean lower production costs which, combined with proper management, should lead to a certain competitivity. However, it has to be admitted that our young industries are finding it hard to cope with competition from the economically more advanced countries, so we have to bring in protective measures for some of our products, in spite of the fact that this is not always easy to do as our system of development is working at the moment.
- ▶ What do you think about Lomé policy, particularly under the 6th EDF?
 - Lomé is a valuable instrument

alisation of programmes is still in its infancy. This is something that has to be remedied to make EDF aid more efficient.

- ▶ Do you expect to see any major changes in ACP-EEC cooperation at the negotiations for the new Convention that begin in mid-1988?
- There absolutely have to be some major changes in the Convention that replaces Lomé III, as the present agreement is full of imperfections. First of all, each ACP State has to be left as much room as possible to decide on the major programmes in its development policy. Then, since social



Cottonseed silos serving the Garoua refinery (Northern Province), an important component of Cameroon's agro-food industry

whereby Commission cooperation policy can be geared to the ACP States and the various Conventions have evolved in the light of the development problems we have in the Third World.

This satisfactory trend should not however mask the difficulties of implementation or the lack of flexibility in programme assessment. Each country has its own characteristics and development priorities and there is no point, sometimes, in trying to apply the Convention programmes to all the ACPs across the board. If you do that, the Convention ends up looking like a list of provisions that have to be applied rigorously to all our countries.

And the involvement of national human resources in the design and re-

and economic situations frequently change, it would appear that we ought to be able to make the implementation of programmes, even those already adopted, more flexible. At the moment, there is very little transfer of technology at the assessment level, which means the external consultancies have to make a huge effort to assimilate, often without any direct control over the realities of the local situation. If national and external experts were properly associated, their exchanges would be more fruitful for both sides, both when it comes to capitalising on the studies and continuing cooperation between the EEC Member States and the ACPs. o

Interview by L.P.

"Modernising farming and improving food" Agriculture Minister Jean-Baptiste Yonké



The Minister of Agriculture

Cameroon is one of the rare countries of Africa where self-sufficiency in food is something lasting. In spite of the economic crisis that has very much slowed and reduced activity in many sectors, Cameroonian agriculture, especially the food crop side, is developing. Any decline would have less to do with a loss of interest in the land than the inadequacy of the general policy on infrastructure and price support or the basic minimum protection against certain surpluses imported at very low prices from the developed countries.

Cameroon's Agriculture Minister, Jean-Baptiste Yonké, an agricultural engineer, told The Courier about the Government's drive to modernise the farming sector. He started with explaining the concept of self-sufficiency in the context of the National Food Plan.

 Cameroon has, indeed, achieved self-sufficiency in food thanks to the combined efforts of the farmers and the authorities. It is visible at national level. Quantitatively speaking, our overall food output is enough to meet domestic demand and export a surplus. We feel that the situation, overall, is a satisfactory one. Although there are nutritional problems attached to the different areas, classes and products consumed.

In the southern parts, for example, there may be seasonal pockets of food shortage as a result of bad rainfall or other things such as locusts or unusual swarms of grain-eating birds.

But our self-sufficiency in food does not stop us importing agricultural products — rice for example — we ourselves don't grow or don't grow enough of.

We have brought in measures for the rapid modernisation of our agricultural production apparatus and the setting up of the medium-sized holdings (EAMI) and the extension of irrigation food crops programme is one of the first step towards achievement of this objective.

Modernisation of our agricultural production is the best response we can give, in terms of food, to the sustained growth of our population and the phenomenon of galloping urbanisation. These two factors combined mean that, if we are to cope with the demand for extra food and cater for the future, we have to bring about substantial changes in the conditions in which our food production, which is essentially in the traditional sector, takes place.

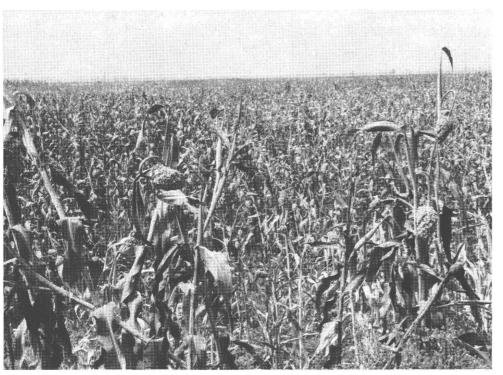
- ► Lomé III insists on integrated rural development, in particular on the basis of areas of concentration. Do you think this is suitable for the situation of Cameroonian agriculture?
- We are already well advanced with our improvements to the standard of living in rural areas with our design and implementation of integrated rural development projects. This concept reflects multi-sectoral needs which, if satisfied, help the development of the people in these areas. So, when we run this sort of project, backing for the farmers usually goes hand-in-hand with a drive to im-

prove the transport infrastructure so produce can be shifted and proper supplies can get to the populations concerned. And according to what means are available, the development drive may also take in public health in the areas in question, rural electricity supplies and an increase in the volume of the financial aid distributed via the agricultural credit facilities. The way the rural population development movement is going, thanks in particular to the promotion of integrated development provided for in Lomé III, reflects our policy of running State schemes in this field.

However, seen from the point of view of areas of concentration, this policy is not without its problems — and they arise from the interpretation that may be made of it. Indeed, although we share the idea of having focuses for schemes so as to induce the rapid development of rural production, we are still faced with the realities that exist in the field.

These realities mean, for example, that we have to help all those making an effort to improve their living conditions in these areas, in the light of what they can do and the place in which they carry out their activity. Obviously, in the conditions in which we work, there is not always the opportunity to organise focuses for integrated rural development. This is something which always depends on the environment and the geographical, technical and socio-cultural bases.

- ▶ What are the main financial and technical problems facing Cameroon's agriculture today and how do you propose tackling them?
- In 1960, when Cameroon became independent, our national agriculture was badly short of technical cadres. It suffered from poor scientific research and did not have enough money to develop. But the domestic drive and the aid channelled into it by friendly countries and internatioal organisations have enabled it to make a lot of progress.



Developing the sorghum crop in the Northern and Extreme Northern provinces where a new variety, "Mouskouari", requiring low rainfall, has been perfected

But there are still problems, both technical and financial. Technically speaking the higher pace of training for agricultural staff (medium and higher level) provided both in our national schools and abroad, means that we now have good potential and can make a valid response to the domestic demand for qualified staff to supervise our farm workers. So the situation, I think, is fine as far as the number of agriculturalists we need for the extension services is concerned. However, it is a situation which calls for an extra effort, as we have to make up for the inadequacy of staff in agricultural research, agricultural economy specialists and people interested in managing large undertakings in the sector.

What about the funds channelled into the development of agricultural output? Well, the poor economic situation at home and abroad has made it even harder to cope and to find an answer with own means alone.

The slump in the prices of our main agricultural exports is a handicap compromising the Government's incentive policy based on fixing prices that give the farmers decent remuneration. And the decline in State revenue attendant on low export prices restricts the amount of money we can spend on raising the standard of our



Harvesting coffee in the coastal belt - a commodity too much a prey to the "whims" of the international market

food production and modernising our agriculture generally.

A close look at these consequences of deteriorating terms of trade on the international market forces us to ask for a greater effort on the part of the European Community under the Lomé aid machinery, not just increasing the amount of Community aid ploughed into rural development but also simplifying the procedures involved in granting it.

We think that the multilateral — and bilateral — aid provided for by Lomé should help us with the financial means we need to modernise our agricultural production structures and run the integrated rural development drive that the Government has started. It should also cover a whole range of technical assistance, training cadres in the specific fields I mentioned just now where we are short.

► How does the seed problem stand and what is the situation as regards preserving Cameroon's harvests?

— The preservation and consolidation of the self-sufficiency in food we in Cameroon have managed to achieve calls for greater attention from the authorities and from private economic interests working in the two fields of proper seed provision and harvest conservation. The State department's effort as far as seeds are concerned is with research — into both production and handling.

The results of agricultural research in this field to date are very interesting. Improved maize, millet and sorghum seed has been developed, as it has for groundnuts, cow peas, beans and tubers, and it is all suitable for the ground in which the crops are grown. Various improved strains of maize have also been developed and tested by our agricultural research institute (IRA).

They include a certain number of varieties adapted to low and medium altitudes — i.e. responding to the needs of producers in regions where maize is grown on a large scale.

In the IRA experimental fields, yield increases of 6-10 tonnes per hectare have been obtained with maize IRA has selected. One particularly interesting thing is that these increases were obtained without any reduction in the organoleptic qualities which

people usually seek in maize-based dishes.

The authorities' work in (improved and selected) seed production since 1984 has been the responsibility of the seed and food crop development mission (MIDEVIV), a public establishment in charge, inter alia, of implementing the Government's national seed policy of which it is the overall supervisor. The Mission runs schemes to create and manage production units, process and package improved food seeds and young plants runs seed control commissions for the purposes of certification and supply the rural intervention departments and organisations with seeds and young plants.

These departments and organisations, whose agricultural extension activities cover the whole of the Cameroonian territory, have made it possible to spread the use of improved and selected food crop seed on a large scale.

Imported seed of rice, (oil palms and potatoes, for example), is used in the extension programmes in addition to the varieties developed and tested by the Institute.

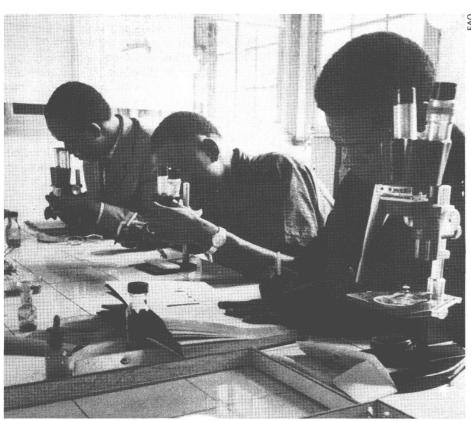


A four year-old avocado tree of the "Collinson Red" variety, grown as a result of the research and execution of the "Fruit Programme"

Alongside this intense work the public departments are doing to produce and disseminate seed, the State has also started a major drive to cut post-harvest food crop losses. This is one of the mainstays of the agricultural policy as laid down in the 5th and 6th five-year plans, the last of which is being run at the moment.

I should like to add that the intensification of harvest preservation schemes follows on from an agricultural loss reduction test scheme run in north-western Cameroon from 1979 onwards with the technical and financial support of the FAO. This project enabled us to get a better idea of the losses in our food crop harvests without the appropriate protective measures. It also pinpointed the need to run thorough investigations beforehand in the areas in which these losses occurred, so that suitable steps could be taken afterwards to get better results — i.e. as little loss as possible at the various stages from producer to consumer. Such investigations mean the sort of technical ability Cameroon does not have enough of - which is why I should like to make an urgent appeal for external contributions to help us pursue our drive to prevent post-harvest loss. This is an important stage in agricultural development without which self-sufficiency in food is a precarious victory - and it determines the success of any agro-industrial policy. o

Interview by L.P.



Training agricultural technicians at the Yaoundé Higher School of Agriculture, founded only three years after independence. Agriculture has always been an absolute priority in Cameroon's economic policymaking

SEMRY and the future of rice

Developing countries neither produce what they consume nor consume what they produce. The paradoxical situation of Africa's economy, and particularly its agriculture, could be summed up in this way. And although Cameroon is largely self-sufficient in food, it does not escape the paradox either.

Rice is a significant example of the drive that goes into producing a popular consumer product the future of which may well be mortgaged by a combination of the wrong marketing policy and transport problems.

Northern Cameroon has an organisation to expand and modernise rice growing. SEMRY, based in Yagoua, has three units and produces about 100 000 tonnes from 13 000 ha of paddy fields p.a., giving about 70 000 tonnes of high quality rice. The cost price of SEMRY rice is CFAF 200 per kg, but since the organisation aims to "ensure Cameroon's self-sufficiency in rice", the State has put the selling price at CFAF 144 (January 1987) to satisfy both the consumer and the producer-who gets CFAF 85 per kg paddy rice delivered to the factory. But SEMRY cannot sell its rice even at CFAF 144 per kg because there is imported rice at CFAF 70 on the market.

Rice stocks of 40 000 tonnes

Over and above the high cost price of SEMRY rice as compared to the particularly low world price of CFAF 100 per kg cif for imported rice, there is a third constraint on national output-transport.

"The cost of transporting rice to Douala, the main consumer centre, is CFAF 40 per kg produced", Tori Limangana, the Director-General of SEMRY in Yagoua, said.

"Yet we can only take commercial quality rice south", he explained, "and this confines the market to the country's three northern provinces which absorb 30 000 tonnes at most". The remaining 5 000 tonnes of the 35 000 tonnes of finished rice (50 000 tonnes of processed paddy) cannot be sold in neighbouring Chad, "because it can't pay" and because of the food aid it receives, or in Nigeria, which told the FAO in March 1987 that it was no longer importing rice as it wanted to capitalise on its national production.

The result of all this is that 40 000 or 50 000 tonnes of paddy rice is stored. It cannot be processed because of marketing problems and inadequate processing capacity. The World Bank is going to help improve the situation

by opening a new factory, able to handle 5 000 tonnes of paddy per month,

The various obstacles conspiring to reduce rice output (one harvest instead of two each year) and build up stores of tens of thousands of tonnes of paddy do not, however, reflect a limit to the country's productive capacity nor to the needs of the national market or the market of the Economic Community of Central African States. So the leaders of the rice sector are looking



Tori Limangana, Director-General of SEMRY

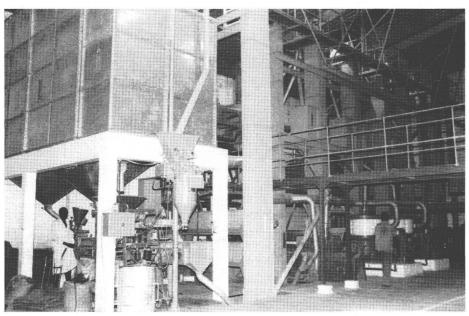
"We produce good quality rice"

for ways of coping with the high production costs, marketing and the place of rice in the economy of both Cameroon and the Economic Community of Central Africa.

What is the answer?

If Cameroonian rice is to compete, it must be shifted to the consumer centres. This means roads, and especially roads that encourage integration. But at the same time, the cost price has to be cut to about CFAF 120 (constant terms, 1987), which means taking action at the level of the peasant and getting him to shoulder certain costs (nurseries, fertiliser distribution, upkeep and so on). The quality of the product would then determine the purchase price, rather as it does for the coffee and cocoa producers.

The rice-growers should also get organised and form cooperatives-in



Rice processing plant at Maga

Cameroon's rice industry has to be protected from international dumping prices. It also has to be highly competitive if development is to be sustained and lasting



More than 40 000 tonnes of paddy rice in storage, and production halved by imports and poor transport to the main consumer centres

which case SEMRY would alter to become, say, a provider of services, something which could well interest certain funders if the Cameroonian Government decided to do this.

The other possibility is to set up an equalisation fund. Since the imported rice is mainly Asian surplus sold at dumping prices, it would be heavily taxed on import and consumption (high selling prices) and the product of these various taxes would be paid over to SEMRY so that it could cut its consumer prices. This solution, however, has the drawback of being more repressive than competitive—which would make it less effective.

An economically viable way out would be one which kept the social importance of rice growing in the provinces in question (100 000 people in the SEMRY areas and the north and extreme north in particular) and made a positive contribution to the balance of payments by keeping the domestic market supplied and developing exports. This could be an achievable target given the major investments made in the three units-CFAF 27.8 billion in 1985/86 including CFAF 4.884 billion for SEMRY III (Logone and Chari project), to which the EDF provided 64% and Cameroon 36%. o

L.P.

Cotton too...

Cotton is one of the mainstays of Cameroon's regional and national economy, particularly in the north of the country. It is grown by some 170 000 planters over a total area of about 100 000 ha. Sodecoton is the company responsible for developing cotton production in Cameroon, and performs the same function for cotton as SEMRY does for rice. The role of Sodecoton, which is run jointly by the Cameroonian Government (70% of the capital) and the French firm "Compagnie française développement des textiles -CFDT" (30%), is to provide cotton producers with technical assistance and advice. The assistance provided by Sodecoton comprises mainly the supply of seeds, fertilisers and plant health products to the peasant farmers living in almost 1000 villages. Cotton-growing, which is a long-established activity in Cameroon, and more especially in the north, was carried out by a traditional, extensive method until recent years. When in 1974 Sodecoton became responsible for strategy regarding this important product for the country's economy, it introduced a modernisation policy involving the extension of animal traction and mechanisation.

The company has about 300 tractors which will enable it to mechanise cotton cultivation very quickly. The equipment, which includes mills and threshers, was financed by the Caisse Centrale de Coopération Economique (CCCE), and it is hired out to groups of producers.

Like rice, however, cotton presents a number of problems as regards marketing and management. The purchase price paid to the Cameroonian cotton planter is about CFAF 350 (FF7), i.e. at least twice the cost price. The value of a kilogram of cotton fibre delivered to a European port (Le Havre) is CFAF 700. However, the top world selling price of cotton fibre was CFAF 500 in 1986/87, as compared with only CFAF 400 for cotton fibre from Cameroon and from 2 most African countries; this represents a loss of CFAF 300 per kilogram of cotton fibre (about CFAF 12 750 million for total exports of 42 500 tonnes of cotton fibre a year). Cameroon produces almost 50 000 tonnes of cotton fibre a year. This situation poses all the more a problem

Raw cotton processing plant at Garoua

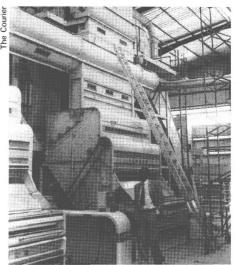
for this sector of Cameroon's economy in that international competition is keen and the fall of the dollar is another constant drawback. Some 70 countries, including Cameroon, export 14 million tonnes of cotton fibre a year; Cameroon accounts for 2% and the whole of Africa accounts for only 5%. Given the African countries' weak commercial position they cannot organise themselves at international level like the cocoa and coffee producers, for example. What should they do, then, to keep up and develop cotton growing in Cameroon?

Mr Mohamed Iya, the director of Sodecoton (which employs 3 000 people) feels that a way must be found to maintain this activity, which, even if it represents only 6% of the country's exports, is still an important part of the regional economy. He suggests, for example, that cotton should be included among the products covered by Stabex, especially since Cameroon exports its cotton, which is of very good quality, mainly to Europe (Germany, France, Netherlands, Italy), although it also exports to Japan, Latin America (Mexico, Argentina) and Africa (Nigeria, Morocco).

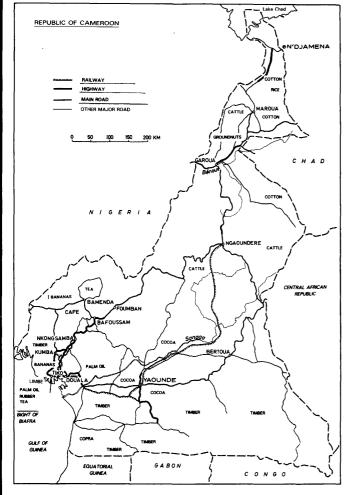
Cameroon is endeavouring to give added value to the cotton produced by developing a national textile industry processing 7 500 tonnes (20%) of fibre a year (30 million metres of unbleached fabrics) and by operating an oil mill which uses 60% of the seed, thereby producing 10 million litres of oil a year, most of which is exported to The Netherlands.

Again as in the case of rice, however, textiles and the other by-products of cotton, including oilcakes and oil, come up against competition from cheap products from South-East Asia or even Europe in terms of the quality of the clothing and household linen.

It is once again a question of having the right market structure and competitive products. \circ L.P.



PROFILE



Republic of Cameroon: Special feature: The Republic is a bilingual country (English and French).

Area: 475 422 km².

Population: 10.5 million (and a projected 12.2 million in 1990-91).

Growth rate: 3.1% p.a.

Average density: 22 inhabitants per km² (1986).

Birth rate: 45.5‰ p.a. (1986).

Education (1984-85): 1 639 000 at primary school, 238 000 at secondary school and 24 480 at university, with a rate of coverage of 75%.

Currency: CFAF (FF 1 = CFAF 50, CFAF 1 = FF 0.02). GDP: CFAF 3 048 billion in 1984-85 (as against CFAF 2 827.4 billion in 1983-84). Per capita GDP now CFAF 300 000 (as against CFAF 294 500 in 1983-84). An increase of 21.2% during the 5th five-year plan (1980-

Agricultural production (1986-87): Cocoa: 123 000 t, coffee: 139 000 t, cottonseed: 122 773 t (fibre: 48 468 t), paddy rice: 103 000 t (processed rice: 70 000 t), millet & sorghum: 480 000 t, palm oil: 76 064 t, bananas: 48 878 t, pineapples: 6 500 t, groundnuts: 49 636 t, rubber: 17 414 t, timber: 300 000 t, cattle: 4.15 million head;

sheep and goats: 3.750 million head; fruit, yams, sweet potatoes, bananas, plantain and vegetables.

Industrial production: According to the DSCN (the national statistical department), industrial output dropped by 13.9% in the first half of 1986/87 in relation to the previous year. The World Bank estimated CFAF 586 billion for industrial added value (1984-85), as against CFAF 702 billion for agriculture, and CFAF 520.5 billion for value added by the mining and petroleum industries.

Exports (1985-86): CFAF 428.6 billion (CFAF 300 billion for the first 11 months of 1986/87⁽¹⁾. Cocoa: CFAF 92.5 million⁽²⁾; coffee: CFAF 95.3 million; petroleum: CFAF 626 billion; other agricultural products including timber and timber by-products: CFAF 67 billion; manufactures: CFAF 44 billion; other products: CFAF 29 billion. Total goods exported: about CFAF 950 billion (about \$2322 billion).

Imports (1985-86): CFAF 586.2 billion (1) (CFAF 506.8 billion for the first 11 months of 1986-87). Capital goods: CFAF 157 billion (2), consumer goods: CFAF 62 billion, intermediate goods: CFAF 187 billion, food products and beverages: CFAF 38 billion, petroleum products: CFAF 53.3 billion. Total goods imported (fob): CFAF 445 billion.

Trade balance (1985-86): CFAF -156.6 billion (CFAF -127.2 billion for the first 11 months of 1986-87). Trade balance without petroleum: CFAF -228 billion (CFAF -196.6 billion for the first 11 months of 1986-87)(1).

Balance of payments: CFAF +14 billion ⁽²⁾. A negative balance of more than CFAF 56 billion in 1984-85.

External debt ⁽³⁾ (1987): CFAF 1 035 billion (\$ 3 000 million) — i.e. 42% multilateral debt, 38% bilateral debt and 20% trade debt.

Debt servicing: 30% of export revenue.

Transport: About 10 000 km of national roads, about 5 000 km of which are tarred. One airline and 13 airports, three of which (Douala, Yaoundé and Garoua) are international. Camair has flights to Paris, Geneva, Rome, Frankfurt and London. Approximately 1 130 km of railways.

Tourism: Considerable but undeveloped potential. Stress on the top end of the market.

Health: Budget from CFAF 13.6 billion in 1981-82 to CFAF 34.5 billion in 1985-86 — i.e. an increase of 4.3-4.7% of the national budget. Total in five years — CFAF 121.4 billion (6th plan). Hospital capacity — 26 872 beds (one per 388 people in 1986).

Culture and information: National television (PAL) broadcast throughout the country. Many provincial radio stations linked to the national network, plus a large number of independent newspapers in the main towns — Douala (population of about 1 million), Yaoundé (about 700 000), Garoua, Bafoussam, Edéa (metallurgical and electrical industries) and Ebolowa.

⁽¹⁾ DSCN, Cameroon's statistical department.

⁽²⁾ World Bank estimates.

⁽³⁾ Ministry of Planning.

Cooperation with the Community

by Agostino TRAPANI (*)

The ties that bind the Community to Cameroon are very old, as they date back to the creation of the EEC in 1957. They are also very strong, more than 70% of Cameroon's external trade being with the countries of the Community. In 1985, total Cameroon-EEC trade was worth almost ECU 5 billion, with a positive balance of more than ECU 1.2 billion on Cameroon's side.

Since independence in 1960, Cameroon has become one of the main beneficiaries of Community aid, having had more than ECU 600 million in all since the 1st EDF.

Although this aid is only a small part (roughly 1%) of the investments made over this period, it constitutes more than 50% of the nation's external financing and more than 50% of its grants.

And Community financing has been particularly important in rural development in the areas of concentration, often amounting to 20-50% of invest-

Traditionally, this aid, particularly the part directly managed by the Commission, has been concentrated on infrastructure, transport especially, and agriculture, although significant amounts have also gone into other sectors such as health, training and trade promotion. Rural development is the main emphasis of the 6th EDF indicative programme.

Since the start of Lomé I, the EIB has run 14 schemes from own resources - which shows that the country's economic and financial situation throughout this period was sound. The scope and diversity of the projects which have been financed (for a total ECU 139 m) are greater than in any other ACP. There have been five agroindustrial projects, three hydroelectric projects, four industrial projects and two infrastructure projects.

Transport infrastructure

This is the sector in which Commu-

nity aid has been most active, with

43.6% of financing from the five EDFs. In the 6th EDF indicative programme, however, transport infrastructure is only one of the aspects of the integrated rural development pro-

The Fund has channelled more than ECU 80 m into building and realigning the railway between Douala and Ngaoundéré. This is a key work for Cameroon and an essential contribution to opening up the whole country and Chad and the Central African Republic as well.

Work in the road sector, with ECU 43 m. has resulted in 330 km of new road and several major infrastructural works - bridges over the Garoua, the Edea and the Dibamba. The remainder of the 5th EDF is to be used to build 160 km more road, this time between Yaoundé and Ayos.

The Community has also helped finance the extensions to the port of Douala, which is of vital importance to the external trade of both Cameroon and its landlocked neighbours.

Rural development and agro-industry

Community aid schemes in rural and agro-industrial development took up 19.9% of the first three EDFs and 50-60% of the 4th and 5th Funds. They account for 80% of the 6th EDF indicative programme.

The biggest achievements in the sub-sector of agricultural and agro-industrial plantations have been the creation of 6000 ha of palm plots and an oil mill in the Douala area, 1600 ha of rice plots in the far north and 425 ha of tea plantations in the Western Highlands.

The results of the oil palm project are particularly good and, with certain reservations, those of the rice project are too — with 13 000 tonnes of paddy rice and 4000 tonnes of other food products being produced every year. The exploitable potential of the region is even greater than this.

Of particular note in the sub-sector of integrated rural development projects is the scheme to get people from heavily populated areas to settle in north-eastern Bénoué (North province) and the north-western rural development operation. The integrated rural development approach is not in itself open to debate. Although the outcome has not always been satisfactory, this is probably due, inter alia, to the fact that the projects have been over-ambitious, covering vast regions



Rubber plantation in the south-west to which the Community (through the EIB) contributed substantially under Lomé II

^(*) EEC Commission Delegate in Cameroon, with responsibility also for Equatorial Guinea.

EEC-Cameroon cooperation 1960-1987

All instruments combined (million ECU)

1. National indicative programme	
1st EDF	52 112
2nd EDF	55 421
3rd EDF	61 419
4th EDF	59 000
5th EDF	69 000
6th EDF	96 000
	392 952
2. Stabex	
4th EDF	4 065
5th EDF	29 590
	33 655
3. EIB	
Yaoundé I	11 318
Yaoundé II	5 950
Lomé I	32 615
Lomé II	95 700
Lomé III	80 000
	225 583
4. Interest rate subsidies	
3rd EDF	530
4th EDF	4 102
5th EDF	18 914
	22.546
5. Diele souitel loose	23 546
5. Risks capital loans	622
3rd EDF 5th EDF	532 4 742
3th EDF	4 /42
	5 274
6. Emergency aid	
4th EDF	2 298
5th EDF	1 596
6th EDF	150
	4 044
7. ONG	3 663
Grand total	655 011

and populations and necessarily marginalising the impact of what resources were available. And the State development bodies in charge of managing the funds are not always as efficient as they might be and have further reduced the direct effect of Community action on peasant productivity.

The projected 6th EDF investments are intended to consolidate the results of the previous programme. They include one or two new schemes — poles of development in the forests and on the Tikar plain — that are geographically limited and within the peasants' scope.



The Benoué Valley development scheme (northern province) is a programme which aims to create an area of land suited to intensive agriculture and to fishing—above, the (smoked) fish market in Lagdo

Health

Community aid has been active here too. It built dispensaries and developed hospitals (with a total of 1400 beds) under the first three Funds, although a study of schemes to set up a hospital equipment maintenance service was never completed.

Public health is still one of the pillars of rural development programmes in the areas of concentration of Community aid.

Education and training

This took 14% of the first five EDFs, leading to:

— 33 000 m² of school buildings, including extensions to the higher National Polytechnic, the teacher training school in Yaoundé, the inter-African statistical training centre and various colleges in Douala, Yaoundé and Ngaoundéré;

1 017 new classrooms and 250 units of housing for teachers;

— the sending of more than 100 grant-holders to train abroad, primarily in Europe.

There are no multiannual training programmes under the 6th EDF, but project-linked training is included in each of the aid programmes.

Stabex

Since 1980, Cameroon has had Stabex transfers worth a total of ECU 23.6 m for coffee and cocoa.

In 1986, ECU 8.5 m was committed to cover the additional part of authorised applications for 1981 (which had not been paid in full). The Stabex transfer agreement for this was signed on 26 November 1987.

Trade promotion

Community aid has made a decisive contribution to the creation and operation of the national foreign trade centre (CNCE) with financing from

EEC financing in Cameroon

	1.	Agricul	lture	and	Rural	Develop	pment
--	----	---------	-------	-----	-------	---------	-------

	'000 ECU	Source of financing
Research		
Various studies	1 959	1st-5th EDFs
Emergency aid	1,33,	13t Stil EDIS
Purchase of fertiliser and pesticide	1 660	5th EDF
Structural improvements		
Aid for marketing	6 812	2nd EDF
	Tea (Djuttitsa	
Production schemes	tea project)	3 552
2nd, 3rd & 4th EDFs		
Sugar cane	4 507	EIB (Lomé I & II)
Palm oil	38 254	EIB, 2nd-5th EDFs
Rice (Logone & Chari)	15 076	3rd, 4th & 5th EDFs
Rubber (Hévécam) Cotton (CICAM)	13 400 1 215	EIB (Lomé II)
Livestock	1 067	EIB (Yaoundé I)
Forestry	223	3rd EDF
Rural development		3.4 227
Mora region	410	1st EDF
North-eastern Bénoué	16 670	2nd-5th EDFs
North-western province	10 400	4th EDF
Bafut	1 500	5th EDF
Stabex		
Coffee	9 524	5th EDF
Cocoa	16 735	4th & 5th EDFs
Timber	3 601	4th EDF
Grand total	146 655	

-	Transport	•	
,	Panchart	introc	TPHATHE

	'000 ECU	EDF
	UUU ECU	EDF
Port of Douala		
Construction of four berthing wharfs	3 373	2nd
purchage of a dredger	1 350	1st
repairs to a dredger	117	2nd
Development	209	3rd
Development	4 100	4th
	9 149	
Roads		
Pitoa-Figuil road	1 397	1st
Nkolbitie-N'Kolenieng track	876	1st
Tignere-Kontcha	711	1st
Yaoundé-Mbalmayo	1 951	1st
Edea bridge	1 375	1st
Ngaoundéré-Garoua	3 133	1st
Garoua bridge	1 898	1st
Bridge over the Mungo	669	1st
Various road studies	293	1st
Bolifamba-Kumba road	3 143	2nd
Bamenda-Bafoussam road	290	2nd
Bamenda-Bafoussam road	12 210	3rd
Limbe-Kumba road	2 800	3rd
Various roads	900	3rd
Dibombari bridge	1 500	4th
Dibombari bridge	4 500 5800	4th 5th
Dibombari bridge Yaoundé-Ayos road study	30 000	5th
	74 306	
Railways	1,1000	
Yaoundé-Bélabo	17 165	1st
Mbanga-Kumba	1130	2nd
Belabo-Ngaoundéré	20 000	2nd 2nd
Studies	37	2nd
Regifercam equipment	1 400	2nd
Yaoundé-Maloumé	12 050	3rd
Douala-Edea	10 000	4th
Study	160	4th
Eséka-Maloumé	12 200	5th
Edea-Eséka	10 000	5th (EIB)
	84 142	
	167 597	4



The EDF has contributed significantly to the rehabilitation of the Transcameroon railway for which a new station has been built in Douala (above)

the 4th and 5th EDFs. The project is finished and the CNCE is now active in making exports more dynamic and varied and outlets more diversified. It also helps young industries to advertise abroad.

Developing SMEs

SME promotion gets 10% of the 6th EDF indicative programme.

NGOs

In 1976-86, the EEC cofinanced 88 economic, social and cultural development projects with Non-Governmental Organisations. This approach, which is flexible and in a proper framework, is absolutely right for Cameroon. The EEC share of the combined financing of these projects is ECU 3 363 260.

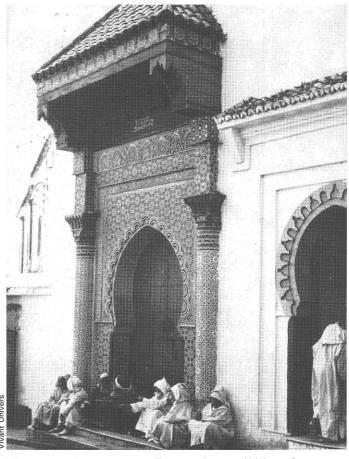
Implementation of the 6th EDF indicative programme was scheduled for 1987 with the signing of the financing agreement for the Benoué Valley Integrated Rural Development Scheme. The ECU 25 m involved here should be a boost to the schemes already being run in this area of concentration. The whole of the 6th EDF indicative programme (ECU 96 m) should be committed by 1989. However, financial and technical assistance is only one aspect of EEC-Cameroon cooperation. Political, commercial and cultural considerations are important, too, and the active role the Community plays on these various fronts on the international scene is particularly wel-A. TRAPANI come. o



Europe and the southern Mediterranean

by Y. RENIER (*)

Between 1975 and 1977, the Community concluded cooperation agreements with countries south of the Mediterranean — the Maghreb (Algeria, Morocco and Tunisia) and Mashraq nations (Egypt, Jordan, Lebanon and Syria) and Israel. They are part of the global Mediterranean policy with a clear, coherent field of application for preferential relations with the Mediterranean countries and their geographical limits. Before that, the Community had had conventional relations with most of the countries in question, but initially no overall design. What the Community now said was, briefly, that it was ready to conclude agreements — essentially on trade and cooperation — with all the countries on the Mediterranean and Jordan as well.



The protocols open up to Europe the possibility of cooperation with the world of Islam. Above, a mosque in Tangiers, Morocco, dating from 1398

Now, 10 years on, it is perhaps a good idea to take stock of the way the two parts of these agreements have been put into practice. This is a particularly interesting exercise in that the arrival of Spain and Portugal, only a few years after Greece joined, is not without creating problems for future relations with the Mediterranean countries. So we shall take past results and see what the future looks like after the negotiation of the commercial and financial protocols now being completed with the countries of the Mediterranean.

Implementation of the cooperative agreements from the beginning (1)

Trade

The cooperation agreements provided for free access to the Communi-

(*) Principal administrator D.G.I.

(1) Note that the agreements with the three countries of the Maghreb also made social security provisions for migrant workers originating in these countries which have not been applied so far.

ty markets for all industrial products originating in its partners — i.e. the suppression of all customs duties and quantitative restrictions plus tariff concessions for the bulk of their agricultural exports. No reciprocal concessions were called for from any country other than Israel.

The development of exports of manufactures, and of the partners' industrial sectors, therefore, was one of the main aims of the agreements. Although there has been some progress, of different degrees in different countries, it is obviously not what was generally expected. Of course the economic crisis which hit the Community and everyone else did nothing to help expand its partners' exports to its markets. And the crisis in the textile industry in the Community forced it to get some of these countries (Morocco, Tunisia and Egypt) to accept certain "arrangements" resulting in restricted exports in a sector on which they had placed great hopes. Lastly, generally speaking, the elimination of customs barriers is not enough to boost exports

on its own. It has to be accompanied by energetic measures in the country concerned to develop new exports. And this means a sustained effort — which will not have immediate results.

It would have been unreasonable to expect the Mediterranean partners' traditional agricultural exports to expand, given that the Community was self-sufficient — or all but — in most of the products concerned... which meant it was unable to do anything about the clause all the agreements had on the possible improvement of the tariff concessions. Nevertheless, overall, the southern Mediterranean countries have managed to maintain their agricultural exports to the Community over the years.

Overall, in 1987, the trade balance of the various countries vis-à-vis the Community was still showing a deficit, although Algeria, which is in a special position because of its hydrocarbon resources, is an exception to this. But a look at trends in this trade bal-

ance since 1975 shows an improvement in the extent to which exports cover imports - in spite of an increase in the imports needed to devel-

That the free trade zone between the Community and Israel will be completed in the industrial sector on 1 January 1989.

Cooperation

The cooperation part of the southern Mediterranean agreements was something the previous agreements had not had. By adding this to the trade provisions, the aim was to establish what was called global cooperation combining different means of action that would contribute to the economic and social development of the countries. In addition to financial cooperation, the new agreements provided for cooperation schemes in a whole series of areas — industry, for example, agriculture, research, the environment, energy, fisheries, marketing and so on.

The arrangements for the Community financial contribution were laid down in protocols annexed to the cooperation agreements. It was to be provided in the following forms: special loans (over 40 years at 1% with a 10year grace period), EIB loans from own resources at market rates, with or without interest rebates, and grants.

The protocols, concluded for the period ending on 31 October 1981, were renewed until 31 October 1986. The Community's forms of intervention stayed the same, but the amount provided for the new protocols was ECU 1015 million - an increase intended to take account of inflation over the previous few years.

By the end of 1987, about 94% of the funds earmarked for the second financial protocols had been committed, any delays preventing total commitment being due to administrative problems in some countries.

A look at the results of financial cooperation between implementation of the first protocols and the present time yields some interesting facts first of all, from the breakdown of Community financial intervention by sector, as Table 2 shows.

So infrastructure predominates in Community financing here, and very

			T	able 1					
Country			ncial protoci ion ECU)	ols	Second financial protocols (million ECU)				
	Total	EIB loans (1)	Special loans (2)	Grants (2)	Total	EIB loans (3)	Special loans (2)	Grants (2)	
Algeria	114	70	19	25	151	107	16	28	
Morocco	130	56	58	16	199	90	42	67	
Tunisia	95	41	39	15	139	78	24	37	
Egypt	170	93	14	63	276	150	50	76	
Jordan	40	18	4	18	63	37	7	19	
Lebanon	30	20	2	8	50	34	5	11	
Syria	60	34	7	19	97	64	11	22	
Israel	30	30		_	40	40	_	_	
TOTAL	669	362	143	164	1 015	600	155	260	

(1) Possibility of 2% interest rebates.

(2) Financing from the Community budget.

(3) Possibility of 2-3% interest rebates.

Table 2: Breakdown of Community intervention under the 1st & 2nd financial protocols, to end 1987, by sector (special loans, EIB loans and grants)

	million ECU	%
Agriculture Industry Infrastructure Education, training Health, housing & the environment	265 372 820 130	17 20 52 8
	1 592	100

varied infrastructure too - ports, water supply networks, roads, railways, dams and power stations - while education and training, sectors that are particularly decisive for development, received relatively modest amounts of funding. When the agreements were being negotiated, a lot of hope was placed on schemes involving such things as cooperation in industry. research and the environment, but they occupy only a small place in Community interventions. Aid to industry, in particular, is primarily a contribution to financing SMI investments - which is not really industrial cooperation.

Special mention should be made here of Israel. Genuine cooperation schemes in industry, agriculture and

research have been run with this country over the past few years because of the country's considerable scientific and technological potential. However, these schemes, financed with limited funds direct from the Community budget, are outside the financial protocol — which only provides for EIB loans on market terms.

Cooperation agreements in the Twelve

The prospect of Spain and Portugal joining the Community was cause for concern to third Mediterranean countries from the word go. The Commission wrote a number of memos to the Council, as it too was aware of the problems of competition the products from the new Member States on the Community market were likely to pose for maintenance of these countries' exports, particularly in the agriculture sector. Work based on these memos first led to a statement on the Mediterranean policy of the enlarged Community, which the Council adopted on 30 June 1985, at the same time as it put the finishing touches to the negotiations on the accession of Spain and Portugal. In this statement, the Council confirmed the importance of preferential relations between the Community and the countries of the Mediterranean and said it was ready to improve them further after enlargement. More practically, it fixed targets for future implementation of the two parts of the agreements concluded with the Mediterranean countries. In trade, the Council agreed that the Community would take the appropriate steps to make a suitable contribution to their economic and social development, in particular by pursuing financial and technical cooperation.

Commercial protocols concluded

The Council declaration of 30 March 1985 was the basis for proposals to the Commission on defining the measures needed to maintain the traditional exports of the Mediterranean nations. This led to the Council inviting the Commission (November 1985) to negotiate protocols with these countries, laying down these measures which would be added to the existing agreements. The measures in question concerned all the Mediterranean countries which had preferential agreements with the Community - so not just those south of the Sea (the Maghreb, the Mashraq and Israel), but Turkey, Malta, Cyprus and Yugoslavia, too, for enlargement posed problems of varying degrees to all these countries.

Industrial products

The southern Mediterranean already had free access to the Community markets for their industrial products under the existing agreements. So they had the same treatment as the Member States in this respect — except that there were restrictions for textiles, as part of special arrangements outside the agreements, with Morocco, Tunisia and Egypt. So when deciding on the industrial trade measures to be included in the protocols, the Council confined itself to saying it was the Community's intention to do away with these restrictions, which were an exception to the agreements, as soon as possible. Provisional maintenance of these limitations made it possible to raise the restrictions which the Community applied to Egypt as part of the Multifibre Agreement.

Agricultural products

Here, the Community usually restricted itself to granting ordinary reductions on common customs tariff duties, in the light of the sensitivity of the sectors concerned, in the preferential agreements concluded with its Me-



View of Cairo. Egypt is one of the most highly populated countries in the region playing a key role in its political and intellectual life

diterranean partners. Unlike the industrial export system, the partners in this case were to find their treatment declining in relation to the new Member States as the other Member States phased out their customs duties for them in accordance with the provisions agreed on in the accession negotiations. So there was a problem when it came to maintaining the traditional agricultural exports of the partner countries in the Mediterranean.

The measures the Community has proposed to cope with this are essentially to do with the tariff treatment to be applied to these agricultural exports in future. They are based on the principle that they should ultimately be subject to the same customs arrangements as those that will apply to corresponding exports from the two new Member States. Practically speaking, this means that customs duties, which have already been lowered pursuant to the Mediterranean agreements, will have to be phased out, alongside equivalent measures in respect of Spain and Portugal. This solution means eliminating duties paid by the partners - in most cases on 31 December 1995, although the date for a certain number of products is 31 December 1992, since the timetable for elimination for the two new Member States has been taken strictly into acThe aim of maintaining traditional exports is to be achieved as follows:

— All agricultural products for which tariff reductions have already been granted in the agreements will see the remaining duties phased out. Exceptions to this are the one or two products for which no real pattern of trade exists. A certain number of goods that are not covered by the agreements have been added to the agreement lists where the countries concerned have managed to develop their exports of them to the Community over the past few years.

 Elimination for a fairly large number of products that are sensitive as far as the Community is concerned will be achieved via quotas of an annual level equal to the average exports of the partners concerned to the Community over the period 1980-84. When the quota fixed for a given country has been reached, its exports for the rest of the year will be subject to tariff reductions laid down by the agreement. For other products, where there is less of a sensitivity problem, the plan is to have reference quantities, also established in the light of exports between 1980 and 1984. If a reference quantity is exceeded for a given country, it can be switched into a tariff quota.

The Community has not just brought in tariff measures. It has included special provisions for some products in the light of the particular features of the Community's agricultural regulations. These provisions, roughly, are as follows:

- Wine: Phasing out of the standard amount added, for imported bottled wines, to the reference price applicable to imports. Application of a particular price at the frontier for wines imported in bulk.
- Olive oil: Application of a special import levy on olive oil imported from Tunisia, within the limits of the quantities traditionally exported by this country.
- Oranges, small citrus fruits, lemons, tomatoes and table grapes: The Community can, as from 1990, change the entry price to be taken into consideration for application of the reference price system, if this is necessary to maintain traditional exports.

Lastly, the protocols provide for the creation of a new body under the agreement — the Economic and Commercial Cooperation Committee, a purely technical body with particular responsibility for facilitating the exchange of information on trade and production. One of the aims here is to make a better job of forecasting trends in the Mediterranean partners' agricultural exports so as to ensure they can be maintained in accordance with the protocols and without upsetting the Community market.

These are the measures covered by the negotiations between the Community and its southern Mediterranean partners with a view to establishing commercial protocols laying down the changes that need to be made to the cooperation agreements following enlargement. After certain adjustments had been made to the initial negotiating directives (October 1986), following specific requests from the counconcerned, agreement reached with Algeria, Tunisia, Egypt, Jordan, Lebanon and Israel. The respective protocols have already taken or should very soon take effect and the negotiations with Morocco and Syria should be completed shortly.

The particular importance of these protocols to some countries — i.e. Tunisia, Morocco and Israel — should be emphasised. The Community is an essential outlet for their agricultural exports and, on the Community market, they are perhaps the most under threat

from competition from the two new Member States, particularly Spain, in view of the nature of their traditional exports (fresh and preserved fruit, especially citrus fruit and tomatoes, wine, olive oil, cut flowers and so on).

The third financial protocols

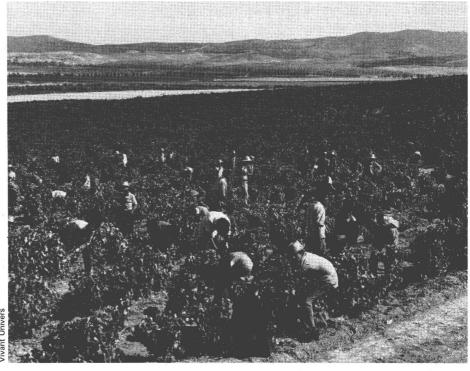
Renewal of the second financial protocols concluded with the countries south of the Mediterranean for the period ending 31 October 1986 was the opportunity for the Community to put into practice the Council declaration of 30 March 1985 in which it said it was willing to make an effective contribution to the development of these countries and, in particular, to pursue financial and technical cooperation.

At the same time as the Council invited the Commission to start negotiating the commercial protocols in December 1985, it set down guidelines to suggest to the partners when the financial protocols were negotiated. They were aimed at improving the efficiency of Community intervention by putting priority on certain areas of cooperation and they won the agreement of the Mediterranean partners. Leaving cooperation with Israel, in view of its particular nature, apart, the priorities laid down in the various fi-

nancial protocols are to develop agricultural production in the Mediterranean countries and strengthen the economic ties between the Community and these countries via the development of certain kinds of cooperation — regional and multilateral.

The protocol says that the development of agricultural production should concentrate particularly on products that are in short supply on the domestic market, thereby reducing the food dependence that costs so much in imports. Diversification of agricultural products and, therefore, exports are also to be promoted. The interest of this particular target should be stressed here, the partners being unable to develop their traditional exports to the Community.

The idea of putting priority on strengthening the economic ties between the Community and each of its partners via certain forms of cooperation was inspired by a desire to help their development, effectively, without the need for the huge amounts of money that are required for, say, the infrastructure projects that have so far been to the fore in Community financing. The protocols quote schemes in industry, technology, research, training and trade as things to be favoured. This, in a way, is a reminder of the aims already fixed by the cooperation



Competition: above, a vinegard in Tunisia. Trade in fruits, olive oil and vegetables has to be regulated, as well as that in manufactured products

Table 3: Third financial protocols		Tab	le	3	•	Th	ird	finar	icial	proto	cols
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Country	G	Frants	EIB loans (1)	Total protocols
	million ECU	inc. risk capital	million ECU	million ECU
Tunisia	93	6	131	224
Egypt	200	11	249	449
Lebanon	20	1	53	73
Israel		panine	63	63 (2)
Algeria	. 56	4	183	239
Morocco	173	11	151	324
Jordan	37	2	63	100
(Remainder)	36	2	110	146
	615		1 003	1 618

(1) Possible 2% interest rebates.

(2) The Commission will continue to have limited means from the Community budget outside the protocol, ...

agreements, without, as already mentioned, much practical application. The protocols are particularly clear about industrial cooperation, as they lay down the methods to be used—encouraging direct contact and joint schemes between EEC and Mediterranean operators, promoting private investments and injections of capital and offering support for small and medium-sized businesses.

Regional and multilateral cooperation, also a priority, is a response to the desire to promote schemes involving several countries at once — provided they make for more effective solutions to the particular problems they have in common.

It goes without saying that implementation of the financial protocols should reflect the particular aspects of the Community's relations with each of its partners. With Morocco, for example, fisheries cooperation should also be taken into consideration because a Community fishing agreement, to take over from the existing ones with Spain and Portugal, is now being negotiated.

The total amount provided by the Community for the third financial protocols is ECU 1618 million. As with previous protocols, this amount is for a period of five years, from 31 October 1986 to 31 October 1991. The increase over previous protocols is 59%. There is no improvement overall, given the inflation of the past few years, but adjustments have been made as regards the way the Commu-

nity contribution is divided between the recipients to take account of trends in their economic situation (especially debts and available resources).

Two innovations in the financial cooperation arrangements are worthy of note — the improvements the Community budget has made for the financial means, as there are no more loans on special terms, just grants, and the fact that part of these means are used in the form of risk capital formation contributions.

This latter contribution, the amount of which is specified in each of the protocols, is intended to facilitate cooperation in industry, which, as we know, is one of the priorities. The protocols say that this instrument should be used, as a matter of priority, to provide own funds for the partner's enterprises, particularly those involving physical or moral persons from Community countries. It can also be used to contribute to projects by these firms. In previous financial protocols, the possibility of using an instrument of this kind was also mentioned, but less systematically and without any specification of the financial limits. Now, in the third financial protocols, risk capital is seen as a favoured way of encouraging cooperation between the operators themselves, particularly as part of joint schemes and ven-

The new financial protocols should take effect very soon. However, by November 1987, neither the negotiations with Morocco nor the commercial protocol had been completed and the talks with Syria had not even been started, as the Council had not fixed the amount of the Community contribution.

* * *

The new Community of the Twelve has clearly expressed its will to maintain and improve its relations with the Mediterranean countries. There is no doubt that, by becoming more Mediterranean itself, it has become even more aware of the importance of these relations, in spite of the problems they could well pose.

Experience with implementing cooperation agreements and the new situation resulting from enlargement of the Community southwards further emphasise the link and the complementarity which have to exist between the two parts of the agreements. The limits facing traditional exports in the Mediterranean protocols, primarily in the agricultural sector, mean that progress has to be made with diversifying trade with the Community and cooperation is one of the ways of contributing to this. Obviously, the role of this cooperation cannot be confined to trade, but it must be able to make as big a contribution as possible to achieving the various objectives that the Community's partners have fixed for their economic development. So what we should do is place special emphasis on improving economic relations between the EEC and the Mediterranean countries — which is what the new financial protocols with the southern Mediterranean are all about. Improvements of this sort, which should be reflected in cooperation schemes in a whole series of fields, cannot but be of benefit to the latter. However, total achievement of this objective means finding money on the capital markets to add to that available under the protocols — which is perforce restricted by the Community's budgetary constraints. Full cooperation also means getting the interest of the operators who have the relevant technology and management techniques. Ultimately, the success of the agreements in both trade and cooperation depends on how far proper complementarity can be achieved between the interests of the Community and those of its Mediterranean part-Y.R. ners. o

HARAMBEE: a game designed to get producers and users of statistics working together

by Jean-Luc DUBOIS (*), Jane CORBETT (*) and Klaus RODEN (*)

HARAMBEE is a simulation game, created with the assistance of the Food Study Group (United Kingdom), the Centre for Advanced Training in Applied Statistics — "Fortbildungszentrum" in Munich (FRG) and the INSEE (France), at the instigation of the Commission of the European Communities and more particularly of its Statistical Office, EUROSTAT. It focuses on the food strategies of African countries south of the Sahara. To some extent, therefore, it

attempts to reproduce the basic characteristics of the countries concerned.

As a training aid for seminars intended to forge closer links between producers and users of statistics, the game proposed a number of roles designed to represent these two categories. So the name of the game is hardly surprising: it is taken from Swahili and means "working together".

HARAMBEE is a game for five players with precisely designed roles who try to improve the economic situation of a make-believe country, which is also named Harambee. Four of these players are users of statistics, namely the Minister of Finance, the Minister of Agriculture, the Minister of Health and the Director of the National Marketing Boards, while the fifth participant is a producer of statistics, namely the Director of Statistics.

There are four basic objectives that can be respectively assigned, broadly speaking, to the four users' respective roles: self-sufficiency with regard to food, economic growth, satisfaction of basic needs and fair distribution of food supplies.

The players trying to attain these objectives must take national decisions with regard to Harambee's balance of payments, improvement of agricultural yields, balancing the nutrition of the national population and achieving the right geographical balance in the distribution of available food supplies.

To attain this specific objective, each player must put forward food policy recommendations based on the political decision-making variables assigned to him. For example, the Minister of Agriculture will propose the producer prices of agricultural products, the quantities of fertiliser to be imported and the prices at which they are to be sold to agricultural producers. Likewise, the Minister of Finance will propose the quantities of fertilisers to be imported and the prices at which they are to be sold, the quantities of maize to be im-

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ported or exported and the level of the minimum wage.

Because certain decision-making variables affect all the players, the different recommendations may conflict with each other. These conflicts are resolved by an Inter-ministerial Food Strategy Committee, composed of all the players, both users and producers of statistics, which works out an overall strategy in the light of the different recommendations. The Committee then takes the corresponding decisions and fixes the levels of the decisionmaking variables. To explain its decisions, it refers to the statistical data with which it is provided by the Director of Statistics. If these data are inadequate, it calls on the Director to supply further information.

The Director of Statistics has an operating budget (to finance the collection of administrative information, surveys, censuses, etc.) to finance the statistical work that will enable him to meet the requests for data received from the Food Strategy Committee. To produce the required information, he uses a micro-computer to simulate the economic position of Harambee resulting from the Committee's decisions.

HARAMBEE concentrates on the elements of the economy that are connected with the implementation of food strategieis.

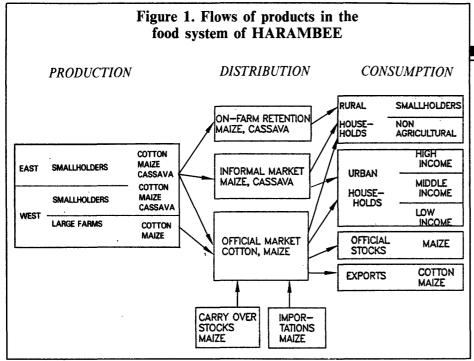
The game nevertheless provides the players with basic data on Harambee: the country has about 14 million inhabitants, mainly rural; there are two regions, a rich one in the west and a poor one in the east; there is a single urban centre, the capital: rainfall is between 700 mm in the east and 1 200 mm in the west.

The economic characteristics of Harambee are precisely described. The country produces maize (part of which is exported and part of which is kept for domestic consumption) manioc (solely for domestic consumption) and cotton (for export). The game provides for several types of operator in the three activities of production, distribution and consumption:

- at the production stage there are big landowners and small farmers, the former being found only in the western region;
- there are two markets via which products are distributed, a free market and an official market. Private traders operate in the free market and the National Marketing Boards (Maize Board and Cotton Board) operate in the official market;
- there are five categories of consumers: the two categories in the rural environment are small farmers and workers not employed in the agricultural sector; in the urban environment there are high income households, medium income households and low income households.

The various operations are subject to a number of constraints. Some are institutional: e.g. cotton is exported only by the Cotton Board, manioc is distributed only in the free market; others are the product of specific types of behaviour: own-account consumption is confined to small-scale farmers; households tend to substitute maize for the consumption of manioc when their income increases.

Harambee's national currency is the HCU (Harambee currency unit). It has an international exchange rate. The HCU is used in the food system, to



measure the value of product flows, and to establish the basic budget and external trade balances. All these characteristics are integrated in some 30 basic equations in a mathematical model used for the simulation game (see Figure 1).

HARAMBEE is an EDP game played entirely on a micro-computer. This permits the integration of the values of the decision-making variables in the model of the food system and enables the players to carry out the corresponding economic simulations and produce the results required from the Director of Statistics. The micro-computer used for the purpose is a compatible IBM PC XT with a 640 K memory, a hard disk and a mathematical co-processor. The mathematical model of the food system and the data base generated by the simulations are stored on the hard disk.

The game is divided into two phases representing two periods of the year, namely the pre-harvest period which determined yields and the post-harvest period which determines the quantities of food distributed, the levels of consumption and the major monetary balances. At each session, specific values for the decision-making variables are inputted via the screen (see Figure 2).

The first session of the simulation game takes approximately half an hour, and the second takes about an hour. The required results are presented as tables or graphics.

Two reference documents are used in the course of the game:

— the participant's manual containing an introduction to Harambee and its food system, the rules of the game and the instructions for using the computer. It also contains a workbook for players to record their requests for statistical

(HCU/kg) .41

data, the values of the decision-making variables and the results of each simulation:

— the Harambee Statistical Bulletin containing statistical data on the country for the period 1976-1986 which precedes the game. These data are broken by statistical domain (agricultural production, balance of payments, nutrition results, etc.) in the form of tables and graphics.

A practical training aid

The Harambee simulation game is designed to foster the dialogue between producers and users of statistics. Hence the use of the game as a training aid at seminars at which the real economic policy-makers, the users of statistical information, get together with professional statisticians who actually produce the statistics. Playing these five roles gives the participants a better understanding of both sides of the "dialogue" between producers and users of statistics.

The advantage of a simulation game of this type is that it removes the relationship between producers and users of statistics from any specific national context. The emphasis placed on this relationship in the course of the game facilitates comparison of the structure of the real country and that of Harambee.

At least a week is needed to carry out simulations of several successive years and assess the quality of the players' decisions taken by studying the resultant changes in the economic situation. A seminar with some 20 participants can be split into fivemember teams and the results of the teams' food strategies can be compared.

As there are both English and French versions, Harambee seminars can be organised in nearly every sub-Saharan country. Two such seminars, each lasting a fortnight, have already been held (at Mogorogoro, in Tanzania, from 21 July to 2 August 1987 and at Bamako, in Mali, from 7 to 19 December 1987). Other seminars are scheduled to be held in several European and African countries in 1988.

More detailed information about the HARAMBEE simulation game is obtainable from EUROSTAT, Analyses and Development Service, Bâtiment Jean Monnet, L-2920 Luxembourg. o

Figure 2

POLVENTI

YEAR: 1988

HARAMBEE simulation game

Now you must input the decision variables for simulation of the first phase of 1988:

(2)	Official producer price of coton	(HCU/kg) 2.55
(3)	Official selling price of fertilisers	(HCU/kg) .32
(4)	Quantities of fertilisers imported	('000 tns) 120
(5)	Quant. of fert. allocated to big producers in west	('000 tns) 80
(6)	Quant. of fert. alloc. to sm. f. in west	('000 tns) 30
(7)	Quant. of fert. alloc. to sm. f. in east	('000 tns) 10
(8)	Quantity of maize imported	('000 tns) 115

You have inputted all your data and now have 2 options:

- Press #F10½ for execution of the 1st phase of the simulation then wait till the symbol C:/SOR> appears and type JEU1 #CR½
- Press #F9½ to repeat your data input

(1) Official producer price for maize

Let's get moving together!

HEALTH FOR ALL?

What, one might ask, has the weighing of this baby girl somewhere on the fringes of Dakar got to do with a little known town in the highlands of Kazakstan? Answer: more than meets the eye.

The town in question is Alma-Ata, the venue 10 years ago this September of a conference on primary health care which was to radically alter thinking on approaches to health care in the developing world. Had it not been for Alma-Ata, this health worker might never have existed, or might never have left the confines of a hospital or health centre, and nobody, perhaps, would have bothered to check that the girl was developing normally.

But what exactly did the conference mean by Primary Health Care? What it certainly did not mean was summary health care — a sort of widespread first aid service. It defined PHC as "essential health care based on practical methods and appropriate technology, scientifically sound and socially acceptable, made accessible to all individuals and families in the community through their full participation and at a cost that the community, and the country, can afford at each stage of its development, in a spirit of responsibility and self-determination". It meant, in practical terms, providing the services to ensure fundamental health - immunisation against the many communicable diseases; prevention, detection and treatment of the major endemic diseases such as malaria or goitre, or of respiratory infections; health education services, including advice on nutrition and sanitation, as well as on the modes of transmission of serious illnesses; mother and child care and family planning services.

Such services were not, of course, unknown before 1978, but, in general, health care in developing countries followed the same model as that in developed countries — hospital-based, urban-based, with little in the way of outreach services or of widespread health education. Since 1978 primary health care has been widely adopted by developing countries — which, after all, face infinitely greater primary health problems than developed countries — as their favoured health policy.

Or, at least that is the theory. True, great strides have been made forward in some fields (such as immunisation services, safe water supplies and mother and child care), but in others (see interview with WHO's Dr Eleuther Tarimo) a change in strategy has proved easier to pronounce than to implement. The budget line — the bottom line — has frequently continued to be monopolised by the big teaching or specialist hospitals, with the international donor community not always as ready as it might have been to finance PHC schemes rather than, for example, more "tangible" clinics or "visible" anti-TB programmes.

Our Dossier in this issue is a look both at health and at "modern" (as opposed to traditional) health care in the ACP States as a whole but principally, it must be said, in Africa, where many of the problems facing health services are at their most acute. It looks at malnutrition, and at progress in the prevention and treatment of some of the major tropical diseases (leprosy, malaria, bilharzia...) as well as at the prevalence and care available in developing countries for illnesses existing in tropical and temperate zones alike (TB, the various childhood diseases and sexually transmitted diseases — including, of course, AIDS, perhaps the greatest challenge in health today).

With health programmes, governments and international funding agencies are fond of setting targets. UNICEF has set 1990 as its target date for the universal immunisation of children against six potentially fatal or crippling diseases. Other targets have been set in the past for the eradication of smallpox, or malaria, for example, some met some not. But in 1978 the Alma-Ata Conference set the most ambitious target of all — Health for All by the Year 2000 — a target which exceeded the aspirations of all others, because health has as much to do with the absence of poverty as it has with the absence of disease.

If, by the year 2000, this girl — and all her contemporaries — is getting enough of the right sorts of foods, and has access to clean water; if she grows up conscious of the principles of hygiene and of disease prevention; if she herself has been inoculated against the major child-killing diseases and lives, if not in comfort,then at least in the absence of deprivation, then that will be development indeed. \circ

Myfanwy VAN DE VELDE



Primary health care: the right prescription?

An interview with Dr Eleuther Tarimo, Director of WHO's Strengthening of Health Services Division

The last occasion on which The Courier published a comprehensive study of health care in the ACP States was in 1979. Then, early on in the introduction to the feature, there appeared the following, and now seemingly extraordinary, phrase: "A new concept of communitybased health care has become popular, known as primary health care (PHC)". The phrase seems extraordinary because PHC is now so established as the preferred form of health policy in developing countries that it is difficult to imagine that a time ever existed when it was not so.



Dr Tarimo

- Since the late 1970s Primary Health Care has been the form of health policy most favoured by developing countries. What led to the adoption of this approach
- Three developments led, really, to the adoption of the PHC approach and the goal of Health for All by the year 2000. Firstly, there was the realisation by countries and the WHO governing bodies-the Executive Board and the World Health Assembly (WHA)-that strategies previously adopted had so far been unsuccessful and were likely to remain so in future. Studies carried out in the early and mid-1970s revealed that 70-80% of the population in many developing countries did not have access to organised care—and this despite intensive efforts in the 1960s and early '70s by the countries concerned, with support from outside to expand and increase hospitals and health centres, to extend coverage.

Despite this increase, it became apparent that still further expansion of facilities within the bounds of available resources could not progress far enough to adequately meet needs without some major changes in approach. Also, I think, it was becoming increasingly apparent that even with the facilities in place, the problems of staffing them with skilled manpower, willing to spend long periods of time in remote rural areas, would be an even stronger limiting fac-

tor on further expansion, even if it could be afforded.

PHC — born of a desire for greater health equity

Then there was a growing concern with equity in health and health care. In fact, the goal of Health for All by the Year 2000 emerged during the course of the WHA's discussions on the New International Economic Order.

Then, finally, there was more evidence of successful "alternative approaches" and programmes for health services in various countries of both governments and a variety of non-governmental organisations. These approaches were characterised by high community participation, cooperation between sectors, use of technology appropriate to local conditions, emphasis on prevention and above all, willingness by the government to channel support and resources to underserved populations. These features are now the characteristics of the PHC approach.

- ► Is it, do you think, an approach that will still find favour in the year 2000, WHO's target year for "Health for All"?
- The role of a "goal" is in setting the *direction* for aspirations and action. In this sense, there will be progress and

Dr Eleuther Tarimo, Director of the Health Services Division at the World Health Organisation (WHO), has seen fashions in health care come and gothough the content of policy statements, he suggests, has often changed a good deal more radically than the actual organisation of health services. The Courier visited Dr Tarimo at WHO's headquarters in Geneva and asked him about the changing approaches to health care in the developing world and whether he thought progress was being made towards achieving health

- change in the specifics of the health situation between now and 2000, but progress will lead to new problems, and there will certainly be new challenges to health even if we manage to conquer malaria, malnutrition and AIDS. The role of a goal and the particular strategies of Health for All seem likely to be durable, even though the specific actions most relevant to the year 2000 and beyond may differ from those today.
- ▶ What has this fairly radical aboutturn implied in the way of changes in the training of medical personnel and of health care infrastructure?
- The PHC approach has a lot of implications in the training of medical personnel and of health care infrastructure. The training of personnel should provide skills and attitudes that promote community participation and the other principles of PHC. It calls, for example, for appropriate revision of training curricula and available learning materials. It also calls for decisions on the levels and types of health workers, based on the need to ensure maximum benefit from their deployment. For example, one should avoid having tasks which can be carried out well by appropriately trained auxiliaries performed by workers who are costly to train and maintain. But changing medical and nursing training institutions, in particular-to consider

DOSSIER

health adequately in their curricula, rather than just medical care-is not easy. WHO has made great efforts in promoting and developing innovative medical training programmes, and has worked closely with medical and nursing organisations such as the Congress of African Medical Associations and the International Congress of Nursing in reorienting staff in individual countries. But the organisation of health infrastructure needs to be changed to ensure more equity and appropriateness in the distribution of health resources between different geographical areas or population groups, as well as types and levels of care.

- ▶ What about the use of drugs? Has PHC, for example, stimulated local pharmaceutical industries or drawn traditional medicine closer into the "official" health care system?
- Some progress has been made. At the policy level a number of countries have reviewed and revised policies and adopted a list of essential drugs (*). To improve implementation a number of training programmes were developed, also. A few countries have brought traditional medicine closer to the "Western" health care system. But a lot remains to be done. Availability of drugs is still a serious problem in many countries due to shortage of funds, particularly foreign currency, and also through deficiency in management. Multi-country procurement systems such as the Eastern Caribbean Drug Service have resulted in dramatic savings for the countries con-
- ► Ten years on from the Alma Ata Conference, what can be said about the system's success or failure?
- The Alma Ata Conference took many people by surprise. Really, the achievements have been beyond the expectations of those involved in organising the meeting. Few international conferences have had a similar impact, I would imagine.

Undoubtedly one of the most important achievements has been the evolution of a strong body of opinion aware of the shortcomings of existing health services and of the need for health policies and programmes that are more peoplecentred.

Most countries have expressed a commitment to the primary health care approach by signing, or by making, political declarations, and publishing policy statements. Some have set national goals and described programmes for the organisation and management of their health systems based on primary health care. And some—about three-quarters of them, I think—now have national plans indicating how existing health infrastructures could be extended and reoriented to achieve the goals of primary health care.

But improvements in health services and health status are the real signs of progress, and there has, undoubtedly, been a considerable increase since 1978 in health facilities and health manpower of various types. Certain services such as immunisation, safe water supplies, and maternal and child health are also, generally, better and there is evidence of some improvement in health. The infant mortality rate, for example, has fallen in most countries, although levels still remain high. Rates of 200 or more infant deaths per 1000 live births still occur in some countries.

But success in improving health has been limited, partly because of the difficulties in developing primary health care. One important problem has been the unrealistic expectations of international organisations and donor agencies. Those supporting primary health care in developing countries have been eager to

show tangible achievements to their executive boards as soon as possible, and projects which they support are expected to show improvements in health in a short term, say one to two years. This has led to a constant search for short cuts in implementing programmes, which has often hindered rather than helped the development of primary health care.

Economic support inadequate

Then there is the fact that economic support for primary health care has been inadequate. The percentage of GNP devoted to health is still low in many developing countries—less than 2% in half the countries of Africa (1). Ministries of health need to review the distribution of their health budget and, in particular, the allocations to central and peripheral levels, to urban and rural areas, and to specific underserved groups.

This is more easily said than done, though. Hospitals are under great pressure, and a shift of resources in the short term has often proved to be practically impossible. Few countries have been able to find additional funds. Indeed, shortages of drugs and essential equipment are quite typical of health services in many developing countries.

"How many children did we fail to vaccinate last year?"

— But even if additional funds were found or better distribution achieved, there would still be little hope of reducing inequities in health because a reorientation towards community care and

(1) Ed. WHO's target is 5%. Most of Western Europe spends some 6% of GNP on health care.



Health care centres should be consumer-oriented. "Encouraging a mother to walk eight miles for antenatal care and to repeat the same distance to bring a child for immunisation the following day is poor health care"

^(*) WHO first issued a model list of Essential Drugs in 1977. It included 250 medicines and vaccines considered essential in good medical practice and which could take care of the majority (80-90%) of treatable health problems. Reducing the numbers of drugs used (in some countries as may as 25 000 branded medicines are on the market) has helped developing countries to reduce costs and to simplify administration and—after some initial opposition—both doctors and patients have been persuaded that the use of fewer preparations can benefit the community as a whole.

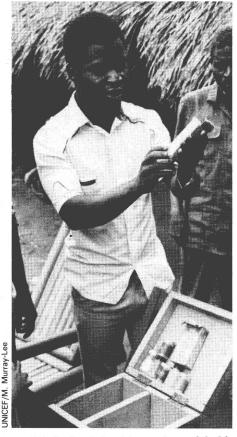
prevention has taken place to only a limited degree. Health personnel may be better distributed geographically, but still be insensitive to local needs. Also, health programmes remain facility-oriented in that hospitals, health centres and dispensaries are concerned with providing health care to those that come to them. Who cares about patients who, for financial, distance, cultural or other barriers, cannot make use of health services? Who cares about the time it takes for patients to return to work after episodes of sickness? How many children did we fail to vaccinate last year? Most ministries of health in developing countries have considered it better to attend properly to those who manage to come to health facilities than to go out in search of disease in the community.

The piecemeal approach to the provision of health programmes is another problem. Control of tuberculosis, leprosy and malaria and the Expanded Programme of Immunisation are examples of programmes which are tangible in terms of attracting funds, organising services, and producing results. But, despite claims to the contrary, this separate approach is more convenient to the providers of care than to the consumer. Encouraging a mother to walk eight miles for antenatal care and to repeat the same distance to bring a child for immunisation the following day, rather than having both services on the same day, is poor health care. Not enough attention has been given to the creation of functional units in which health services are integrated and at the same time coordinated with the activities of other sec-

"The issue is not really whether choices must be made but how and who makes them"

▶ In some quarters a so-called "selective" PHC policy is favoured, concentrating scant resources on a few priority actions. What is your view of this option?

It is true that there have been continuing efforts, particularly among some international and bilateral funding agencies, to promote more "selective" approaches to health development. These approaches concentrate on specific programmes such as immunisation, diarrhoeal diseases and nutritional surveillance. But these programmes are selected by outsiders, often bearing little relation to the priorities for health care perceived



A village-level health worker with his medical kit. "Most developing countries have considered it better to attend properly to those who manage to come to health facilities than to go out in search of disease in the community"

by communities or health workers, and ignoring the concept agreed on at Alma Ata of eight essential elements, all of which are so basic that none can be ignored if we are serious about primary health care. The practical difficulty of telling a person with abdominal pain or a mother whose child has pneumonia "your disease has unfortunately not been selected for treatment this year, please try again during the next five-year plan" is an obvious example of problems of the selective approaches. The issue is not really whether choices must be made but how and who makes them. There is never enough money to do all you'd like to do. But you can't ignore the fact that health systems have often been notoriously inefficient and ineffective in addressing their health problems. What is needed is an appropriate "mix" of activities of the various components of PHC, which respond to the priority health problems of communities, and to their distribution and causes within the community. We are so used to making choices, whether it be cars, wives or jobs, that the moment we see a list of eight elements, we consciously or sub-consciously begin to work out criteria for selection. But the eight components of PHC are not frameworks for choice. In operational terms, we may need to give priority to staff orientation programmes with emphasis on particular diseases or to strengthening logistic support with emphasis on making particular items available.

Two examples, cancer and cardiovascular diseases, will make the concept of appropriate "mix" clear. These are important diseases in the developed countries and a lot of resources go into providing sophisticated curative care. These diseases are usually excluded from lists of selective PHC in developing countries, because they cannot provide this type of care. But primary prevention of these diseases through promotion of health lifestyles-physical exercise, and abstaining from smoking-can and should be carried out by all countries. The aim in PHC should be to carry out appropriate action in all the areas rather than selecting one or two areas for unlimited support.

► Finally, with the advent of new and deadly illnesses and the delays in finding cures for old ones, is there not cause for greater rather than lesser pessimism in 1988 than there was a decade ago?

- I believe that it is a challenge rather than a cause for pessimism. The challenge is much greater in developing countries. To continue with the examples of cancer and cardiovascular diseases, these diseases are becoming increasingly important in developing countries at a time when communicable diseases such as malaria and diarrhoea are rampant. The challenge for these countries is how to initiate appropriate strategies for dealing with the new diseases and at the same time intensify the fight against the major killers. This can be done, as I said before, through developing preventive programmes, addressing lifestyles, etc. If the poor countries decided to deal with these problems in the same way as developed countries doputting up sophisticated curative facilities-they would not have resources to deal with other problems and this would justify pessimism. At the same time, PHC principles-community participation, etc.,-remain the key for dealing with emerging problems, including AIDS. o

Interview by M.v.d.V.

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	World health indicat	tors
(Countries are listed in descer	nding order of their 1986 und	der five mortality rates = U5 MR)

		% of population with access to drinking water 1983-1986	% of population with access to health services 1980-1986 —		Percentage full	y immunised	1981/1985-86		ORS per 100 episodes of Diarrhoea	% of births attended by trained health	Materi mortal rate
		Total/urban/ rural	Total/urban/ -	ТВ	One-year-ol	d children Polio	Measles	Pregnant women Tetanus	(litres) 1985	personnel 1984	1980-
	Very high U5MR countries (over 170)		· · · · · · · · · · · · · · · · · · ·							·	
	Median	29/ 61/21	40/ 80/30	27/46	14/20	8/21	19/39	5/12	20	22	4
1 2	Afghanistan Mali	16/ 56/10 12/ 23/ 9	29/ 80/17 15//	48/16 19/15	3/9 /3	3/9	6/12 /5	3/10 1/3	37 8		6
3	Sierra Leone	22/ 61/ 6	/	35/80	15/21	13/21	28/66	10/17	57	25	4
4 5	Malawi Ethiopia	51/ 66/49 6//	80// 46//	86/79 10/12	66/54 6/6	68/55 7/6	65/42 7/9	/47 /6	9 38	59 58	:
6	Guinea	17/ 69/ 2	//	4/46	/10	/8	15/41	5/17		· ;	_
7 8	Somalia Mozambique	36/ 65/21 13/ 50/ 7	27/ 50/15 30//	3/29 46/45	2/18 56/32	2/18 32/32	3/26 32/39	5/7 /59	27 10	28	1
9 10	Burkina Faso Angola	30/ 27/31 28/ 90/12	49/ 51/48 30//	16/67 /59	2/36 /20	2/36 /58	23/68 /44	11/1	8 17	i :	1
11	Niger	34/ 41/33	40/ 99/30	28/27	6/4	6/23	19/49	3/16	2	47	
12	Chad Guinea-Bissau	26//	//	/15	/3	/3	/7	/3	28 19		
13 14	Central African Rep.	33/ 21/37 16///	//	/47 26/59	/11 12/24	/11 12/24	/34 16/30	/16 13/20	23	••	
15	Senegal	42/ 69/27	//	/32	/54	/54	/40	/8	10		
16 17	Mauritania Liberia	/ 80/ 20//	30// 28/ 40/20	57/74 87/50	18/21 39/25	18/21 26/25	45/59 /50	1/ /16	2 5	23 89	
18 19	Rwanda Kampuchea	59/ 55/60 //.	27/ 60/25 55/ 80/50	51/86 /54	17/67 /37	15/72 /35	42/55 /54	5/26 /3	24 91	• •	
20	Yemen	31/ 99/21	30/ 75/24	15/28	25/16	25/16	40/19	/3	20	iż	
21	Yemen, Dem.	53/ 79/39 15/ 40/14	30//	9/12 36/32	5/6 8/16	5/5 7/16	6/6 9/15	3/5	105	10	**
22 23	Bhutan Nepal	15/ 71/11	19//	32/67	8/16 16/38	1/34	2/66	/4 4/13	21 14	3 10	
24 25	Burundi Bangladesh	39/ 94/22 41/ 29/43	45/ 90/30 45//	65/80 1/5	38/60 1/5	6/61 1/4	30/57 (.)/3	25/17 1/5	26 18	12	
26	Benin	18/ 26/15	40//	/44	/19	/19	/22	/82	12	34	1
27 28	Sudan Tanzania, U. Rep. of	25/ 60/10 50/ 88/39	55/ 90/40 76/ 99/72	3/23 78/82	1/14 58/62	1/14 49/62	1/11 76/67	1/6 36/58	87 36	20 74	
29	Bolivia	43/ 77/12	23//	30/15	13/38	15/31	17/65	/1	97		
30 31	Nigeria Haiti	33/ 58/25 32/ 50/25	40/ 75/30 55//	23/20 60/57	24/14 14/19	24/14 3/19	55/16 /21	11/11 /56	2 7	20	1
32	Gabon Uganda	// 16/ 90/ 7	61/ 90/57	/79 118/51	/48 9/21	/48 8/21	/56 22/33	/32 20/5	27 21	••	
,,	High U5MR countries	10/ 70/ /	01/ 70/3/	110/31	7/21	0/21	22133	20/3		· ·	
	(95-170) Median	51/ 73/33	74/ 99/62	55/73	35/54	37/58	26/51	8/22	22	60	
34	Pakistan	47/ 83/38	55/ 99/35	11/68	3/55	3/55	2/40	1/28	28	24	
35	Zaïre Lao People's Dem. Rep.	17/ 35/ 5 21/ 28/20	25//	34/45 4/11	18/30 7/8	18/30 7/8	17/30 7/4	/35 2/8	4 34		
37	Oman	14/ 70/10	91/100/90	49/90	9/84	9/84	6/76	21/70	82	60	
38	Iran (Islamic Rep. of)	76/ 95/55	71/ 95/45	6/75	29/69	47/72	48/73	2/28	11	• •	······································
39 40	Cameroon Togo	26// 35/ 68/26	// 61//	8/83 44/66	5/45 9/41	5/42 9/40	16/44 47/48	/17 57/64	1 21	::	
41 42	India Côte d'Ivoire	54/ 80/47 18/ 30/10	32/ 61/11	12/29 7/16	31/53 42/11	7/45 34/11	/1 38/31	24/40 25/32	5 17	33	
43	Ghana	50/ 72/47	60/ 92/45	67/37	22/14	25/13	23/45	11/8	26	73	1
44 45	Lesotho Zambia	14/ 37/11 47/ 65/33	// 75//	81/91 72/82	56/82 44/46	54/80 77/46	49/73 21/56	0/0 /38	41 42	28	
16 17	Egypt Peru	75/ 88/64 55/ 73/18	//	71/84 63/53	82/87 18/50	84/86 18/50	65/85 24/41	10/8 4/6	21 15	24 44	
48 	Libyan Arab Jamahiriya	96/100/90	//	55/77	55/62	55/62	57/50	6/12		76	
19 50	Morocco Indonesia	30/ 63/ 2 36/ 53/30	73/100/50 75//	/71 55/67	43/53 (.)/48	45/53	/48 (.)/47	/ 10/26	18 22	43	
51	Congo	21/ 42/7	/ ,/	92/91	42/65	(.)/46 42/71	49/86	/11	22 23	43	
52 53	Kenya Zimbabwe	28/ 61/21 52//	71/100/62	/80 64/76	/72 39/63	/72 38/63	/65 56/53	/40 /40	10 4	69	
54	Honduras	69/ 91/55	73/ 85/66	46/67	36/62	37/62	38/55	11/18	120	50	
55 56	Algeria Tunisia	89/100/80 75/100/ 5 0	89/100/80 90/100/80	59/88 65/80	33/68 36/70	30/68 37/70	17/67 65/65	/ 2/11	22 106	60	
57 58	Guatemala	51/ 90/26	34/ 47/25	29/30	42/31	42/32	8/42	1/2	11		

Source: UNICEF.

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		<u> </u>							<u> </u>		
59 60 61 62 63 64	South Africa Nicaragua Turkey Iraq Botswana Viet Nam	56/ 91/10 63/ 63/63 89/100/46 65/ 98/47 41/ 60/32	83/100/60 //. 93/ 97/78 89/100/85 80/100/75	65/95 42/24 76/78 80/67	23/45 64/45 13/91 64/64	52/80 69/45 16/91 71/60	20/51 52/36 33/75 68/62 /37	/ /25 /4 4/43 32/16 /	92 3 39 38 10	78 60 52 99	65 207 300 110
	Middle U5MR countries (26-94) Median	66/ 86/42	78//	58/77	47/66	48/71	42/55	12/44	21	82	90
66 67 68 69	Ecuador Papua New Guinea Brazil Burma	61/ 98/21 16/ 55/10 76/ 86/53 23/ 36/21	18// // 50/100/31	82/93 64/78 62/58 15/32	26/44 31/43 47/62 5/20	19/44 31/37 99/86 /4	31/50 /29 73/63 /3	4/11 / / 6/21	34 20 28 84	27 34 73 97	220 1000 154 135
70 71 72 73 74	El Salvador Dominican Rep. Philippines Mexico Colombia	//42 60/ 85/32 66/ 83/54 75/ 91/40 63/ 84/20	80// 45// 75//	47/50 34/51 61/72 41/16 57/77	42/70 27/93 51/55 41/40 20/61	38/70 42/82 44/55 85/92 22/62	44/24 17/89 /53 33/74 26/51	64 26/87 37/49 / 6/6	35 152 19 18 53	74 98 51	56 80 92 126
76 76 77 78 79	Syrian Arab Rep. Paraguay Mongolia Jordan Lebanon	75/ 98/54 26/ 46/10 // 93/100/80 92/ 95/85	75/ 92/60 60/ 90/38 //. 97/ 98/95 //.	36/82 42/99 53/52 0/2 /4	14/73 28/54 99/81 81/53 /30	14/73 26/97 99/86 87/54 /30	14/70 16/46 /10 40/39 /30	3/19 6/61 / 2/52 /	6 10 20 61 2	37 22 99 75 45	280 469 140
80 81 82 83 84	Thailand Albania China Sri Lanka Venezuela	66/ 50/70 //. / 85/ 36/ 76/26 //65	70// // // 93//	71/83 93/92 /70 58/76 77/92	52/62 94/96 /62 45/77 54/49	31/62 92/94 /68 46/77 75/59	/39 90/96 /63 /47 43/56	27/45 / / 57/44 /	34 59 58	33 87 82	270 44 90 65
85 86 87 88 89	United Arab Emirates Guyana Argentina Malaysia Panama	93/ 95/81 73/100/60 63/ 72/17 69/ 93/53 62/ 97/26	90// 89//. 70/ 80/21 //. 80/ 95/64	18/88 /76 63/89 91/99 77/94	45/72 45/64 46/63 59/68 49/73	45/73 37/67 38/69 61/68 50/71	42/66 /42 73/67 /48 53/83	/ /93 / 20/48 /29	23 14 13 19 18	96 82 83	 104 85 59 90
90 91 92 93 94 95 96	Korea, Dem. Rep. of Korea, Rep. of Uruguay Mauritius Romania Yugoslavia USSR	//60 81/ 95/ 3 95/ 95/95 //.	92/ 97/86 80//. 98/100/97 //.	52/53 42/47 76/92 87/86 / 99/85 /93	52/61 61/76 57/70 82/84 /95 90/89 95/85	51/62 62/80 58/84 82/84 /92 95/90 95/99	31/44 5/88 95/76 /70 /88 95/91	18/13 1/55	21 12 	99 84 99 	41 34 56 52 175 27
	Low U5MR countries (25 and under) Median	//	//	92/88	84/90	90/90	69/78	/	• •	99 .	11
97 98 99 100 101	Chile Trinidad and Tobago Jamaica Kuwait Costa Rica	85/100/18 99/100/96 86// 89// 91/100/82	// // 93// 80/100/63	93/199 / /73 /4 81/92	91/91 52/70 39/74 54/90 83/90	93/85 55/71 37/74 76/90 85/90	63/91 /45 /36 65/5 71/95	/ /60 50/50 30/2 /90	3 18 0 38 67	95 90 89 99 93	55 81 102 18 26
102 103 103 105 106	Portugal Bulgaria Hungary Poland Cuba	//	//	74/82 97/99 99/99 95/95 97/98	75/76 97/99 99/99 95/96 67/91	16/77 98/99 98/99 95/97 82/88	70/66 98/99 99/99 65/95 49/85	/ 98/ / /	••	100 99 	15 22 28 12 31
107 108 109 110 111	Greece Czechoslovakia Israel New Zealand USA	//	//	95/56 95/99 70/ /20	95/54 95/99 84/85 72/72 /37	95/96 95/99 91/87 /83 /24	/77 95/98 69/85 /71 98/82	/ / / /		100 99 99 100	12 8 5 20 9
	Austria Belgium German Dem. Rep. Italy Singapore	// // // 100/100/	//////	90/90 / 95/99 /50 83/72	90/90 95/95 80/94 /12 87/78	90/90 99/95 90/94 /90 88/81	90/25 50/ 95/99 /12 57/73	/ / / /90		100 100	11 10 17 13 11
117 118 119 120 121	Germany, Fed. Rep. of Ireland Spain United Kingdom Australia	//	//	40/30 /80 /. /5	50/30 36/45 /87 44/60 /	80/80 76/90 /87 71/78 /	35/25 /63 /79 52/62 /68	/ / / /		96 98 99	11 7 10 7 11
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Malnutrition and infection: a deadly synergy

by David NABARRO (*)

We all know about the problems of malnutrition in disadvantaged societies: we are abruptly reminded of this reality when we see pictures of starving children affected by famine — particularly in Africa. Malnutrition is not always a direct result of lack of food, however. Studies of malnourished children — and their families — from throughout the world have revealed striking similarities and they are likely to have general application.

We are malnourished if the amounts of energy and nutrients in our bodies aren't right: In the developing world, malnutrition is usually a result of insufficient energy and nutrients in the body for full physical and mental function. Severe malnutrition occurs when body functions are so badly impaired that the individual is at risk of death. We usually assess malnutrition using indices based on measurements of body weight or stature. Commonly

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we compare weights with an expected weight for age; heights with an expected height-for-age and we identify people who are thin — or wasted — by comparing weights with expected weight-for-height. Many other measures are also used but they are all designed to identify those whose body dimensions are less than expected. We can detect early signs of malnutrition through regular weighing and this is particularly helpful in growing children as growth faltering often develops insidiously. However, if it is detected, early severe malnutrition can be prevented. Longer-term malnutrition in childhood leads to short stature and there is no doubt that environmental factors are at least as important as genetic predisposition in determining stature — especially in poorer societies.

Malnutrition: not always just shortage of food

Malnutrition is not always associated with shortage of food in the home, or even inadequate diet. It may be due to illness, causing loss of appetite and reducing the amounts of food that people consume. Or the illness

may influence absorption of foods. Frequently malnutrition and infection come together.

Malnutrition is rarely a result of isolated deficiency of a single nutrient: usually a combination of deficiencies is found occurring together (lack of energy, protein and other nutrients) though isolated deficiencies of some vitamins and minerals may cause special problems. Deficiency of vitamin A may lead to blindness and to susceptibility to infection (especially after measles); deficiency of iron may lead to anaemia (associated with weakness, circulatory disturbance and additional risks for new-born children).

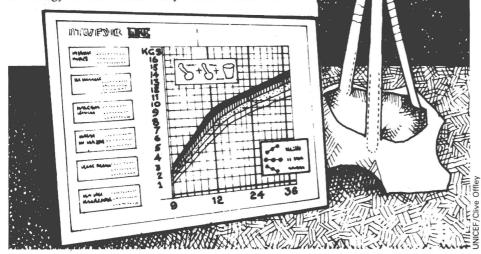
The tip of the iceberg

Much of the malnutrition in the world today is invisible. Adults and children who are obviously malnourished with severe wasting or other disorders related to insufficient energy and nutrients are but the tip of an iceberg. There are many others who may appear outwardly normal but whose function is impaired — sometimes dangerously — as a result of deficiencies, particularly of energy intake.

Malnutrition in childhood may start before children are born — women in poor societies are particularly likely to give birth to children with low birth weights and they, subsequently, will face far greater risks of death or disability than children whose birth weights are close to the expected value.

Children are particularly vulnerable in situations where food shortage or infectious disease is common. They would be expected to display several episodes of growth faltering during the first three years of life, especially during the time when they are transferred from breast-feeding to adult-type diets.

Several factors are important in determining children's growth: these include the number of times they are fed each day, the concentration of energy in the foods they receive and the



Growth charts help to make invisible malnutrition visible

degree to which their feeds are contaminated with bacteria. Children who are weened in warm and humid environments are particularly likely to receive feeds that are contaminated.

The malnourished child: higher risk of infection and death

Children whose growth is faltering are more likely to be severely affected when suffering from common infections. This is because their immune system can be impaired by low-nutritient availability. Evidence suggests that growth faltering is often associated with an increased risk of death; for example, there is widespread evidence that measles is more severe in malnourished children, particularly in Africa.

Malnourished people are most likely to come from families that are socially and economically deprived. Members of these families are also likely to have a high incidence of infectious disease. In these households parents have limited time available for child care and are only able to purchase small quantities of precious high energy-dense foods like fats and oil.

In rural areas malnutrition is frequently a seasonal condition. It is more likely to become apparent in those months of the year when rainfall is heaviest, household members are busy working on the land and the incidence of infectious diseases — particularly those associated with diarrhoea — is highest.

The epidemiology of malnutrition

Who are the malnourished?

In any developing society, malnutrition is most commonly detected in childhood. Most development workers

consider that the malnourished child is the marker of a familiy that is nutritionally at risk. These families at risk tend to belong to the most disadvantaged groups in any society: those with the smallest landholding, the lowest income and the least flexibility to cope with unexpected stress such as illness or major expenditure.

Where do they live

Malnourished people are to be found everywhere: in urban squatter settlements of village communities; camped around prosperous estates or living alongside railway lines. They are not always displayed in public view as parents, understandably, do not want to advertise the consequences of their deprivation.

What are its consequences?

Low energy supplies are associated with reduced physical activity, faltering growth and, eventually, breakdown in the systems by which body integrity is maintained. The relationship between intake and particularly functional consequences is not clear and there is some evidence that populations are able to adapt to low levels of energy and nutrient supply. It is clear that nutritionally disadvantaged households have limited room for manoeuvre when times are hard.

Tackling malnutrition in the Community

The malnutrition infection complex is particularly likely to affect poor households affected both by limited food availability, low income, shortage of time of household members, restricted access to adequate quantities of water for washing and by limited access to health care services. They are not easily reached by conventional health and development interventions.

Malnutrition is a social and economic problem

Whenever there is poverty there is always a likelihood of malnutrition. Intensive educational or health care initiatives can reduce the risk of malnutrition developing in poor households, especially if they include the regular monitoring of children's growth and education to ensure that

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children's food intake is increased after illness. Many governments are concentrating now on increasing mothers' ability to look after their children at times of stress. Such approaches, however, fail to take full account of the underlying problems faced by households at risk. It is not always easy for household members to tackle these problems for themselves.

Oral rehydration: cheap, simple and effective

But preventive health care *can* help reduce the consequences of the malnutrition complex. The increased use of oral rehydration in the home prevents death due to dehydration and may speed the return of appetite following diarrhoea. Measles immunisation can reduce the incidence of malnutrition that is a result of measles. The promotion of breast-feeding can reduce the incidence of malnutrition associated with inappropriate bottle-feeding.

A short birth interval may be associated with an increased risk of individual children becoming malnourished, especially following illness. Attempts to increase the space in between births beyond 18 months is essential. Family planning interventions that bring choices and advice directly to people — for example through community-based distribution of contraceptives — offer great potential for bringing about this important social change.

The regular administration of specific nutrients may also be valuable, particularly in areas of the world where deficiencies are reported. For example, goitre and cretinism, as a result of iodine deficiency, are particularly likely in mountainous areas of the world and community iodine intake can be increased through fortification of salt or injection of iodised oil to women. Vitamin A supplementation (using high dose capsules) may be extremely valuable in groups whose intake is low because of limited availability of green leaf vegetables.

Evaluations of many small-scale health programmes throughout the developing world have confirmed that the careful monitoring of individual children from households that are at risk of malnutrition, by trained personnel (not necessarily doctors and nurses) backed-up by effective cura-

tive health services — will reduce the incidence of severe malnutrition. This approach is clearly extremely useful but it is expensive in time and resources.

The International Community's usual response to malnutrition is to arrange widespread feeding programmes for children from families that are at risk. These can be extremely useful in situations of food shortage but their management is a problem. They can create dependence and they should not be continued beyond a short-term food emergency.

To be most beneficial, programmes to tackle the malnutrition complex ought to involve the participation of the people for whom they are designed — is a policy that is directed to improving the food security and living conditions of population groups that are most at risk. What is required is regular surveillance of the population, studying a variety of diseases (like diarrhoea) and nutritional status. These surveillance systems need to examine the nutritional status of representatives of different social and economic groups so that those groups most at risk can be identified and appropriate development policies can be instituted.

As long as there is poverty in the world and resources are unequally distributed, there will also be people who are malnourished. Those most at risk of malnutrition tend to be the most



Teaching mothers to feed their children better is fine... but the households most at risk from malnutrition are often those least able to tackle the problems themselves

and not be imposed on them. Unless they are designed with an understanding of local conditions, they are likely to fail. They should also, ideally, be implemented through several channels — including, but not restricted to, health services.

The economics of tackling nutritional problems in the community have been studied by a number of authorities. Inevitably such interventions are expensive, particularly if children are being kept under continuous surveillance. The costs of averting a death or disability are high and few countries are able to afford them, particularly in times of structural adjustment. An alternative — if a government is seriously concerned to reduce levels of malnutrition in its population

deprived in our society. They have no voice, limited political clout and they are often inaccessible to development programmes. They need advocates to bring them to the attention of the international community though this advocacy should not be accompanied by suggestions that there are simple solutions to the problems of malnutrition in the world. The experiences of many national governments and even the international community suggest that there are not. Where there is poverty and suffering, where choices are restricted and where security is compromised, malnutrition will be found. It needs to be tackled with energy and imagination, but also with realism. "Crash campaigns" have limited use. D.N.

D.F

STD: old wars, new wars

by Renée THOMPSON (*)

Sexually transmitted diseases (STD) can rarely have commanded public attention so much as in the 1980s. In the past, venereal diseases have decimated armies, but the greatest enemy in 1988 is undoubtedly AIDS, the disease described at a recent conference in London as "a serious threat to humanity".

AIDS is by no means the biggest killer in developing countries—as Dr Thompson points out in her article, it does not yet have that "sad privilege". But, because of its alarmingly high rate of replication, and the absence of sure means of prevention or of treatment, it presents a challenge perhaps unsurpassed in the field of health care today. Dr Thomson describes, in brief, a number of the main STD as well as—in greater detail—the history and clinical aspects of AIDS, and the search for a cure.

Although sexually transmitted diseases (STD) had lost a lot of their interest in the '70s, the recent appearance of acquired immune deficiency syndrome (AIDS) has put them back on the map. These diseases, by definition, have their method of transmission in common—the infection starts from the genitals of one or other of the partners. This is true of all types of relation—heterosexual, homosexual, genito-genital or any other.

There are a number of consequences. The diseases affect a young population of between 20 and 40 years and small children may be infected by their mothers. They may make men sterile, although women are at greater risk, and both partners must be treated, regardless of whether they display any signs of the disease or not.

Some of the diseases—syphilis and gonococcal infections, for example—have been known for years, while others, such as AIDS, a latter-day plague

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and the greatest cause of concern on the world public health scene today, are new.

The traditional sexually transmitted diseases can be roughly divided into local and general ailments. At the top of the genitally localised list on every continent is gonorrhoea, followed (with varying predominance according to region) by syphilis, chancroid and the diseases caused by trichomononas and viruses. Those that can lead to general infection include syphilis (if not treated), hepatitis and, above all, AIDS. These last groups can also be spread by non-sexual transmission.

In all diseases, symptoms will look different in the tropics, as the climate, the humidity and the heat make for worse skin lesions and discoloration, particularly around the rash. The economic and social situation can also lead to delays in diagnosis and treatment and so things are further advanced when the problem is tackled than they would be in the industrialised countries.

Gonorrhoea is caused by a bacteria. It is easily diagnosed in men, but much more difficult to detect in women. Children can be contaminated by their mothers at birth and, if not treated, will develop ulceration of the cornea and sometimes blindness—which can easily be prevented with drops of silver nitrate or antibiotics. In most cases, intramuscular penicillin will effectively treat the disease.

A recent classification of syphilis has replaced the former four-stage one

and the disease is now divided into early and late. If not treated in time, syphilis spreads to the heart and the central nervous system—particularly in the developing countries.

Biological diagnosis is based on two easy, inexpensive tests of the patient's serum. In countries where treponematosis (caused by similar germs) is common, the serology may be positive and only the increase in antibodies (the substances produced by an organism in contact with a germ) will lead the doctor to suspect the disease.

Treatment works because the germ is highly sensitive to penicillin and one intramuscular injection is usually enough, although a second may sometimes be necessary three months later.

Both these diseases declined in recent years, but they seem to be on the increase again now, according to a recent report from the US Center for Disease Control (CDC).

Virus-related lesions are increasing. The papovavirus group produces harmless warts and cockscomb-like condylomata. Some of the 40 or so listed recently can lead to cancer of the cervix in five years in 1% or 2% of cases.

In the developing countries, lesions of this kind are encouraged by local humidity and are more common in pregnant women and on previous sites. The treatment is surgery.

Another sexually transmitted virus disease is caused by one of the herpes viruses (Herpes hominis 2), which leads to ulceration of the mucous membrane of the genital area. It is easily visible in men, but much more difficult to detect in women. In the case of primary infection, the lesions

A health worker explains the symptoms and treatment of STD in a Nigerian village



DOSSIER

may be severe and accompanied by general symptoms (fever and sickness). Neo-natal herpes can generate one or two symptoms but there is usually general debility leading to a high percentage of infant deaths or major cerebral sequelae in cases of survival. The disease is diagnosed by electronic microscope examination in the major hospital centres.

Lastly, hepatitis B can be transmitted sexually, particularly by homosexuals.

AIDS, which emerged recently, is found throughout the world. After some years of uncertainty, the agent of the disease has been properly defined and the clinical aspects are now known.

A history of AIDS

It seemed simple back in 1980-81 because it was thought the disease only affected homosexuals. The following year, however, the people of Haiti were revealed also to be at risk. Then, in 1982-83, the first cases of AIDS occurred in patients who had received blood transfusions and they were followed by even more cases among drug addicts. Then, in 1985, the disease seemed to have appeared in Africa. So, by early 1985, AIDS was affecting people the whole world over, though in different ways.

The virus

In late 1982, a virus was suspected when the first cases were traced among haemophiliacs who had received filtered blood products (i.e. containing neither bacteria nor fungi, but a smaller agent) and a drive was made to identify it.

The first suggestions were from Gallo and his (Bethesda, USA) team in late 1970. These were HTVL (Human Cell Leukaemia Virus) I and II, which produce leukaemia in man in exceptional cases. Then in 1983 Françoise Barre-Sinoussi of the Luc Montagnier team at the Institut Pasteur (France) isolated a third retrovirus, which was called LAV (Lymphadenopathy associated virus), in a patient with lymphadenopathy (a clinical form of AIDS). A few months later, Gallo and his team isolated a virus from the same family in the blood of an AIDS patient and, logically, they called it HTVL III, as it was similar to the viruses described previously.

A serological comparison of LAV and HTVL III showed they were closely related and led to the coining of a single name for them—HIV (human immunodeficiency virus). In 1985, the Institut Pasteur team, working with other Portuguese and Parisian researchers, isolated a virus from a West African patient. They called it HIV IV, the first one being renamed HIV I.

Even more recently, a team from Essex (Boston) has isolated another retrovirus, HTLV IV, from atypical cases of AIDS from West Africa.

So what we know about AIDS is that it is caused by retroviruses, i.e. viruses which contain a special substance whereby they can become an integral part of the parasite cell and possibly multiply. There are two of these—HIV I and HIV II, which is close to a virus isolated in monkeys (SIV) and HTLV IV.

The possibility of a common ancestral virus which has developed differently from one region to another was brought up at the 3rd international conference on AIDS in Washington on 1-5 June last year.

These retroviruses have an affinity for the human immune system—which means they attack the cells responsible for defending the organism and T4 lymphocytes and macrophages in particular. So the disease occurs when the virus penetrates the target cell, the lymphocyte, becomes integrated and multiplies to the point where it destroys the cells.

Other as yet little-known things occur to back up the action of the virus. In particular, any stimulation of the immune system by other infections will increase the likelihood of reaching the serious form of the disease or the AIDS.

Once the virus has penetrated the cell, it may lie dormant for months or even (5-8) years before generating any clinically detectable manifestations—which will develop at varying rates.

However, the serum of infected patients has been shown to have special substances, antibodies, which only appear after the virus has entered the organism—and after a much shorter period of dormancy (four weeks to three months).

Clinical aspects

The slow, variable evolution of HIV infection decided the CDC to suggest a clinical classification:

- primary infection;
- asymptomatic infection no signs other than the occasional biological one:
- persistent lymphadenopathy with or without biological signs;
- presence of other diseases in isolation or association, general manifestations, neurological anomalies, infection, secondary cancers, other.

Primary infection can give mild problems—fever, diarrhoea, ganglions etc—which disappear fairly quickly. After a fairly long period when no clinical signs of the disease are apparent, ganglions, mild haemmorrhage and mild infections occur. In stage three, fairly large ganglions occur in several places, persisting for months.

The move to stage four can lead to established AIDS, which is extremely serious, leading to death within a more or less short space of time. In this phase, the so-called opportunist infections occur, settling in organisms deprived of their natural defences, and cancer.

The symptoms of AIDS vary. They include fever, weight loss, large numbers of ganglions, coughing and breathlessness, a variety of rashes, discoloured skin and mucous membrane, itching, memory and behavioural difficulties, haemorrhage and impaired vision. The disease itself will differ according to whether it is manifested by infection or tumour and according to the site of the lesion.

Pulmonary infection gives a serious form of pneumonia (pneumocytosis), infection of the digestive system gives diarrhoea or parasitic, bacterial or fungal infection of the mouth, infection of the nervous system gives epilepsy or dementia (this clinical form is more common among homosexuals) and skin infection gives various eruptions. A persistently high temperature may be the sign of parasitosis, virosis or bacterial infection (tuberculosis, for example).

The commonest tumour is Kaposi's sarcoma, which starts on skin and mucous membrane but can become generalised.

In the tropics (including Africa and

Haiti), the disease looks slightly different. In particular, it often involves pimply rashes accompanied by severe itching which lead to skin lesions when scratched. Diarrhoea is much more common than in the industrialised world, being found in 80% of cases.

For some years now, parts of Africa have had a disease called "Slim" which gives fever, diarrhoea, rashes and ganglions. Patients are HIV I positive, so this could be the African form of AIDS. Kaposi's sarcoma in Africa has given tumours under the skin (nodules) which develop slowly and react well to chemotherapy, but it is now taking on epidemic proportions, developing rapidly and seriously with respiratory symptoms and considerable weight loss. It does not respond to treatment. The incidence of the disease has been increasing constantly since 1983 and has even doubled in some countries-Zambia, for example.

The clinical manifestations of infections in the developing ocuntries are sometimes due to different germsmeningeal cryptococcosis, with epilepsy caused by toxoplasmosis. Herpes zoster tends to return frequently and herpetic lesions are persistent.

AIDS is only one form of HIV infection-the most serious. The term AIDS only applies to patients with the clinical symptoms of group IV in the CDC definition after opportunist infection(s). The term ARC (AIDS related complex) is used for group IV diseases with clinical manifestations other than, and in fact less developed than, AIDS. In these cases, the virus is present in the blood and is therefore transmitted through the blood of infected people, something which can happen in a number of ways-through sexual contact with an infected person without using a condom, by using infected equipment (syringes, needles, tatooing and scarification devices), through blood products (transfusions etc.), from mother to child-but NOT through simple contact, kissing, swapping things or using the same linen or even furniture or housing. Once out of the organism, the virus is rapidly killed by, say, bleach.

Before moving on to the present means of diagnosis, one or two definitions are called for. Being *seronegative*

means that no HIV antibodies have been found in the blood. Being seropositive means that HIV antibodies are in the blood so there has been contact with the virus. As things stand, everyone who is seropositive is considered to be carrying the virus and able to transmit it. Seroconversion is the change from seronegative to seropositive.

Diagnosis

Laboratory diagnosis has been refined rapidly, with our advancing knowledge of the virus. It is routinely based on highlighting HIV antibodies in patients' serum in a number of ways. These antibodies appear, as we have seen, between four and 12 weeks after infection.

The ELISA (enzyme-linked immunosorbent assay) technique combines the patient's serum with all viral proteins, a simple approach whereby a large number of serums can be tested at the same time. One or two changes are being made at the moment and they will make ELISA easier to use in the developing countries as the equipment will be simpler and cheaper and able to be used at room temperature.

Other techniques-immunofluoresimmunoprecipitation (RIPA) and the western blot (WB)can be used to confirm diagnosis or run more complex epidemiological studies. Research is continuing here and second generation serological testing is now being set up.

Lastly, to assess the state of the patient's immunity and the effectiveness of the treatment, an intradermoreaction to tuberculin or other antigens (multitest, for example) can be run. This is easy and inexpensive.

WHO reports give the following figures for recorded cases of AIDS:

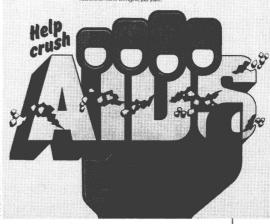
Table I			
Continent	May 1986	February 1987	
Africa	378	2 576	
America	22 085	33 145	
Asia	50	103	
Europe	2 423	4 552	
Oceania	214	404	

AIDS has hit every continent and a total of 128 countries have reported

Eneza ukweli

JNAWEZA kuppunguzia hatari kwa

- Kuwa na mpenzi mmoja
- Kujitenga na mapenzi ya makahaba au kwa: kujitenga na waraume wanuo fanya mapenzi na: makahaba.
- Kutumia mfuko wa mpira au kusisitiza mwenzako autum
- Kwa kumwona daktari mara tu unapopatwa na jugonjwa ulicambukizwa na ngono.
- Kwa kusoma zaidi kuhusu ugonjwa huu na kuwafahamisha wengine juu yake



Poster on a wall in Kampala (Uganda) "Fight AIDS" "Spread the facts, not fear "

71 751 cases of the disease (Epidemiological survey No 49 of 4 December 1987). The number of cases is increasing all the time. The figures for Africa inter alia, are probably underestimated.

Different features of different continents

Each continent has its own particular features. In Europe, it takes 4-15 months for the number of cases to double, this period being shorter in the countries in the southern part of the continent. France has the largest number of recorded cases, although the highest figure per million inhabitants is in Switzerland. The sections of society most affected are, in descending order, homosexuals, people who have had blood transfusions and haemophiliacs. Since 1986, the number of cases of homosexuals with the disease has more than doubled and the number of cases amongst drug addicts more than trebled.

In Africa, the disease predominates in certain countries-Zaïre, for example, Congo and the Portuguese-speaking nations-and it is much rarer in North Africa and South Africa. The annual figures vary. In 1985, there were 80 cases per 100 000 inhabitants in Kigali (Rwanda), as against 7 per million in France and 43 per million in the USA. But Kigali is probably the worst hit city in Africa. The groups of society most affected are different

Special Community programme to prevent and control the spread of AIDS in the ACP countries

by André VANHAEVERBEKE (*)

The Community has taken vigorous action to combat AIDS in Europe, but it also has an interest, and indeed a duty to help its partners in the developing countries to do the same.

Current measures need to be stepped up and made more systematic, especially since some countries are particularly badly affected, above all in Central and East Africa where the disease has taken on epidemic proportions, striking men, women, children, rich, poor, townsman and countryman alike. The virus has already been identified virtually everywhere and even where there is not yet an epidemic, action is urgently needed to ensure that one does not develop. This is why the Commission immediately approved a special programme to combat AIDS which is initially confined to the ACP countries and which has a supplementary budget of ECU 35

It can therefore make a substantial contribution to the implementation of the Special programme on AIDS launched by the WHO which, besides its general activities, will encourage and coordinate measures in each country which together make up short- and medium-term national programmes to combat AIDS. The Commission will have more specific responsibility for the following types of action:

(i) reduction of the risk of transmitting the disease through blood transfusions, in other words ensuring that the blood used for transfusions is "clean"; (ii) information and education cam-

(ii) information and education campaigns aimed at the public about the ways the disease is transmitted and the attendant changes in sexual behaviour;

(iii) applied research to improve the content and application of prevention and control programmes and to examine the size of the epidemic, ways of transmitting the disease from mother to child, screening techniques and so on.

For the implementation of its programme the Commission has used extremely fast decision-making procedures, similar to those used for emergency aid. It is therefore now faced with the need to find and mobilise the necessary experts, train technical staff, im-

(*) Head of Department VIII-A-2, Sectoral policies.

prove the functioning of the health services which will be carrying out the measures and above all determine the most effective ways of informing and educating high risk groups.

It is much more difficult to implement these operations in the developing countries because in some cases the disease has already reached epidemic proportions, thereby increasing the numbers of people at risk. In other cases health and education structures are weak and because of general poverty condoms and sterile syringes are not used systematically.

More specifically, in the areas where the Commission is active, for example, in monitoring blood transfusions, the problem is fairly simple when it comes to dealing with well-managed and wellequipped transfusion systems, as is the case in Rwanda. In the industrialised world the risk of infection from this source has virtually disappeared. By contrast, in numerous developing countries the effectiveness of this type of control depends on the modernisation and rehabilitation of existing transfusion systems, which entails new equipment, training and organisational and management support. It is therefore not just simply a question of setting-up screening methods, but rather deciding on and making fundamental structural improvements.

As long as there is no vaccine or treatment for AIDS the most basic measures have to be taken such as teaching people to change their sexual behaviour. But even this is difficult. How can you design a publicity campaign aimed at risk groups when little is known of current attitudes and habits—how can you get the message across in areas of high illiteracy, where audiovisual equipment is virtually non-existent and so on!

Priority is therefore being given to measures which can be passed on via dispensaries, schools and so on and to measures to help high risk groups, for instance people involved in the world of prostitution. In this specific case, given the link between AIDS and other sexually transmitted diseases (STD), it would seem appropriate to use STD centres to teach people about AIDS and

to test for AIDS, but usually these centres need to be rehabilitated or reactivated which means that measures become structural in nature. It is impossible just to "add" to existing structures, it is always lengthy and difficult in poor countries which have so many other pressing priorities.

Clearly, since urgent action is required, one has to accept the need from the outset to make do and improvise, but very soon a more coordinated approach has to be adopted which entails improvements to health and information services. It is only if special measures against AIDS are incorporated in existing improved systems that they will have any lasting and effective impact. Any approach which advocates separate programmes outside existing structures should be avoided as they tend to be too costly and not viable in the medium term.

The difficulties of implementing these measures highlight the need to get to grips with the problem before AIDS becomes an epidemic. Fortunately, in many countries the campaign can be better prepared and more structural than in countries where AIDS has reached epidemic proportions and where the most pressing situations must be attended to first and where all kinds of risks must be taken to prevent the spread of the disease. We must harbour no illusions, because even if we can hope to slow down the epidemic, it is impossible to stop it merely by preventive measures. The only way of halting AIDS will be if vaccines and medicines are developed and made available fast. The Commission is deeply involved in another aspect of the problem through its research programmes, and more specifically the "science and technology for development programme" which has just been launched and which covers more fundamental areas of research-immunology, vaccines and treatment-than those in the ACP pro-

In all these different ways the Community, along with the WHO and other donors, particularly European donors, is making an effective contribution to efforts to curb what for some developing countries is already a major disaster.

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from those in Europe. Homosexuality, if it exists, is rarely owned up to and drug addiction is rare. Most of the recorded cases in the population of two men to one woman are prostitutes and heterosexuals and the disease is more common in the towns than in the countryside.

Curran (CDC, Atlanta) suggests that the breakdown of cases in the USA is similar to the breakdown in Europe, although the evolution is slightly different.

Table II			
Groups affected	May 1986	February 1987	
homosexuals drug addicts heterosexuals haemophiliacs transfusees not-specified	73% 17% 1% 1% 2% 6%	53% 62% 14% 3% 7% 12%	

He suggests a figure of 900 000 cases in the USA by 1991. In this country, information to the above-mentioned groups at risk will stabilise if not bring down the number of cases of AIDS. This is already happening among the homosexual population. The treatment of blood-based products should prevent AIDS in the people who use them.

The groups of society affected in the Caribbean, Haiti and Guyana are the same as those in Africa. We have little information on Asia. WHO put the number of seropositives, i.e. potential contaminants, in the world at 4-10 million in 1987. Seroprevalence in the general population in the USA in February 1987 was 1 to 1.5 million—a rate of seropositivity of 0.04-0.11% according to group tested.

Seroprevalence in Africa is 0.5% in Cameroon, the CAR, Chad, Congo, Equatorial Guinea and Gabon. It is two to four times less common in rural areas than in the towns and twice as common among men as women. Things are much the same in Morocco, where 0-0.5% of blood donors are seropositive.

The risk of moving on to the seropositive stage of AIDS has been put at 15% after four years and 31% after six. It varies from one group to another, being 100% among people who have received transfusions, for example, and 10% among the wives of seropositive haemophiliacs. A child born of a seropositive mother has a 50% chance of being contaminated within 10 months. Anyone who is seropositive can transmit the virus. A single sexual contact without precautions is enough, but the rate of transmission rises with the number of partners (in Africa, prostitutes in a privileged socio-economic situation, i.e. with fewer partners, are less affected than the others). The risk is greater when other sexually transmitted diseases, particularly localised ones such as herpes and syphilis, are present.

What will happen?

The prognosis is frightening. Curran (CDC, Atlanta) has observed a total death rate of 57% among 30 000 recorded AIDS patients, although the average survival rate varies with age, clinical form and membership of a special risk group. Treatment varies with the stage of the disease. The antiviral in current use is azipothymidine (AZT) which improves the clinical symptoms and prolongs survival. It is a recent drug, dating from February 1985, which has been on most markets for six months now, but it is toxic in the long term. Early treatment, with the addition of a drug to stimulate the body's immune system, should further improve these patients' lot. Many research teams are working on the subject and there are possibilities of improvement in the coming years. Treatment at the infection stage will be adapted to the germ responsible (antibiotics, anti-fungals or anti-parasitics). A certain degree of success with treating Kaposi's sarcoma has been obtained with chemotherapy, in association with interferon, an antiviral substan-

There is no possibility of vaccination so far. Vaccine production is made difficult by the very nature of the virus (which can change to evade immune response), although one is on the drawing board at the moment. The idea is to use a viral support that is not dangerous to man, the virus of the vaccine, combined with HIV. This is currently being tried out on seropositive volunteers and monkeys will be vaccinated with it in a few months' time and then injected to determine

the effectiveness of the vaccine. But there could be a wait of four to five years between the vaccine being tested on animals and being made available to the public.

Prevention through information

But treatment to prevent AIDS transmission can and should be instituted now. This of course means informing the public. Many countries on all the continents are now running information campaigns and WHO has taken up the problem and allocated funds to fight AIDS. The information has to be clear. It must point out that seropositivity does not mean AIDS, that contamination can only occur through sexual relations where no protection is used and that the disease is not "reserved" for certain social or ethnic groups.

As far as the individual is concerned, Luc Montagnier advises anyone who is seropositive not to give blood, to use a condom in sexual relations and to warn his/her partner(s) so he/she/they can be tested. These precautions would prevent an epidemica pandemic to be precise—of a disease which is disastrous for the individual concerned (let us not forget the fact that people and even medical staff in some countries reject AIDS victims) and which carries enormous financial burdens. AIDS should be publicised, detected and treated at national level. The declining health of the developing countries is a threat to the whole world.

The diagnosis of sexually transmitted diseases has developed over the years and treatment is increasingly effective. But, for unknown reasons, perhaps greater moral freedom, perhaps decreasing precaution in sexual relations, combined with the fact that antibiotics are available, other diseases have emerged and AIDS among them.

However, let us not forget that, although AIDS is advancing, it is not the first sexually transmitted disease in the world at the moment. Although it is well on the way to becoming one of the big three causes of death in the industrialised world, it does not yet have this sad privilege in the developing countries—where infectious diseases as a whole are far from being eradicated. \circ R.T.

Prevention and treatment of eye diseases in Africa

by Adenike ABIOSE (*)

Blindness is a major public health problem in Africa because of the sheer number of people so afflicted. Economic survival is a struggle for the average, non-handicapped person in a developing country. The burden of blindness is therefore a major added frustration to the individual's economic independence and social development.

Eve care delivery has not received much attention in many African countries. Although the need for eye care cannot be denied, it is competing for scarce resources with more compelling problems like high maternal and infant mortality and acute medical and surgical problems. Ophthalmologists are few and the traditional hospitalbased curative ophthalmic practice is expensive to run. By and large, the ophthalmologists and hospitals are situated in big cities and towns while more than 80% of the population lives in rural areas and villages. The majority of the population is therefore underserved or not served at all. For every patient who attends the hospital, there are probably 4-5 needy patients who have not visited the doctor because they are too poor, too far from the hospital or just ignorant of what can be done. Besides, taboos and sociocultural attitudes often discourage patients from using existing modern facilities. Consequently, diseases are usually seen at an advanced stage. These factors, contributing to late presentation, together with inadequate facilities lead to a pool of curably blind as is seen in the cataract backlog in Africa.

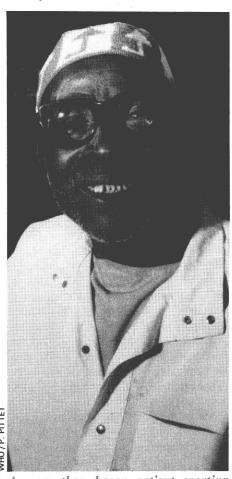
The eye diseases seen in Africa are often no different from those encountered in Europe; most of them are treatable or preventable, but their neglect has a devastating effect on vision.

Prevalent eye diseases

Cataracts are very commonly seen in Africa, accounting for approximate-

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ly 50% of all cases of blindness. They may be congenital in origin; often due to intrauterine infection like rubella, or metabolic diseases in the child like galactosaemia. Cataracts may also complicate injuries to the eye; but more commonly they are seen in the elderly.



A more than happy patient sporting corrective glasses after cataract surgery. Treatment is highly rewarding, but ignorance and lack of facilities limits its great potential

Senile cataracts are known to occur at an earlier age in the tropics, and recent work suggests that severe diarrhoeal diseases early in life may be a contributory factor. It will be interesting to see in a few years' time the effect of oral rehydration therapy on the prevalence of cataracts. The surgical treatment of cataracts is very rewarding, but advantage of this fact is often

not taken, due mainly to inadequate facilities and ignorance. Mobile eye units being operated by various nongovernmental organisations are now bringing cataract surgery within the reach of many. Even when the patient is unable to afford the cost of corrective glasses, as is often the case, the improvement in vision is often adequate to enable him look after himself and move around, thereby ceasing to be a burden on family and friends. Although more cataract operations are now being done, contact lenses and intraocular lens implantations, which have become routine in developed countries, are not usually available in

Infections of the external eye are very common, notable among which are trachoma, conjunctivitis of the newborn, epidemic haemorrhagic keratoconjunctivitis, corneal ulcers, measles keratoconjunctivitis and leprosy. The infection may spread to the inner eye and lead to loss of the eye. Eye infections may be responsible for up to 25% of all cases of blindness in Africa.

Trachoma: associations with poverty and insanitation

Trachoma, an infection of the outer eye, has the highest incidence in the dry, hot, dusty climatic zones of Africa. The disease is always associated with poverty and unhygienic living conditions. It is caused by *Chlamydia trachomatis*, an organism with characteristics between bacteria and viruses. The infection spreads from eye to eye in overcrowded conditions; flies also help to spread the disease. It presents with irradiation and discharge, and may manifest with a red eye, opaque cornea, ingrowing eyelashes and lid entropion.

It affects all age groups and is a very important cause of blindness. It can be treated with antibiotics like tetracyclines, sulphonamides, and erythromycin. However, better living conditions, and improved personal hygiene lead to reduction in the incidence and severity of trachoma, even in the absence of antibiotic therapy. Pipe-borne water should therefore be supplied, rubbish cleared to control the fly population and people educated on the importance of hand and face washing and general hygiene.

River blindness

Onchocerciasis, or river blindness (1), is a parasitic infection caused by Onchocerca volvulus whose baby worms are transmitted by black flies of the Simulium damnosum s.l. complex. The disease is endemic in West, Central and East Africa and is a major cause of blindness in these areas. Clinical manifestations may involve the skin, lymphatic systems and the eye. The effect on the eye is usually due to the presence or death of the baby worms (microfilariae) in the eye; and may include itching, conjunctival pigmentation, redness, pain and loss of vision. The traditional treatment with dieathylcarbamazine (DEC) or suramin leads to adverse effects. The main method of control presently is by controlling vectors of the S. damnosum complex by the weekly application of rapidly biodegradable larvicides delivered by aircraft to breeding sites, as in Onchocerciasis Control Prothe gramme in West Africa, involving 11 countries. A new drug, ivermectin, has shown considerable promise for the effective and complication-free treatment of human O. volvulus infection, as well as reducing transmission of the disease.

Chronic simple glaucoma, a disease which causes painless and gradual visual loss, is seen at an earlier age in Africans, as opposed to the middleaged and elderly, in Caucasians. It is responsible for 20% of all cases of blindness. The disease is usually advanced at diagnosis and seems to be less responsive to medication; although this unresponsiveness may be related to the high initial intraocular pressure and poor compliance to therapy.

The majority of patients cannot appreciate the necessity for daily instillation of drops on a life-long basis. The problem is compounded by the high cost of the drugs and their frequent non-availability. The only available option is early surgery, the results being generally good in experienced hands.

Eye injuries, whether penetrating or contusional have a potential for causing permanent visual disability when treatment is delayed, which is usually the case in Africa. Many cases of uniocular blindness result from poorly



Blind children at school in Bamako. All too often blindness is the legacy of poorly managed eye injuries or of preventable diseases such as measles or rubella

managed injuries. Pterygium, a degenerative condition of the conjunctiva, is common in Africa. It is thought to be solar-related and surgical excision is often followed by recurrence but this can be reduced by beta-irradiation which is not, however, available in most centres.

Tumours of the eye and orbit are seen regularly in Africa, especially in children. Retinoblastoma, a malignant tumour arising within the eye is the commonest, presenting with a cat's eye reflex, squint or more commonly, fungating tumour. Although the tumour is initially detected in one eye, both eyes are eventually involved in about 20% of cases. In this century, retinoblastoma has evolved from an almost uniformly fatal cancer to one that is cured in approximately 90% of cases in developed countries.

Refusal of treatment — an added problem

In Africa, however, the outlook is still gloomy due to late reporting, refusal of treatment and inability to carry treatment to its logical conclusion because of lack of facilities for radiotherapy. Burkitt's tumour, a childhood tumour originally thought to occur exclusively in equatorial Africa but now confirmed to be endemic in New Guinea, has been linked to the Epstein Barr virus. It originates in the cheekbone and spreads to the orbit displacing the eye upwards and forwards. Although it may be limited to the orbit,

it may affect other parts of the body like abdomen or central nervous system. It responds to a combination of cytotoxic drugs.

Most of these diseases are curable or preventable. Primary eye care should be brought to the people thereby eliminating some of the problems presently militating against successful treatment—distance from available treatment, high transport costs and reluctance to go to a strange environment. Greater emphasis should be placed on child-hood immunisation with special emphasis on measles vaccination.

Although a lot still needs to be done for eye care delivery, especially in the context of primary eye care, there is no doubt that great progress has been achieved in the last decade, especially in the area of personnel training, infrastructural development and education. However, there is a need for intersectoral development, especially in the area of agriculture, education, water resources and environmental sanitation, so that nutrition and personal hygiene can improve and a clearer understanding of eye diseases emerge, thereby reducing the complications resulting from their late reporting. Communities and individuals at risk would thus be protected by early detection and treatment of disease. If this could be achieved, the number of patients needing attention for preventable conditions would reduce, thus freeing the doctors to concentrate on non-preventable conditions. o A.A.

⁽¹⁾ See Article on river blindness Courier N° 103.

Fighting leprosy

by M. LECHAT (*) and E. DECLERCQ (**)

Most people think that leprosy disappeared from Europe in the middle ages and is now only a disease that affects people in the poor countries.

This is not quite true. Leprosy still exists in one or two places in the Mediterranean basin and it was only wiped out from Norway, where more than 8 000 cases were recorded between 1850 and 1929 (with as many as 1% or 2% of the population afflicted in some regions), this century. And in many developing countries it is still widespread, albeit to varying degrees.

There are an estimated 10-12 million lepers in the world today and the most recent statistics suggest that about 5 300 000 of them are known. The total number of lepers recorded in the ACP countries is about 900 000,

although the real figure is more like 3 million. Epidemiologists use prevalence — i.e. the percentage of the population with the disease — to assess the extent of leprosy, which may vary widely from one country to another

The face of leprosy. Though rarely contagious, leprosy continues to inspire a high degree of unjustified fear

and even from one region to another within a given country. In some countries, up to 2% of the population may be infected.

So leprosy is a major public health issue, in spite of the fact that many countries have other problems — infant mortality, maternal death, malaria, infectious children's diseases that can easily be avoided by vaccination (tetanus, for example), malnutrition, accidents and many more — which call for as much, if not more, attention from the authorities.

Leprosy – prime cause of physical handicap

Priority does not mean exclusivity, however. In some countries, alas, leprosy is, if not totally neglected, then at least pushed into the background by the Governments' health promotion priorities.

This is a grave mistake. People all too often overlook the fact that leprosy is probably the prime cause of physical handicap in the countries of what is known as the Third World. Without treatment, more than a quarter of those affected are left with serious disabilities — they lose the sense of feel in their skin and thus any protection from the accidents of daily life, leading to loss of fingers, mutilated feet, serious ulceration and even blindness. Millions of lepers in the world today are disabled because they have not had proper treatment.

Contrary to popular belief, most lepers are only slightly contagious or not contagious at all. The disease is caused by *Mycobacterium leprae*, or Hansen's bacillus (after the Norwegian doctor who discovered it in 1873), which mainly attacks the skin and the nerves. Little is known about transmission. There is no animal reservoir as is the case with other diseases and transmission does not involve any intermediate vector such as insects, as, say, malaria does.

There are two main clinical strains of leprosy. In one, essentially repre-

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sented by lepromatous leprosy, the patient is actually colonised by the bacillus following a deficiency in his immune system. The patients are easily recognised (typical cases are illustrated on many a poster) and may be hosting as many as 10 000 billion bacilli. In the other form, tuberculoid leprosy, the bacilli are so rare that they cannot be traced under the microscope.

Studies carried out in the Philippines long ago and confirmed elsewhere since showed that it is the former patients, those who are full of bacilli, who transmit the disease, while the others run little or no risk of infecting others. In most countries in the tropics, patients that can be considered as non-contagious make up as many as 95% of all lepers.

Efficient medicines - sulphones

Today leprosy can be cured. In 1941, suphones were found to be effective in the USA, where leprosy is still endemic in some southern States. There was a remarkable paradox here, as this particular medicine had been discovered at the beginning of the century but not tried out on lepers. Noone has yet managed to cultivate the leprosy bacillus artificially and animal inoculation (mice and then armadillos) only dates back to the '60s and '70s.

Someone had to be daring enough to experiment with it on man. Here is a lesson to all those who see fundamental research as a waste of money. Lepers suffered and lepers died for 35 years although the medicine was there, stuck at the back of the shelf because there was nothing to suggest it should be tried.

Once sulphones were discovered, major leprosy control campaigns could be undertaken in the countries where it was endemic and particularly in Africa and India.

The basic principle was and still is that the only efficient way of fighting leprosy is chemotherapy. As the leper is apparently the only reservoir of the bacilli (there is no known animal host), these bacilli have to be reduced or eliminated altogether by tracing and treating everyone infected as early as possible.

The sick are cured and mutilation prevented at one and the same time.



Lepers receiving their weekly dose of Dapsone

And transmission can also be stopped so that more people are not infected — which is the prime aim of the campaign.

Sulphones, and particularly their most common derivative, Dapsone, were highly suitable for this sort of approach. They were cheap (the fact that it only takes ECU 2 – 3 p.a. to treat a leper has been repeated time and time again), they were easy to administer, there was no toxic dose and they kept well in a hot climate. The tablets just had to be taken once a week.

Mobile units, using bicycles, boats, mopeds and donkeys, covered many countries. Lepers came from the villages and waited together under the trees ("the clinics under the trees", they were called) and nurses distributing tablets went round at regular times on regular days. If villages were too remote, the terrain too difficult or the contrasting dry and rainy seasons unsuitable, then leading local personalities, the priest, the chief and even the lepers themselves, took charge of several months' supply.

That was the saga of leprosy treatment in the '50s and '60s.

The method was an efficient one. There is no doubt that hundreds of thousands of lepers were cured and as

many, if not more, saved from contagion. The incidence of leprosy certainly decreased in many countries.

But alas, although the treatment was cheap, it took time — several years for lepers with the mildly or non-contagious strain and a lifetime for the others (although they were non-infectious within a few weeks). Who is going to leave work and walk miles every day, often with mutilated or ulcerated feet, to fetch medicine that takes years to have an obvious effect?

Patients' perseverance, in the long run, faltered, and more and more of them stopped the treatment.

Then something frightening happened — the bacillus became Dapsone-resistant. This is a phenomenon all biologists are familiar with. In technical terms, it is the selection of mutants.

Drench an area with insecticide and some naturally resistant insects, maybe one or two out of 10 million, will develop to the detriment of those which succumb and repopulate the area in a few generations. Stronger doses are called for and, sooner or later, the insecticide will have to be changed. Who has not heard of the problem of hospital infections due to germs that are resistant to many antibiotics too widely used?

DOSSIER

The same thing happened with Dapsone. Naturally resistant strains of the bacillus developed in many patients who got worse, in spite of the treatment, after a temporary improvement (secondary resistance). They in turn contaminated other people — who were immediately resistant to treatment (primary resistance).

Secondary and primary resistance has been found in all the countries in which it has been sought and in some

things stand, almost 5 million of the 6 million recorded cases are still being treated with Dapsone alone. The new methods of treatment must be spread to all lepers as a matter or urgency. The situation must be tackled before it gets even worse.

The NGOs have an essential part to play here. For 20 years now, the leprosy control campaign and the medicosocial assistance offered to the patients have been backed up by a series of

record system that can be used by non-specialist staff in the field and adapted for micro-computers. It is curently used in 29 ACP countries.

The new strategy also demands that a considerable effort be made with

monitors and evaluates leprosy con-

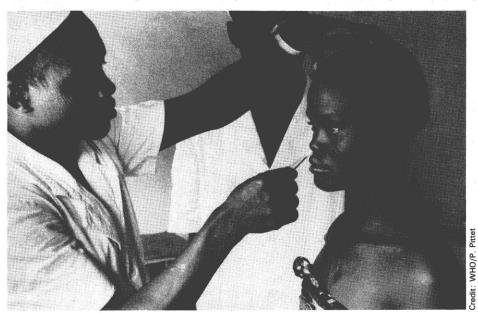
trol activities. It is a simple patient

a considerable effort be made with training staff – doctors, of course, but ancillary medical staff above all, who have the most important jobs to do in the field.

There are leprosy training institutes

There are leprosy training institutes in several countries, the best known in Africa being ALERT in Addis Ababa, the Marchoux Institute in Bamako and the Institute of Applied Leprology in Dakar. Hundreds, if not thousands, of people have received training here.

When it comes to the training of doctors, however, the situation is unfortunately less encouraging. Many faculties of medicine in the ACP countries are modelled on the European prototype and little is taught about leprosy, so lepers can do what they do in Europe and wander from hospital to hospital for years before being diagnosed. It is perhaps time that teaching programmes in countries where leprosy is endemic gave the disease the importance it warrants.



The examination of a new patient includes the extraction of nasal mucus where the Hansen germ is usually found

cases as many as 30% of lepers are affected.

But other drugs have been developed and new strategies devised. Double or triple treatment, combining Clozamine and Rifampicine, is a sure way of keeping resistance at bay. The World Health Organisation has come up with standard therapy plans which are relatively easy to apply.

This polychemotherapy is more expensive than the monotherapy with Dapsone of the past. But it has the advantage of being shorter (although the minimum is six months to two years) and of providing a permanent cure in the vast majority of cases.

Polychemotherapy as applied in the WHO Experts' Committee's recommendations is absoluty imperative in the countries in which leprosy is endemic. Overlooking this aspect of the problem would create the spread of leprosy by resistant bacilli for the next generation, when it could well be much more difficult to control. But as

associations which are grouped together in ILEP, their international federation. These associations are active in all the ACP countries. Although leprosy control is the job of the governments, the associations can give tremendous help and in many cases their activities are integrated or run in close collaboration with the government schemes.

Demands of the new therapy

Replacing monotherapy by polychemotherapy means more than just replacing one sort of treatment with another. The new therapy calls for closer supervision, proper logistics (to avoid such things as stocks running out) and careful laboratory control. What is needed is software to enable the new strategy to succeed in the more or less short term. Both governments and NGOs have to be aware of this side of things.

One important thing to note here is the WHO leprosy data system which

The International Leprosy Association

This professional organisation, which combines the world's leprosy specialists, plays an important part in training and the spread of knowledge of the disease by bringing out a trilingual (English, Spanish and French) publication. It also runs an international congress every five years, with good attendance by health leaders and researchers from the ACPs. The next congress, under the joint patronage of the WHO and ILEP, is scheduled for The Hague (Netherlands) on 11-17 September 1988.

A big contribution to the success of the leprosy control campaign is its gradual integration into the primary health care strategy, as announced by the WHO after the Alma-Ata declaration in 1978. One of the things this sort of policy means is that all resources have to be mobilised to promote health and the community has to be actively involved. And this means making a special effort to eradicate the

unwarranted fear of lepers, which is the biggest obstacle to the success of the leprosy campaign today.

But fighting leprosy is much more than a medical problem. It is an organisational problem first and foremost. The drugs are there, the infrastructure is often there, the staff can be supplied and the resources are often available.

But planning, implementation and evaluation are difficult and they are particularly important when it comes to integrating the activities into the general health services, something which will be effective and make for savings in the long term.

The basis of the new strategy – early diagnosis

The leprosy campaign today is based on early diagnosis followed by polychemotherapy. What will it be tomorrow? Pure and applied research is going on in molecular biology, immunology and therapeutics. The WHO is coordinating vast international research programmes as part of the special tropical disease research and training programme it is running under the auspices of the World Bank and the UNDP. One, IMMLEF, is aimed at producing a vaccine and the other, THELEP, at developing faster and even more efficient treatment. The European Communities' R & D Science and Research for Development programme is also financing some research.

Clinical testing of a mixed, BCG-based vaccine and leprosy baccilli collected from the armadillo and killed with heat has begun. Yet it will take 10 years or so for conclusions to be drawn. Meanwhile, certain new drugs, quinolones especially, seem to point the way to the development of even better polychemotherapy.

This research has to be financed if the fate of the sulphones — which were relegated to the ranks of useless medicines for more than 30 years — is to be avoided.

If the political will is there, today's science and technology are such that leprosy could be, if not wiped out altogether, then at least reduced to a problem of minor dimensions over the coming decades. O

M.L. and E.D.

Disability: the work of the African Rehabilitation Institute

Disablement is not, of course, the preserve of the Third World. The dangers from road accidents, alcohol and drug abuse are probably greater in the North than in the South, but there are many causes of disability, nevertheless, to which those in the developing world alone — or virtually alone — are vulnerable

One such cause is malnutrition, and especially vitamin deficiency, which can lead to both mental and physical handicap and which is the cause of disablement of an estimated 100 million people worldwide. Other causes are diseases such as polio, tuberculosis, leprosy or measles - afflictions which are either non-existent in the developed world or are prevented by inoculation or (as with measles) are harmless provided that the sufferer is otherwise in good health. Of the estimated 450 million disabled people in the world, some 360 million live in developing countries. They are often known as the "poorest of the poor" because to be disabled means not only greater physical vulnerability, it also means, in many cases, social stigma. The disabled are the least likely to benefit from development gains - educational and social activities tend to be geared to the fit — and, where there is employment, the fully healthy and the fully mobile will be chosen first.

(1) P.O. Box 4056, Harare, Zimbabwe.

Though they are reckoned to reach only 2% or so of those in need, rehabilitation programmes do exist, though. One body doing a good deal in the field of rehabilitation and disability prevention is the African Rehabilitation Institute (1), a pan-African network programme which collaborates with the various African governments, and African and international NGOs for the purpose of developing a concept of African self-reliance in various fields of disability. Amongst their aims is to create facilities to satisfy the needs of handicapped Africans who, because of their disability, find it difficult to adapt themselves to a rapidly changing world. The Institute does not look after the handicapped themselves, but promotes the development of rehabilitation centres in all countries of the African continent. It runs courses for staff training in the field of deafness, for example, or training courses for vocational rehabilitation instructors. Other activities include research on low cost technical aid requirements and guidelines for their production; and the production of a manual on disability surveys in Africa. The Institute is based in the Zimbabwean capital, Harare, and when fully fledged will operate in the five Regions of Africa - the Northern Region (probably to be based in Cairo), the Southern Region, the Eastern Region, the Western Region and the Central Region (based in Brazzaville). o



These young Malawians have overcome their first big hurdle: they can walk. Employment and independent living are other hurdles yet to come



Schoolchildren in Zanzibar being tested for schistosomiasis (bilharzia). Using new rapid diagnostic tests and safe drugs the PHC team can test and treat several hundred children in one morning

In Europe, as elsewhere in the industrialised world, to have a member of the familiy seriously ill or handicapped is the exception rather than the rule. The vast majority of us are spared the worry of serious disease, let alone suffer the grief of maternal death or the loss of an infant.

In the tropics, alas, disease is a way of life. Not only is there the question of contending, often in conditions of undernourishment, insanitation and poverty, with those illnesses found the world over — pneumonia, bronchitis, heart disease, cancer — there are also the many fatal or debilitating diseases to be found in addition to these in the tropical countries which constitute much of the developing world. Many of the diseases — malaria, schistosomiasis (bilharzia), trypanosomiasis (sleeping sickness), Chagas' disease,

leishmaniasis, leprosy, onchocerciasis (river blindness), filariasis, to name but a few — are chronic and long-drawn-out, often brought on by infection through insects.

The number of those affected is enormous, in each case running to many millions, and the impact on the lives and work of sufferers potentially devastating, not only for the victims themselves but for their families and the community at large. In some cases the presence of disease-bearing insects will oblige rural populations to abandon fertile lands in favour of less productive ones. (This is the case, for example, in parts of West Africa, where the presence of the blackfly simulium damnosum, which transmits onchocerca volvulus larvae into human beings, thereby causing river blindness, has driven farmers from the fertile valleys in search of uninfected lands).

Such diseases are a major impediment to development, because people who are not in full health can neither contribute fully to the process nor benefit fully from it. A case in point is that of Gezira, south of Khartoum (see inset).

Two of the most widely spread parasitic diseases are malaria and schistosomiasis, and in their way they characterise the whole challenge of research into tropical disease control. One (malaria) appeared well on the way to eradication - or at least possible eradication — as long as 20 years ago and is now resurgent; the other, schistosomiasis (bilharzia), having long defied control is now - probably - approaching the stage where control is within reach. The following is a look, in layman's words, at malaria and schistosomiasis and at progress towards their prevention and treatment

Malaria

Malaria (the name is derived from the Latin *mal aria* or "bad air") is known to have existed since prehistoric times. As its name suggests, it was associated with stagnant water, and was to be found not only in tropical climates, but in the warmer, swampier parts of the temperate zones such as, for example, the present-day French Riviera.

The disease is caused by four principal parasite species which are inoculated into human hosts by a particular genus of female mosquito. Within a month of infection, victims begin to suffer from alternate chills and fevers. In its most severe form, malaria can be fatal, and chronic or repeated infection can impair children's growth or give rise to miscarriage or stillbirth. Not all forms are potentially fatal, but all can cause serious illness. Some strains of the disease reappear at more or less frequent intervals.

Some 2 700 million people (56% of the world's population) are estimated to live in areas where malaria transmission occurs (predominantly between the Tropics of Cancer and Capricorn, though also throughout the Indian subcontinent and in parts of the Middle East) and are therefore at risk of infection. No really reliable figures are available on the numbers of those infected in tropical Africa, but the toll is likely to be of the order of 200 million.

From early carvings and drawings it is known that malaria was treated in past centuries with medicinal plants, particularly with the bark of the *cinchona* tree, from which quinine was isolated in 1820. Chloroquine, a major anti-malarial drug which clears the blood of most parasites within four days, has been in use for the treatment of patients for almost half a century. Other drugs such as mefloquine are now used, too, either alone or in conjunction with other drugs.

The rise and fall of DDT

Control of the carrier of the disease — the mosquito — has been attempted through larvicides and insecticides, such as dieldrin and DDT which, in the 1950s and '60s gave rise to real hope, for a while, that malaria

The Gezira case history (*)

Many examples can be found of the impact of tropical diseases in destroying the hopes for a better life by undermining the efforts to achieve it. That of the Gezira project in Sudan is typical.

Early this century, the possibilities for economic development and social progress were remarkably well demonstrated in this triangle-shaped area lying between the White Nile and the Blue Nile south of Khartoum. The Gezira was a sparsely populated, semiarid savanna when the completion of the Sennar Dam on the Blue Nile made possible the reclamation of nearly half a million hectares of land.

Spectacular transformations gradually took place as living conditions of farmers improved and new immigrants were attracted by the magnet of a self-sufficient, decent life. Within a few decades, the Gezira became the most densely populated and the most prosperous agricultural region of Sudan.

The typical Sudanese thatched round huts became interspersed with the rectangular whitewashed mud or brick houses built by the immigrants from Chad and Nigeria or provided by the government, and with the camelhair tents of the nomads who came during the cotton-picking season. Schools, dispensaries, health centres, and hospitals jostled with white minarets and the traditional markets—social centres for a busy, white-clad, white-turbaned or white-veiled population.

At first, reclaimed land was almost exclusively planted with cotton, the country's cash crop. This crop permitted a simple and effective mosquito control measure: peripheral irrigation ditches were left to dry out every few days, never remaining full for a whole week — the time required for the complete development of mosquitoes from egg to adult. This, together with the use of larvicides and the speedy treatment of the relatively few malaria cases, kept the disease under control.

Gradually, secondary crops were added: millet, wheat, groundnuts and, later on, rice. This meant that the pe-

(*) UNDP/World Bank/WHO Special Programme for Research, and Training in Tropical Diseases

riodical drying out of the canals had to be abandoned, with the result that larvae of Anopheles gambiae, the principal malaria-transmitting mosquito in the region, could reach maturity.

Malaria strikes

In 1950, after a season of particularly heavy rains, malaria struck. It spread rapidly from village to village, affecting thousands of people within weeks. More than half of the total labour force of the Gezira was infected. Hundreds of people died, and so many were weakened that fully one third of the crops went unharvested. To the incalculable human cost was added the economic loss of about 10 million dollars.

This marked the beginning of a long, costly fight against malaria and its vectors—mosquitoes. These insects gradually developed resistance against major insecticides: first to dieldrin, then to DDT. A World Health Organisation survey in 1970 revealed "an extraordinarily high tolerance of mosquitoes to DDT". The use of DDT was abandoned in the Gezira. Larviciding became irregular and by 1974 it was entirely discontinued owing to a shortage of larviciding oil. Meanwhile, malaria progressed.

In 1961, a survey of 16 villages had shown that malaria was endemic in seven of them. By 1975, it was endemic in all of the 16. In some villages, more than half of the people were infected with malaria.

A major effort was then made to use massively all available weapons against malaria. Armies of "mosquito men" were trained to spray malathion, a new insecticide to which mosquitoes are still susceptible. Households were regularly surveyed and drugs were used on a large scale in the hope of reducing transmission. Larviciding operations were resumed, and experiments undertaken to test the possibility of seeding canals with fish that feed on mosquito larvae.

Nevertheless, a parasite transmitted by a mosquito has endangered one of the most promising and dynamic developments in Africa. Who can tell what the Gezira would have been like today had not a tiny micro-organism, invisible to the naked eye, interfered with man's will to better his lot?

DOSSIER

could be eradicated. Considerable I strides were, indeed, made where eradication programmes could be properly funded and manned. In India, for example, cases had been counted by tens of millions, but in 1965 the number had been reduced to some 100 000. By 1976, however, the figure was back up at 6.5 million. Mosquitoes had begun to become resistant to insecticides (which were, in many cases, both costly and ecologically unacceptable, anyway) and parasites began to be resistant to certain drugs. As a result, incidence of malaria — the so-called "King of diseases" - has fallen in only a few countries in recent years: in the vast majority of affected countries it remains endemic and in much of Africa has actually gained ground.

Other than by vector control, in which new possibilities are being explored such as the replacement of vector populations by non-vector strains, prevention is limited to a number of prophylactic drugs. None can guarantee full protection at all times, however, and both cost and distribution problems mean that this is not a satisfactory large-scale solution. A satisfactory malaria vaccine has long been dreamed of, and its discovery must surely constitute one of the major challenges of current research into tropical diseases. So far, however, such a vaccine has proved elusive.

No longer "eradication" but "control"

There is little talk of eradication of malaria nowadays, but rather of control. This is not to say, however, that no progress has been made in the past 40 years towards understanding the disease. Its resurgence in the late 1960s and 1970s rekindled interest in research: the new anti-malarial drug. mefloquine, was developed; better ways of using existing anti-malarial drugs are now in practice; the biology of the parasite and its relationship with its human host is better understood and some progress has been made in the development of a malaria vaccine. Vector control has regained its full importance and the European Community's Research and Development Programme "Science and Technology for Development", for example, includes provision for research, by

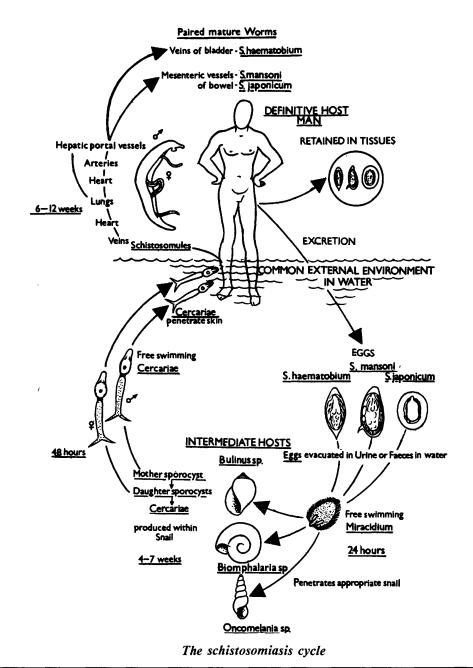
advanced genetic techniques, into the exact strains of mosquitoes involved in the transmission of malaria in sub-Saharan Africa.

Schistosomiasis

If the control of malaria has taken a clear step backwards in the past quarter century, the same, happily, cannot be said of schistosomiasis, the disease known in some countries as bilharzia after the physician Theodor Bilharz who, in 1851, discovered that it was caused by the parasite worm schistosoma.

Schistosomiasis is a water-based

disease and is transmitted by snails. Individuals cannot infect each other directly, but those infected spread the disease through schistosome worm eggs expelled in urine or faeces into stagnant or slow-moving water (see illustration for disease cycle). Between 500-600 million people are estimated to be exposed to schistosomiasis worldwide, of whom as many as 200 million may be infected. Of the ACP States, Ghana and the Sudan have amongst the highest infection rates, though much of sub-Saharan Africa is a potential risk area, as are parts of the Caribbean. Those most at risk are women and children, who, through washing and bathing, are most likely to be





Sometimes known as the disease of rural development, the introduction of irrigated farming has often encouraged the spreading of bilharzia

in daily contact with untreated surface water.

The disease is rarely fatal of itself, but considerably lowers sufferers' resistance to other infections. In 1970 WHO described it as "a chronic, insidious and debilitating disease, which saps the energy, lowering the output of the worker and the receptivity of the schoolchild. In many countries it may be classed not only as an important health problem, but as a major social and economic one in addition". In some forms (the main forms are urinary and intestinal schistosomiasis) the illness produces an overwhelming lassitude in the sufferer, and the combined disinclination to work on the part of mothers, farmers and all those affected can, of course, have a serious effect not only on the overall health of a community but on its productive capacity. Unfortunately, the advent of dams and irrigated farming, an important part of the drive for agricultural development in some areas, has frequently led to an increase in schistosomal infection.

Control: a major breakthrough

A number of drugs are available for the treatment of patients, (notably Praziquantel, which is effective but costly), but a key component of control of the disease is, of course, health education — persuading rural populations in particular of the need for the greatest possible standards of hygiene in the use of water.

A long-acting vaccine would go a long way to controlling the disease, and as recently as last year a major step was made towards that goal by a team of French scientists working at the Institut Pasteur in Lille in northern France. After more than 20 years of research, Professor André Capron and his team have succeeded in isolating and cloning and antigen which promises to provide immunity

to some 75% of those inoculated. Baboons inoculated at the Institute's laboratories in Lille have shown high degrees of immunity to the disease so far, and tests on other animals have been carried out recently in Kenya and Sudan. The team is seeking to establish protection for animals first, before beginning human trials.

As the history of malaria has shown, optimism in tropical medicine can very soon give way to pessimism. The schistosomiasis vaccine has not yet been put fully to the test and effective control, let alone eradication, is very much a hope rather than a certainty. It is a hope, though, and more than a hope for future schistosomiasis sufferers alone, but for all threatened by parasitic diseases in tropical zones, because it gives encouragement — perhaps the firmest so far — that such diseases can, indeed, be vaccinated against. \circ

M.v.d.V.

Tuberculosis: a suitable case for integration into PHC systems

by Pierre MERCENIER (*)

Tuberculosis, while virtually eradicated in the developed world, remains endemic in much of the southern hemisphere. Not only is it one of the most widespread of the chronic infectious diseases of the developing world, with an estimated 4-5 million highly infectious cases developing every year, it is also one which—in common with malaria and leprosy—is frequently controlled outside the PHC framework. This is less true of the prevention of the disease (the administering of the

BCG vaccine), which is fairly well accepted by PHC workers as a part of their normal child health care responsibilities, as of its detection and treatment.

In the following article, Professor Mercenier looks at tuberculosis in the tropics and, in particular, at the case for fully integrating the prevention of the disease and the care of patients into the health "package" offered by Primary Health Care centres.

Tuberculosis is a genuinely cosmopolitan, endemic and relatively stable disease. The main form throughout the world is pulmonary—cavitary and bacillar—tuberculosis, the commonest, the most serious and the most easily transmissible. The first symptoms are always insignificant and neither the patient nor the doctor initially thinks of tuberculosis. So diagnosis is often late and the disease has taken what can be a dramatic hold.

A look at the possibilities of TB control in about 1950 shows that the facilities of the time were by no means satisfactory: patients had to undergo prolonged hospitalisation to prevent transmission. This was the minimum treatment. Collapse therapy and surgery were the only possible forms of active treatment. Early diagnosis, even before any symptoms occurred, was therefore a major factor of control and the major difficulty—but one which one could, however, strive to overcome with the technical means then available.

Even BCG vaccination raised problems. Not only had its efficiency not yet been absolutely proven, but the need for prior tuberculin testing and frequent revaccination restricted the possibilities of widespread application.

All these approaches called for considerable resources at the initial investment stage, both in terms of running costs and of large numbers of highly specialised staff. So an effective TB control campaign was virtually out of the question in countries whose limited resources had to cover many other problems just as urgent as tuberculosis.

Since then, ever-greater differences have emerged. Tuberculosis is still endemic in the tropics, very much as it was before, but it has regressed slowly but surely in the West, to the point where it is now only of anecdotal interest. Of course, thanks to more sensitive epidemiological mea-

surements, we now know that this localised regression started several decades ago and there is a temptation to put it down to the improvement in the standard of living in this part of the world over that period. And the same sensitive indicators confirm that the endemic is stagnating in many countries of the Third World.

Regardless of the importance of the social environmental factors behind these differences, current techniques, which are highly efficient (an effective vaccine, BCG, and strong drugs mean that the vast majority of patients can be cured), they are still not available to the people of the



Queuing at a rural dispensary. Taking care of tuberculosis patients as well would increase primary health workers' credibility and improve the chances of cure

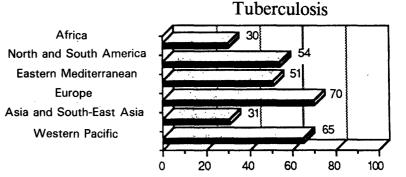
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North and South on equal terms. The inadequate health cover of the tropics still means that people are slow to consult a doctor and often abandon the course of treatment, and the poor performance of the health system often leads to late diagnosis and non-availability of the essential medicines.

Two relatively new things offer possible solutions—short courses of intensive chemotherapy and priority health care.

This form of chemotherapy, a technical innovation whose effects could be felt in the short term, should considerably improve the rate of cure once the price of the drugs is such that widespread use is possible. So... TB has to be detected as early as possible and treatment

Percentage of children vaccinated by the age of one (1986)



has to be dispensed in acceptable conditions of accessibility.

Source: UNICEF.

The relatively new policy of primary health care should lead, in the needs to be done is to include TB con-

longer term, to health coverage whereby essential services are available to all by the year 2000. All that needs to be done is to include TB con-

Tuberculosis

A mycobacterial disease caused by the Mycobacterium tuberculosis primarily from humans, and M. bovis primarily from cattle. It is found world-wide, but incidence rates have fallen dramatically in industrialised countries. Morbidity rates increase with age and, among older persons, are higher in males than in females. They are usually higher in urban than in rural areas and decrease with improvements in the standard of living. Epidemics have been reported among people living in crowded conditions.

Transmission

Transmission is usually by exposure to bacilli in airborne droplets from the sputum of persons with infectious tuberculosis. The subsequent risk of progressive pulmonary or extrapulmonary tuberculosis is greatest within a year or two after infection, but it may persist for a lifetime as a latent infection. Cases are infectious for as long as the infectious tubercule bacilli are being discharged in the sputum. Cases that are untreated or inadequately treated remain sputum-positive for years. Extrapulmonary tuberculosis is generally not communicable. Where the disease is not controlled in cattle, infection with the bovine tubercule bacillus may occur as a result of drinking raw milk from infected cows.

Incubation period

The incubation period from the time of infection to a demonstrable primary lesion is about four to 12 weeks.

Clinical features

The initial infection usually goes unnoticed, with tuberculin sensitivity appearing within a few weeks. This may progress directly to pulmonary tuberculosis or spread to other parts of the body. The disease may also spread by the lymphatic route and produce pulmonary, miliary, meningeal or other extrapulmonary disease in children. A serious outcome to the initial infection is more frequent in infants, adolescents and young adults, particularly among malnourished or undernourished persons.

Prevention

Prevention is by appropriate immunisation. Drug therapy has been shown to be effective in preventing the progression of latent infection.

and its vaccine (BCG)

The vaccine is a freeze-dried preparation made from an attenuation of Mycobacterium tuberculosis (Bacillus Calmette-Guérin).

Administration

BCG is given intradermally and can be administered concurrently with other vaccines,

Immunisation schedule

It is recommended that BCG be given routinely in developing countries as soon as possible after birth.

Efficacy

The protection conferred has varied markedly in different field trials, some providing evidence that protection may persist for as long as 20 years in high incidence situations. Currently, the efficacy of the vaccine is recognised for young children but there is controversy over the efficacy of the vaccine given at a later age, according to WHO trials in southern India.

Side-effects

A small red tender swelling appears at the site of immunisation after about two weeks which might develop into an abscess or may cause a swelling of the lymph glands.

Storage

The vaccine is sensitive to sunlight and heat. It can be stored for one to two years if kept at or below +8°C.

Source: UNICEF.



Cold boxes make it possible for vaccines such as the TB vaccine BCG, to be administered in the remotest of health centres

trol activities in the light of available resources and priorities.

Though it is widely accepted that the detection and treatment of tuberculosis could-and should-form part of the Primary Health Care system, the question of actual integration remains a vexed one in many developing countries. The "package" offered by Primary Health Care centres consists, typically, of the dayto-day care of common diseases, preand post-natal care, surveillance of high risk groups like young children and old people and the follow-up of chronic patients. Vaccination against tuberculosis can be-and, in fact, frequently is-undertaken by PHC workers, as should be early detection of the illness by initial symptoms. Most of the time, however, initial uncharacteristic symptoms are disregarded and those patients who are eventually referred to secondary-level health services (hospitals and specialised services) are already far advanced. Where they are treated in PHC centres, the work is often performed reluctantly by staff, who consider it as an additional burden rather than an integral part of their care. All this reinforces the tendency to consider that the care offered at primary level is necessarily of inferior quality, to be accepted only where there is no suitable alternative.

Yet there is no doubt that taking

care, effectively, of the suffering of self-reporting tuberculosis patients would increase the prestige and credibility of primary health workers as well as improve early detection and the chances of cure.

Studies have shown, for example, that patients tend to abandon treatment administered by hospitals far more readily than that administered by PHC centres. This is, of course, particularly true of patients in rural areas, where the distance to be covered in order to get to a hospital or specialised centre for treatment is itself a strong disincentive.

Technical support—and expertise—will continue to be needed. But what part should it play? This is a complex organisational problem because there is more to it than allocating jobs, saying who should do what and sharing the tasks so that everyone accepts his particular role as a component of his more general responsibility.

TB: only one of a number of health problems

Each person has to recognise the role of the others in the light of their priorities and motivation. How can the polyvalent health worker be motivated to play an effective part in the early detection, diagnosis and continuity of treatment of the tuber-



Vaccination is readily accepted as an integral part of health workers' duties: the treatment of patients with tuberculosis, however, is frequently seen as an additional burden

culosis patient? How can people dealing with tuberculosis be made to realise that the disease is only one of a number of health problems and that the polyvalent health worker has to look at it in this light? This is difficult, as, if integration is to be achieved, both political will and technical ability are called for. But, as a complex problem of interaction between two systems, integration becomes a subject of operational research—or research action—in itself.

With its relatively simple and highly effective technical methods, TB detection and treatment is a good subject for integration. The integration of TB control could be much more than a contribution to containing the disease. It could be a way of helping give strength and credibility to primary health care.

Is there a TB problem in the tropics? There may well be if one considers that, in spite of all the suffering it causes, tuberculosis is but one problem among others. And there certainly is if by organising TB control as an integral part of PHC it becomes a means which helps provide better general health cover for the people. \circ P.M.

Defeating child-killers: universal immunisation by 1990

by Paul RESS (*)

Every minute eight children under the age of five die in the developing world and eight more are handicapped by one of six communicable diseases... unnecessarily. Unnecessarily because in the industrialised world these diseases—measles, polio, whooping cough, diphtheria, tetanus, and tuberculosis—have been vanquished by immunisation.

In Europe and North America, for example, immunisation, along with improved living conditions, reduced the incidence of polio, diphtheria and whooping cough by 95% to 100% in the two decades that followed the introduction of vaccines against those diseases in the late 1950s and early 1960s. And among those children who catch measles, only two out of 10 000 die in the United States, for example, whereas three out of 100 die in the developing world. In malnourished populations 10% or more die, while among populations weakened by drought and famine, or packed in refugee camps, as many as 40% or even 50% of measles victims succumb.



A young Ethiopian being immunised at a health centre in Asmara

Only four or five years ago the goal of making immunisation available to all the world's children by 1990 seemed utopian and unrealistic. Admirable but unachievable.

But events have changed the climate so much that that possibility seems real indeed today.

Vaccines have become more heatresistant and less expensive. Enormous progress has been made in the cold chain for delivering them intact from the production line to the vaccination queue. Health planners have worked out accelerated and simplified vaccination schedules. Heads of State have shown unprecedented political determination to have their countries' children immunised.

And the phenomenal success of mass immunisation campaigns and nation-wide crusades in desperately poor, drought-ridden Burkina Faso, war-torn El Salvador, in Colombia, and in countries with huge populations like China, India, Pakistan, Bra-

zil, Indonesia and Nigeria has proved that it is possible to bring immunisation to Third World children.

Progress over the past decade

Immunisation is one of the most powerful and cost-effective weapons of disease prevention, yet remains tragically under-utilised.

Close to 40% of infants under one year of age in the developing world (excluding China) in 1984 received all three necessary doses of the DPT vaccine (diphtheria, pertussis or whooping cough, and tetanus) and a third polio dose, while only 20% were immunised against measles, the Number One child-killer of the developing world. The average coverage among all young children for the six diseases is under 40% in the Third World, as opposed to some 80% in the industrialised countries.

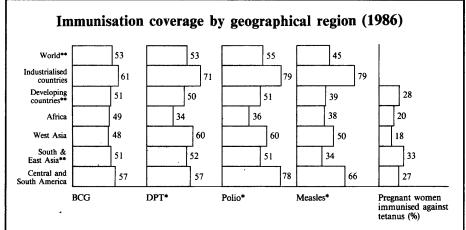
On the face of it, these figures could provoke discouragement and pessimism about the chances of immunising the world's children against the six vaccine-preventable children's diseases by the end of 1990.

But measured against the situation in 1974 (the year WHO's EPI ⁽¹⁾ was created), these sobering statistics show progress. In that year, when virtually no data were available, probably no more than 4% of the developing world's children were immunised against any one of the six diseases.

Now, with almost 40% of Third World children immunised, the death toll has fallen from an original estimate of five million a year to about 3.6 million, as of mid-1985. A similar drop is estimated for the numbers of children who become crippled, deaf, blind, or mentally retarded for want of protection against these six diseases.

But even this very substantial advance can be speeded up. Technological improvements, a better understanding of nation-wide vaccination strategies, and the sharp increase of political understanding and determination at the highest levels, make the 1990 goal achievable.

⁽¹⁾ Expanded Programme on Immunisation



Half the developing world's infants are now vaccinated against tuberculosis, diphtheria, whooping cough (pertussis), tetanus and polio before reaching one year; 39% are vaccinated against measles; 28% of pregnant women in developing countries are immunised against tetanus.

- * In some countries DPT and polio vaccines are given in two doses, only, and the measles vaccine is administered after the age of one.
- ** Excluding China, where recent surveys in 28 provinces show a 70% vaccination rate for BCG, 62% for DPT, 68% for polio and 63% for measles.

Source: WHO, UNICEF and the Division of Population (UN).

Eradication of smallpox — another proof

Another proof that rapid progress is possible is furnished by the eradication of smallpox. Decided upon by WHO in 1958, but launched as a coordinated, world-wide campaign only in 1967, smallpox was wiped out ten years later in 1977.

The problems of achieving universal immunisation are neither technical nor scientific, but human and organisational.

Proof of that most central truth about the present status of immunisation in the world has been provided by the achievements of the People's Republic of China where, in recent years, an excellent immunisation service has been established on a large scale with existing technologies.

Immunisation in Abidjan in Côted'Ivoire between 1978 and 1981 reduced the number of hospital polio cases by 72% and the number of hospital polio deaths by 95%. In the period between 1975 and 1981, polio incidence declined in Yaoundé in Cameroon by 88%. In the Western district of Gambia, immunisation in 1980 and 1981 led to a 93% fall in measles.

Immunisation success with such highly visible diseases as measles and polio in one community stimulates neighbouring communities to support similar programmes.

However, further reduction in the number of doses—assuming, course, that they lost nothing in effectiveness—would decrease the problem of drop-out rates for immunisations. There is a sharp fall-off between the first and the third doses. Only 41 million of 100 million infants in developing countries receive a third DPT shot. Research in one country revealed that between a third and a half of the parents, when they took their child away from the health centre, did not know when they needed to return for another injection.

Protection againt the major diseases costs about \$ 5 per child. Deaths from immunisable diseases amounts to some 4 million every year

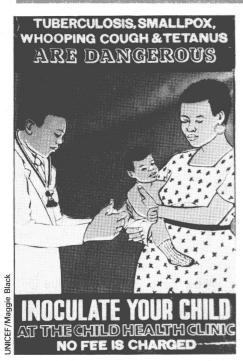
Cheaper and simpler

It takes only one shot to protect a child from measles, and the vaccine is considered 95% effective. The cost of measles vaccine has been halved in recent years from 12 to six cents.

DPT and polio vaccines each cost around two cents. Since there should be three doses of oral polio and of DPT, protection against these five diseases can be had for around 18 cents. A BCG injection against tuberculosis costs 5.5 cents.

Polio, diphtheria and tetanus vaccines are 95% effective, according to WHO, while the effectiveness of the whooping cough vaccine is put at 80%.

Furthermore, vaccination schedules have been simplified. It used to be that a mother had to take her child to a health post six times in order to complete his or her immunisation. Now, the number of times has been reduced to three.



"People were willing to walk long distances for curative care but not for preventive care". Persuasion is often called for, as witness this Nigerian campaign poster

But even knowing the date is no guarantee they will come back. The nearest health centre is often five to 10 miles away, and that's too time-consuming to undertake several times on foot. Frequently, the child is much too young to walk such distances and too heavy for the mother to carry. A study in the Danfa District of Ghana disclosed that people were willing to walk long distances for curative care, but not for preventive care.

There are other understandable reasons for the high drop-out rate. Parents may believe that one dose is enough. Sometimes the first imunisation experience is unpleasant, and the mother or father has no desire to go through it again. On other occasions a parent returns with the child to find the clinic overcrowded or no vaccine available. The family may move to another region of the country. Immunisation records can be lost by the health centre or the parents. The child's crying or side effects may put the parents off immunisation.

However, the recent successful campaigns have shown that by covering the country with temporary vaccination posts and mounting an intensive communications campaign to inform and remind the parents, many of these difficulties and constraints can be overcome.

Beating the heat

Equally essential for the mass success of Third World immunisation efforts have been the vast improvements in the cold chain in the last few years. Well-insulated cold boxes in which some 5 000 vaccine doses can be transported and stored safely for a week at an ambient temperature of 32 °C and portable vaccine carriers with a two-day cold life have made it possible to deliver vaccines with their potency intact to deserts and tropical forests, to high mountains and the most remote jungle village.

Unbreakable, irreversible thermometers and chemical card monitors that change colours enable health workers to determine with certainty whether, and when, a vaccine has been damaged through exposure to heat, light or freezing temperatures at any point between the pharmaceutical laboratory or factory and the immunisation point.

So, ministries of health know that if they can mobilise the necessary human resources, low-cost technical means exist to guarantee the delivery of potent vaccines to the most remote village.

No vaccine is totally immune, so to speak, from adverse reactions, but the risks of severe complications from the six vaccines are much lower—many hundred times lower—than the risks from the natural diseases in a society with a low vaccination rate.

Whooping cough — dramatic recurrence

A case in point was the unexpected re-emergence of whooping cough in Britain in the 1970s. Immunisation reduced the number of cases from 100 000 in 1952 to 10 000 in 1962. But then, as a result of alarmist articles in the press attacking the pertussis vaccine as dangerous, the proportion of vaccinated children in the UK fell from 70% in 1974 to 30% in 1978. The worst outbreak of whooping cough in 20 years then swept Britain. Between 1977 and 1979 there were some 100 000 cases and 36 deaths.

Polio — stark contrast in case numbers

Nowhere is the contrast between health conditions in the two worlds, developed and developing, so stark as in the incidence of polio. The Sabin and Salk vaccines have virtually eradicated polio in industrialised countries, while 25 or 30 years after their discovery some 265 000 children in developing countries are still crippled every year.

In the United States in 1952 there were over 20 000 cases of polio, but in the last several years, there have been only 10 to 12 cases a year, for most

Annual under-five deaths, developing countries, 1987 (*)

14		ountries, 1987 (*)
13	Diarrhoeal diseases 5 million (also a major cause of malnutrition)	Of which approximately 3.5 million were caused by dehydration which could have been prevented or treated by low-cost action using ORT.
11		
10		
9	Malaria 1 million	Can be drastically reduced by low-cost drugs if parents know signs and can get help.
9 8 7 6 5	Measles 1.9 million (also a major cause of malnutrition)	Can be prevented by one vaccination, but it is essential to take the child at the right time – as soon as possible after the age of nine months.
5	Acute respiratory infections 2.9 million	0.6 million whooping cough deaths can be prevented by a full course of DPT vaccine – most of the rest can be prevented by low-cost antibiotics if parents know
4		danger signs and can get help.
3	Tetanus 0.8 million	Many of which can be avoided by prenatal care, breast-feeding and nutrition education.
2	Other 2.4 million	Neonatal tetanus kills 0.8 million. Can be prevented by immunisation of mother-to-be.
1		
1 s	Of the 14 million child IO million are from only	deaths each year approximately four major causes and all are now low-cost actions by well-informedats.

third of all child deaths

Source: WHO and UNICEF estimates.

(*) For the purposes of this chart, one cause of death has been allocated for each child death when, in fact, children die of multiple

causes and malnutrition is a contributory cause in approximately one

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part imported cases, or related to the vaccine's inherent risk.

The vaccination of all children continues to be necessary, however, since the threat of the disease persists. This was demonstrated a few years ago in Holland where 110 persons belonging to religious sects which refuse vaccination were victims of poliomyelitis in 1978.

As for tuberculosis, in the course of a lifetime each untreated patient is

cases have fallen from 43 000 in 1960 to 3 000 in 1972. In the developing world diphtheria is the least well documented of the six diseases, and threatens in the absence of immunisation to emerge as an epidemic disease.

Tetanus — statistically overlooked

A particularly deadly disease for children is tetanus. Neonatal tetanus is



Tragic evidence of how, when it does not kill, measles can maim. The lives of these Sudanese children were spared, but the disease left all three of them blind

likely to affect 10 or 20 other persons.

Immunisation has triumphed in industrialised countries, but it is a victory that must be repeated. Several challenges remain, most notably in improving the health profession's and the public's acceptance of immunisation where a disease may be perceived as being benign. This is the case with measles and rubella in several countries, even though the cost-benefits of these vaccines have been demonstrated. When a disease has been controlled through previous immunisation efforts, its severity tends to be forgotten and so it is allowed to return.

Diphtheria — the threat of an epidemic

Until the use of the 1923 Ramon vaccine became widespread in 1945, there were 20 000 to 40 000 cases of diphtheria in France alone every year. Only 20 cases have occurred there in the past decade, usually among children with no or incomplete vaccinations. In Europe as a whole, diphtheria

usually fatal. Giving pregnant women two doses of tetanus toxoid before they give birth is the most effective preventive measure.

An estimated 800 000 children in the developing world die of neo-natal tetanus every year, making it the worst child-killer after measles.

And yet tetanus immunisation is remarkably effective. During World War I there were 13 cases of tetanus for every 1 000 wounded men in the US Army. In World War II out of 2 700 000 wounded American soldiers, only 12 developed tetanus, and six of them had not been vaccinated.

"Don't count your children until the measles has passed"

Easily the most murderous of the six vaccine-preventable diseases is measles. People in many developed countries shrug when they hear the word, and look upon measles as a minor inconvenience. Everyone gets it but gets over it. However, even in the richest countries a child with measles

can develop complications such as ear infections, pneumonia and encephalitis (inflammation of the brain), and a small number do die.

The number of proverbs attests to the seriousness with which people in developing countries regard measles. "As long as your child has not had measles", says a Mali adage, "you have no child". An Arab maxim says, "a child who survives measles is a child re-born". And a Persian proverb warns that "smallpox will make your child blind, but measles will send him to his grave". Still another Arab saying suggest, "don't count your children until the measles has passed".

Of the more than two million children who die of measles throughout the developing world, just over half are to be found in four countries with very large populations: India, which alone lost 650 000 children in 1984, and Indonesia, Bangladesh, and Nigeria, which together lost 450 000.

Costs and funding

Generally speaking, it is UNICEF, WHO, the United Nations Development Programme and the industrialised donor nations which furnish most of the vaccines, syringes, needles, cold chain equipment, vehicles and training to the developing countries, or about 20% of the cost of immunisation. The governments of the developing countries pay 80% of the costs in the form of salaries for health staff and operating expenses.

For the foreseeable future, 100 million children will need immunising every year in the developing world. Since it costs about \$ 5 to immunize a child fully against the six target diseases, the amount required annually is approximately \$ 500 million.

"Can we see to it", asks Dr Ralph Henderson, EPI's Director "that no child is killed or crippled or retarded by the lack of \$ 5 worth of immunisation? We have no choice but to try our best. For it is a sad indictment of our planet's civilisation when children are allowed to die in such numbers from simple things like whooping cough or measles or be crippled by preventable polio. In a truly civilised world, there could surely be few appeals as powerful to both heart and mind as the appeal to provide the protection of immunisation for all children."

P.R.

Cereals marketing and food security Liberalism or intervention: a false dilemma

by Marc FRANCO (*)

Over the past few years, a lot of attention has been focused on the problems of the food security of the peoples of Africa by both political leaders and academics as well as public opinion, largely due to the famine and malnutrition that hit many countries of Africa in 1984-85. Going beyond the cyclical nature of the phenomenon of drought and crisis, more fundamental issues were discussed — the extent to which the African nations could feed themselves, for example, and the food and agricultural policies that were needed to boost their degree of self-sufficiency.

Increased food production is an obvious forerunner of any improvement in food security. But increasing production by extending the area under staple crops is only a short-term answer, as, in the long term, it is likely to create more problems than it solves, perhaps being achieved to the detriment of the nation's ecological or economic balance. In most countries of Africa, there is very little good earth still available, as expanding populations and diversified crops have encroached on most virgin territory and even the fallow land.

One solution - higher yield...

Ultimately the only solution is to intensify and increase yield, a much more complex process than boosting production by bringing more land under cultivation. Providing the peasants with higher-performance technological packages, even if there were any, would not be enough. These peasants have actually to adopt the new ideas. That is to say they have to alter their methods of farming and work organisation and agree to invest in input and equipment - all the more difficult in that most of them are still using traditional methods, which means they are part of a traditional way of life and governed by the sort of rules and behaviour that cannot be reduced to technical rationality or modern economics.

So, since there is a considerable effort to make, all the conditions of technical efficiency and economic profitability have to be there to contribute to the success of the operation. This means minimising the risks run by the peasant, who has to be able to work in as stable an environment as possible. Economically speaking, the biggest risk is that prices will collapse because of either excess production or cheap imports. Market stabilisation, combined, where appropriate, with protection against cheap imports, is a vital part of the process of boosting yield.

This argument may trigger two opposing attitudes:

1. The free-traders would say it was false, claiming that it is in every coun-

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try's interest to make the most of the possibilities of world trade and the low price of imported food in spite of the competition with more expensive local products. And any official intervention is less effective than action by the private sector.

2. The interventionists would claim that self-sufficiency must be achieved at any price and the official and semi-official bodies must ensure that the peasant gets a remunerative price, even if this means heavily penalising the consumer or the tax-payer.

A debate has emerged over the past few years between two opposing factions, each of which has been trying to point out the flaws in the other's argument. But it is dangerous to run these debates like religious wars, at the level of principles. Each impassioned salvo produces more smoke than light and a more pragmatic approach, based on realistic positions and taking account of the special situations of the different countries, is essential.

... through a stable market

These realistic positions taken up in the light of either experience or a finer interpretation of theoretical principles could be as follows.

A. The theory of comparative advantage which is behind the free trade reasoning should be interpreted with care. First of all, it is wrong to assume that the theory means there is no point in producing goods locally if they can be imported cheaper. The theory is couched in relative and not absolute terms. There is always a question of another solution and only when food

production is the country's relatively less ineffective option should imports be envisaged. Second, the point of reference of the free trade position is the price on the world market. The price of basic food products fluctuates in what is often a violent manner and this may, as it is particularly with cereals at the moment, be the result of the main producers dumping their surplus stocks. This sort of price is an unreliable reference for a nation's food policy. And even if a reliable reference price can be established, a simple comparison between this and the domestic price is not valid because it ignores the dynamic effects (productivity increases in particular) which may be aimed at and would make it possible to produce more and sell cheaper in the future.

B. Nonetheless, the interventionists should not forget that market protection has its price. Ultimately, someone, be it the consumer or the taxpayer, will have to pay. Even if the present cost is offset by potential gains in the future, the cost to the present generation may be exorbitant and insupportable — either nutritionally or from the point of view of balancing the budget.

C. Lastly, it is wrong to say that, by definition, the official or semi-official structures are less efficient than the private sector. Each has its part to play. Obviously there are examples of inefficient and very costly intervention structures. And it is also true that this type of structure is particularly prone to the misappropriation of funds and to confusion between public

and private monies. But generalisations are dangerous. The official and semi-official structures have their part to play, especially in situations where the free market does not work (properly).

The market machinery has to be altered to avoid or limit exploitation of the countryside and speculation on the consumer markets by one or two big businessmen. Such intervention is also needed to maintain buffer stocks at an adequate level and stabilise producer and consumer prices. Official and semi-official structures have done this job (and very often efficiently) for export crops (cotton, coffee, tea etc) in most countries, thereby contributing to their agricultural (and general economic) development. They should be able to play a similar part with food crops.

However, the desired degree of stabilisation or protection and the best ways of achieving them have yet to be defined. A practical discussion of the targets and ways of reaching them is far more useful than a debate about principles. It should be in terms of a comparison of the cost-benefit of the various solutions envisaged and of their effect on the different sections of the population, so the partners (Governments, interest groups and donors) can design the most suitable policy.

Pragmatism rather than rigid principles

This is the way problems of this kind have been tackled within the framework of ACP-EEC cooperation. Many ACP countries have had cereal marketing problems to cope with and, paradoxically enough, it has been more difficult from the point of view of economic management to handle surpluses than shortages. Although the situation in many of these countries is different, their problems have been remarkably similar:

- inefficient management;
- local markets already running a surplus upset by low-cost imports;
- financial difficulties on the part of the product marketing boards;
- macro-economic difficulties, budget restrictions etc.

The Governments' rationalisation and recovery policies (designed with or without IMF or IBRD help) have usually included measures to liberalise the cereals market, reorganise the boards and promote private involvement in the sector. The well-foundedness of this policy is in no doubt. In many cases, intervention structures (often with the status of public monopolies) in the food sector have been inefficient and expensive. Better methods of intervention must therefore be

found and the extent and pace of the relevant reforms defined in the light both of the demands of stabilisation-protection and the nation's economic and budgetary situation and of the interests of the various socio-economic groups concerned.

So, particularly within the framework of the food strategies, the Community is forced to help the countries design and run reforms that reflect their own development aims and priorities — in spite of the fact that other funders may be pressing for farther-reaching or faster reforms. Negotiation with the Governments and other funders has proved that it is possible to find pragmatic, realistic solutions if the discussion of principles is replaced by a discussion of the practical aspects of the problem in hand. Here are one or two examples.

Examples

Mali. Results obtained in this country with the cereal market reorganisation programme (PRMC) have been generally deemed to be satisfactory. Cereal marketing has gradually become more liberal, the marketing board (OPAM) has been reorganised, prices are more stable and the gap between the official price and the freeprice has narrowed. But in years when there has been a surplus (and cheap imports), the board has not avoided mounting financial problems. So pressure has been brought to bear to liberalise the market further and abolish the system of a minimum guaranteed price. This sort of measure would be particularly unwelcome for rice, as a major Niger Office (the nation's biggest hydro-agricultural scheme) reorganisation programme is about to start. Free trade in rice would have exposed the producers to the particularly low levels of the imported product and discouraged any attempt at the intensification needed to make the programme a success. Negotiations between the various partners led to a general relaxation of positions, with the Government agreeing to the principle of intervention according to the means available and the World Bank agreeing to the need to continue ensuring the rice producers got a remunerative price.

Kenya. Since the colonial era, cereal marketing in this country has been in



Growing rice in Mali

"Free trade in rice would have exposed the producers to the particularly low levels of imported rice and discouraged any attempt at the intensification needed to make the (cereal market reorganisation) programme a success"

the hands of a semi-public organisation, the National Cereals and Produce Board (NCPB). In spite of a series of reforms, difficulties, particularly financial ones, have mounted over the past few years, primarily because of the inadequate margin between the producer and the consumer prices, excessive stocks (and storage costs) and losses on both imports and exports of cereals. A new programme of reform, aimed at liberalising the market and reorganising the Board, was produced five years ago with World Bank support, but the situation at the time (a poor harvest) and the projected speed of liberalisation were such that the programme was difficult for the Government to accept. The blockage of the negotiations between Government and donors was relieved by new, pragmatic proposals (emerging from a Lomé IIfinanced study) involving, practically speaking, careful, gradual liberalisation and stressing the importance of the financial reorganisation of the Board. These proposals could well be put into practice by a combined Government-donor drive. The Community's proposals for assistance, through the indicative programme and other instruments of cooperation, are being drawn up.

Cameroon. Difficulties have arisen in the rice sector in Cameroon over the past few years. Existing facilities in the north (SEMRY), which give excellent yields, have found it difficult to sell the product on the national market because of good rainfed rice output and competition from cheap imported rice. They also lost their regional market when the Nigerian frontiers closed. Bad sales and the cost of storing surplus stocks are behind the considerable financial losses that the Government, with its budget problems, is no longer able to cover. This is a threat to the drive to boost food security in the north, where hydro-agricultural developments are the key. A series of measures — on protecting domestic production, reorganising rice production and consolidating and extending the production infrastructure - were devised at the negotiations which the Community and the Government held on continuation of the rice production investment programme.

Ethiopia. Food problems here are acute and the Government has embarked on a process of agricultural



Ethiopian farmer inspecting wheat

"Emphasis in EEC-Ethiopia cooperation is on developing family holdings — for which efficient marketing conditions are vital"

modernisation. The arrangements for this and the role of the Agricultural Marketing Board (AMC) especially, are being actively discussed in Ethiopia and between the Government and the donors.

The problem as far as the AMC is concerned is not so much financial as its role in relation to private business and the price levels used.

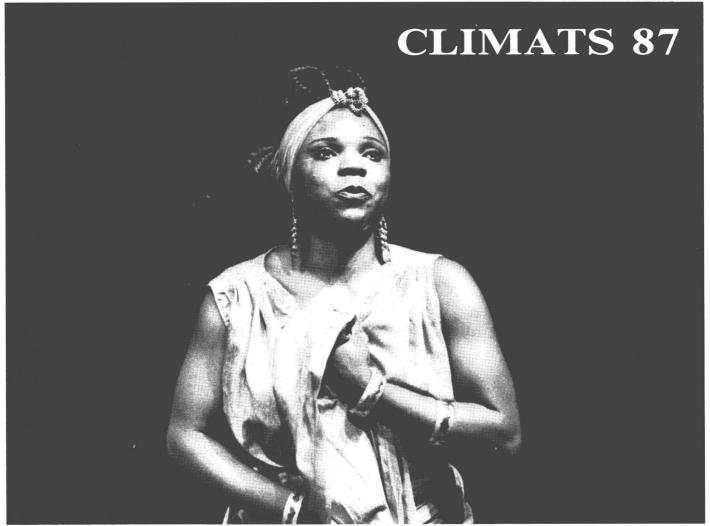
Emphasis in EEC-Ethiopia cooperation is on developing family holdings—for which efficient marketing conditions are vital. In this context the EEC has assured the Government of its support for the development of family holdings within the Government programmes aimed, in particular, at improving marketing conditions and enabling the farms to sell their output at profitable rates. This approach is not inspired by philosophical principles. The idea, a pragmatic one, is to make an effective contribu-

tion to the agricultural development of the country by helping it to make the most of its rural development potential. Discussions are leading to a series of Government marketing measures and this should mean that the regional development programmes (PADEP) financed by the various donors can be speeded up.

These few examples illustrate the Community's cooperation policy in various parts of Africa. They show that, in most cases, grounds for agreement on cereal marketing policy really do exist. Extreme solutions, be they in the way of free trade or of intervention, are likely to lead to political and economic failure. Only pragmatism, on a sound economic basis (i.e. viability), in line with the aims of the country in question and respectful of its development priorities, offers the right conditions for a successful development policy.

M.F.

TULTURE & THE



A scene from the play "I, widow of the Empire"

Festival in Brussels - dialogue between the cultures

by Pierfranco ALLOA (*) and Issa BEN SAÏD DIA (**)

Belgium - and Brussels, Louvain-la-Neuve and Namur particularly — was the scene of a 13-day meeting (27 October to 8 November 1987) when intercultural expression, interdependence and dialogue were the order of the day. This was the CLIMATS festival, which was run with financial aid, in particular, from the European Community.

CLIMATS was the evocative title of a wide-ranging programme of films, literature, music, art and drama from Black Africa.

It was two weeks of culture shock and cultural enigma, with African films and a conference on the African cinema; on stage, Ghelderodian sorcerers and the famous Cleopatra seen in an entirely Africa light (see inset), and the mirror game, seeing and being seen (see inset), and jazz from brass and sculpture from bronze...

Every genre was there, with 15 countries on the pro-

gramme, the A to Z of Africa, quite literally, from Angola to Zaïre, through Benin, Burkina Faso, Cameroon, the CAR, Congo, Côte d'Ivoire, Guinea, Mali, Niger, Nigeria, Senegal and Togo.

The welcome extended to such varied artistic expression from such a range of African countries, the fact that they were side by side and there for European producers to see revealed a kind of link between forms of art that were seemingly far apart. The CLIMATS formula led, symbolically, to the enrichment and interaction of different cultural sensibilities. The West, sick of material wealth, is seeking simply to find a more human level, while a materially much less well off Africa offers the North different interpersonal relations in a society rich in symbolic value.

In our time, when even the planet is no longer a boundary, in spite of enormous progress with telecommunications, it is still difficult to tune in to other people's culture. But it is vital that we should do this.

This is certainly something that the Belgian festival organisers realised.

^(*) Assistant with the Directorate-General for Development. (**) Audio-visual expert, Brussels.

Rocado Zulu Theatre

in "Widow of the Empire" by Sony Labou Tansi

Sony Labou Tansi, the Congolese playwright, takes another look at history — the assassination of Julius Caesar. Not just the ambition that urges Oko-Navès and Oko-Brutus to kill the potentate, but the desire to conquer the proud, intransigent Cleopatra who rejects them.

Shakespeare would no doubt have approved of this drama, because the metaphors of human behaviour are timeless. Yet neither history nor literature repeat themselves. The executioners will not control Cleopatra, the Woman and giver of Life and Death and the keys to the omens, by murdering the tyrant. Being may be crushed, but not the archetypical being.

Sony Labou Tansi writes with all the lyricism of the fighter. He digs abysses and fashions prophetic visions with rhythm and prose, a language that overturns norms and syntax, denouncing the ugliness of the world with models born of the African soil but with the sinister echoes of the universal. Never is the playwright content to "Africanise" Shakespeare or Roman history. His is a genuine synthesis of western scene and African village fête, achieved in a form both new and time-honoured. "Supposing we were all Romans...", he says.

Sony Labou Tansi

This former English teacher, born in Congo in 1947, has been director-producer of the Rocado Zulu Theatre in Brazzaville since 1979. He has written novels and short stories and is a recognised playwright, many of whose plays have been staged abroad. Several of his plays have been put on in Paris — "La Rue des mouches" at UNES-CO, "Je soussigné cardiaque" at the Chaillot National Theatre and "La parenthèse de sang" at the Espace Kiron.

The Rocado Zulu Theatre of Brazzaville

A number of troupes merged to form the Rocado Zulu Theatre in 1979. It has gradually made a name for itself in Congo and abroad and now is one of the best-known troupes outside the continent.

After putting on the works of Congolese writers, together with Aimé Césaire's "La Tragédie du Roi Christophe" and collective creations, Rocado Zulu is now concentrating almost entirely on the works of its director, Sony Labou Tansi.

It took "L'Arc en Terre" and "La Rue des Mouches" to the International Francophone Festival in 1985 and "Antoine m'a vendu son destin" in 1986.

"Intersignes"

This was Climats' way of creating conditions in which writers of Belgium and Africa could come together. The aim was to break down the concept writers have of periphery and thus, inevitably, centre. Why not let writers actually look at each other instead of contemplating with one-way gazes?

The four evenings were designed to enable authors to get to know each other, provide enrichment for each other through their common love of writing and in this way to go far beyond their Belgian, Cameroonian, Congolese, Guinean and Senegalese origins. They were as follows:

28 October: Michèle Fabien, dramatic author and Sony Labou Tansi (Congo), novelist, playwright and poet

29 October: Jean-Claude Peritte, novelist and poet and Yodi Karone (Cameroon), novelist

30 October: Anne Richter, short-story writer and essayist and Aminata Sow Fall (Senegal), novelist

31 October: Jean-Pierre Verheggen, poet and Williams Sassine (Guinea), novelist.

Getting each author to talk about the other's work, playing the part of a mirror, was sometimes to fend off unease or complacency. And it was also focusing on the essential — often neglected at other literary meetings — which is the unique and the universal facets of the novels, the poetry and the drama.

The evenings were a time for exchanging signs and knowledge and affinities and pointing, if need be, to obscurity and misunderstanding. And these signs, which were perceptible through public meeting, pointed the way to the works and to fresh discovery.

Michèle Fabien and Sony Labou Tansi: It might have been the antipodes. One bubbly and sensual. The other more conventional and intellectual. One revealing the lesions of a frighteningly conscious South in its profusion and the other baring to the bone the myths, ancient and modern, of an introverted North. But the dichotomy may be an illusion.

Jean-Claude Pirotte and Yodi Karone: Prison, break-down and exile, internal and physical. Minotaurs to run from or defy. What was the point of bringing Pirotte and Karone together? Doubtless because of some of the themes they have in common — isolation, self-seeking, an acute awareness of social straightjackets and the incoercible, primordial need for freedom.

Anne Richter and Animata Sow Fall: (Aminata Sow Fall): Uncompromising, the light emphasising the angles. Social reality is a comedy, yet not really a joyful one, in Dakar today as in the Paris of Balzac, so let us wipe off the make-up and return their confiscated language to the players.

(Anne Richter): A love of shade, lengthily tracking confusion. Fascination with the Germanic realms of dream, counting the cards of modern fantasy in her feminine wiles.

Jean-Pierre Verheggen and William Sassine: Are Zorro and Zeheros so different? Not in writing, of course. The Walloon writer works the language, chipping away at its every corner. The Guinean's approach to his story is calmer. But both poet and novelist are aiming, without false modesty, to scour the language clean when untruth has fossilised it. 0

The collection and preservation of ancient Arabic Manuscripts in Nigeria (*)

by Dr. Ahmed Mohammed KANI (1)

"The largest number of ancient writings in Arabic characters in sub-Saharan Africa is, very probably, to be found in Nigeria. Although there is no bibliographical information in the shape of catalogues, cards or specialist journals, a random look at the resource centres and archives across the country reveals many literary works written in Arabic. Literature in Arabic has in fact been shown to have flourished in Nigeria since the 15th century, with works by such learned men as al-Imam Jalal al-Siyuti (1505) and Muhammad Kanim al-Maghili, a contemporary of al-Siyuti, being spread. And further proof of the fact that Arab writings go back a long way in this part of the world is the Asl al-Wangaralwiyyin manuscript, by an anonymous author (1650-55), and the Mahrams of Borno.

Since 1958 both individuals and academic and public institutions in the country - the University of Ibadan, the Jos Museum in Jos, the Ahmadu Bello University's Northern Historical Research Project in Zaria, the University of Bayero in Kano, the Sokoto History Bureau and, recently, the Islamic Centre at the University of Sokoto - have been making a concerted effort to find, preserve and classify this material. The activity of the various centres has been stimulated particularly by research and teaching programmes in the departments of history. Arabic and Islamic studies. which use the material. But it perhaps comes as a shock to learn that most of these Arabic documentation centres (other than the Ahmadu Bello University's Northern Historical Research Project and the Islamic Centre at the University of Sokoto) have already closed down or are about to do so. Reasons for this sad situation vary from one place to another—cadres on some projects may be unenthusiastic or Government staff may feel that any investment in Arab literature and archives programmes is a waste of money. And red tape hinders sincere work by researchers anxious to find, preserve and document material. The case of the Sokoto History Bureau is worth noting here. In spite of opposition from the Director and leading figures such as the Warizin of Sokoto, Dr Jinaid Muhammed al-Bukari (whose collection. preservation and documentation in the field of Islamic history has been an unparallelled contribution to Nigeria's cultural heritage), the Government of the State of Sokoto decided to dissolve the Bureau in 1984 and thus subordinate its work to some other cultural activity. such as annual festivals. In the early '60s, the work of the first documentation centre in the Ibadan University library virtually had to stop because the University authorities were not interested in it and, to the best of my knowledge, both the Arabic resource centre at this University and the research bulletin have ceased to operate. The Kaduna State History Bureau disappeared after only a year - without having made any cultural impact on the immediate environment. And another serious problem hampering the work of recovery is the shortage of qualified archivists to make a professional job.

Collecting manuscripts

It is worth noting here that much of the literature written in Arabic characters by the ulemas of Nigeria is still in the hands of individuals. Language problems and cultural barriers and the ulemas' lack of confidence in the researchers are much to blame for the difficulty the Northern Historical Research Project has in laying its hands on this precious material. The work carried out since 1979 has gone beyond Nigerian borders into the Republic of Niger. Systematic research is being run in the former North-Eastern State, with particular stress on the Borno and Bauchi areas and trips into these parts have been useful in tracing the precolonial history of Borno and the Hausa country. In 1980-83, project research was transferred to

the State of Sokoto with a view to finding more manuscripts. In 1982, I managed to obtain more than 25 new manuscripts which shed further light on the intellectual history of the califat of Sokoto in the 1850s.

Preserving manuscripts

Special care is called for here. Manuscripts are usually kept in an ordinary room where atmospheric conditions vary. Some are even on open shelving. As far as I know, none of the manuscript collections in the academic or public institutions has any fire-control facilities to protect the documents in case of accident. Nor are there proper fumigation systems to protect them against destruction by termites or other insects. Weather conditions may also be harmful to paper and ink, but so far, alas, none of the curators have attempted to introduce any protection. It is well known that manuscripts, and old ones especially, will wear or tear if they are not handled properly - a problem facing almost all the nation's Arabic documentation centres.

Publishing and translating

Another subject of serious concern to the researchers is the publishing and translating of manuscripts. It is important to realise that very few of them have been published or translated, largely because of the shortage of specialists. And the fact that there is no large reference library in many cases makes translation pointless: it is well known that it is difficult to get a proper translation of a manuscript unless it has been properly published.

Recommendations

We must start by coordinating the work of collection of all the Arabic documentation centres in Nigeria, and in Africa in general, with a view to exchanging ideas, information and specialist knowledge in the field of collection and documentation. Then, organisations such as UNESCO must save the situation by setting up training centres for archivists and publishers of manuscripts. Third, priority must go to collection, particularly when we know that there are still thousands of manuscripts in private hands - and they are disappearing. And fourth, the long-awaited common catalogue of all Arabic manuscripts in Africa must be produced to avoid documentation centres working, as they do presently, in isolation." o A.M.K.

^(*) Extracts from one of several contributions, made in August 1986 to a Workshop-Seminar on "Arabic Manuscripts in Africa" in Bamako, Mali under the auspices of UNESCO. Text originally in French.

⁽¹⁾ Professor of History, Ahmadu Bello University, Zaria.



New horizons for West Africa's fishermen (*)

The high nutritional value of fish has been recognised for centuries. This is particularly so in the nations of West Africa, where it forms an important part of the diet. Here the fisheries sector not only provides a valuable source of food, it also contributes directly to the national economy and is a major source of employment.

Each year more than one million tonnes of fish are caught in the region. three-quarters of which is landed by local fishermen who often work from canoes. This provides up to 8.4 kg of fish per head of population, although annual consumption is estimated to be much higher, at nearly 15 kg per person. The deficit, approximately half the fish consumed, has to be imported, drawing hard currency that can hardly be spared.

But surprisingly this need not be so. Several surveys off the coast of West Africa have shown that the marine fish stocks are massively under-exploited, having the capacity to yield up to 1.7 million tonnes more fish each year. This increased exploitation, particularly of small pelagics, could provide a further 10.5 kg per person an attractive proposition in terms of improving both the general nutritional status of the population and the balance of payments.

Recognising this potential, considerable effort has been devoted by aid organisations to providing fishermen with the means of increasing their catches — motorised canoes, new nets and so on. However, such development projects have proved only partially successful because they require large capital investments and, more importantly, they often involve reorganisation of social structures within fishing communities.

More recently attention has been focussed on making more efficient use of the fish already caught rather than on increasing the catches.

This can be achieved in a number of ways, from promoting the use of traditionally neglected species to finding ways of saving the fish that trawlers discard as "bycatch" and, of course,

(*) Article provided by the CTA Information Service.

by improving methods of handling, storage, processing and marketing. Such initiatives usually involve the improvement and adaptation of existing traditional practices rather than the introduction of entirely new methods. As such they tend to progress more rapidly and the results are often longer lived.

Precise estimates of wastage vary, particularly between seasons when, for instance, processing techniques that might otherwise prove adequate are overstretched by a glut of fish which could prove valuable if preserved and stored for periods of less plentiful supply. Nevertheless, conservative estimates put the physical losses alone at 20%, representing an annual loss of 57 000 tonnes in the region as a whole. Add to this the bycatch discarded by trawlers - sometimes as much as 40% of their catch - and the figure rises to nearer 192 000 tonnes. This is equivalent to nearly 93% of Senegal's entire annual catch, and exceeds the combined catch of 11 of the other countries in West Africa.

Against this background the prospects for increasing the supply of fish are encouraging, but serious technical developmental and socio-economic barriers remain. A fuller understanding of the complexity of the fishing industry in this region is also necessary. For example, it is easy to appreciate that in most countries of West Africa the prime markets for fish are towns that may be well inland and that transport may be difficult. Less often understood is the fact that the fish may change hands many times on its way to the market, often being rehandled and reexposed to sources of contamination and decay.

The part played by women in smallscale fisheries is also frequently misunderstood or underestimated. While the canoes themselves are usually worked by men, it is women who are at the centre of the operation. The socalled "fish Mammies" control the processing and marketing of the catch and are often the prime source of credit, providing the finance for new outboard motors, nets and so forth and vet bringing up a family at the same time. Failure to appreciate this may undermine a project from the outset. No matter how efficient a new fish processing system may be, if it has to be operated communally or away from her centre of activity, it will generally prove unacceptable and will not find sustained use.

Perhaps the most straightforward wastage that can be tackled is the bycatch losses from trawlers. These are particularly common with shrimp trawlers where the value of the fish caught relative to that of the shrimps makes the fish uneconomical to land. Elsewhere, though, particularly in Central and Southern America, the bycatch is well utilised, providing significant quantities of fish to local markets. Again, developmental and technical solutions such as encouraging the use of the artisanal canoe fleet to trans-ship the bycatch, and developing low-cost, high-volume collection, handling and processing systems, are readily apparent. Much more difficult is the task of gearing these solutions to existing marketing channels and ensuring their acceptance by the fishing communities.

The scope for making better use of this previously under-utilised fish is limited by the same factors that restrict the value of increasing overall catches — the ability to market or preserve the fresh fish. One-fifth of the fish caught never reaches the consumer, reflecting its perishable nature, particularly in the prevailing climate of the region. The causes of such high losses are similar in most of the West African countries, although the relative importance of each factor differs according to geographical and cultural considerations. It is instructive to look in more detail at the losses sustained in one particular country - Ghana, for example.

The annual marine catch in Ghana amounts to some 200 000 tonnes, with artisanal canoe fishery accounting for about three-quarters of this total. A wide range of species is utilised, with pelagic species dominating the catch. Fish Mammies handle the vast majority of processing and marketing operations and are known to own many of the boats and equipment.

Only about 20% of the fish landed is eaten fresh and the remainder is preserved mainly by smoking in kilns. Hard smoking, which reduces the moisture content to around 10%, enables the processors to keep the fish for up to six months with regular light resmoking, perhaps as often as every four days to reduce blowfly and beetle infestations. Smoking is common throughout West Africa and the strong flavour it gives to the fish is also welcomed.

Sun drying and salting are also important techniques and, to a lesser extent, so are fermentation and frying. Fermentation is in many cases considered a last resort, used during periods of glut when it may be the only alternative to total wastage. Frying serves as a pasteurisation process allowing the fish to be kept for only a relatively short time. Generally the fish is processed close to the point of landing and then packed into large wicker baskets, covered with sacking and sent inland for marketing. Ghana is fortunate amongst West African countries in having hard surface roads along most of its coastline, so that transport from the coastal fishing villages presents no problems. In Sierra Leone, however, petrol for transport is in short supply, and in other countries roads are poor and fish has to be accumulated until there is sufficient to justify transport by boat. In Mali, for instance, fish can be kept for a month before there is sufficient to justify moving it to a buying centre.

At first sight, therefore, Ghana appears fortunate in having a range of traditional processing methods and a well-established marketing and distribution system. Why, then, do annual losses amount to between 20 000 and 40 000 tonnes of fish, worth up to 10 or 20 million US dollars?

Losses begin early in the chain since very few canoes carry ice, and space is cramped so that fish are crushed and bruised.

Ambient temperatures are high. If the catch is good then the fishermen return home and the fish is landed within about five hours. When fish are less abundant, though, the fishermen stay at sea until they have a sufficiently large haul. In the absence of ice, quality deteriorates rapidly. As well as the immediate effects, this loss of quality will also lead to drip loss and physical losses caused by fragmentation during smoking and distribution.

Once ashore, fish is generally smoked to arrest the deterioration, except, that is, during gluts when there is simply not enough smoking capacity and large quantities of fish are lost. The smoking and subsequent distribution involves regular handling and, again, considerable losses of fish fragments occur. Finally, insects attack the fish at every stage of the process. Blowflies affect the fresh and partlysmoked fish, and beetles attack the fully smoked or dried product.

The extent of losses from these factors is directly dependent on the speed at which the fish is processed. Thus under normal conditions losses are fairly small but during gluts they can be enormous. Elsewhere in West African similar losses occur but these are compounded by shortcomings in the processing methods themselves. Intense heat during smoking often chars fish close to the fire while fish further from the heat is insufficiently cured. Lack of basic hygiene in some fishing camps means that fish debris accumulates and provides an ideal breeding ground for insects and poor air flow through solar dryers leads to unnecessary putrefaction. Finally, when the fish has been processed it may be packed too tightly so that crushing occurs, or it may be stored and severe insect infestations may build up unchecked.

Many other factors acting alone or in combination may lead to losses and this brief overview is necessarily simplistic. Nevertheless it is clear that virtually all these problems would yield to technical, developmental or socioeconomic solutions. In many cases, though, a concerted effort is required and more often than not this will draw upon developments in more than one of these fields.

Technological advance is not the overriding need since solutions to most of the problems are already available from elsewhere. It is information, adaptation and application that are required. For example, kilns that smoke more efficiently and use far less firewood are already available;

what is needed is the technical and developmental support to introduce them more widely and ensure their full acceptance where they are already in use. An understanding of this, and that many of the problems are common throughout West Africa, provides a compelling case for regional co-operation.

Precise problems may differ from country to country and indeed from village to village, but overall there are a number of areas of common interest over the whole region where collaboration and pooled resources could bring about major improvements. Such an approach is not entirely novel; the Bay of Bengal Development Project for small-scale fisheries is an example of a highly successful regional fisheries project. It owes its success to many factors, but foremost among these has been the long-term commitment and collaboration of donors and the regionally-based project staff who have detailed knowledge of the countries' developmental problems.

The desirability of a regional project in West Africa has been highlighted by the outcome of CTA's efforts in this area. These were, firstly, the funding of a joint study undertaken by the Centre d'Etude et d'Action Sociales Maritimes (CEASM) in Paris and the Tropical Development and Research Institute (TDRI) in London (now part of the new Overseas Development Natural Resources Institute), and then through the translation of a major TDRI technical document from English to French. This study led to a three-week meeting on the issue in Dakar in November 1986 and to a meeting of the Directors of Fisheries from 15 West African countries in Banjul last October, both supported financially by CTA. Detailed studies have suggested that a regional programme could aim conservatively to increase the per capita availability of fish by at least 0.5 kg per year over a ten-year period, and there seems every sign that the countries of West Africa are ready to work together in achieving this.

If the causes of wastage can be tackled and the efficiency of the handling, processing and marketing of fish improved then once again attention may be focussed on the opportunities for bringing more fish ashore. o



Criticise bad management

The Courier often talks about under-development but it never mentions the bad management of some of the existing régimes.

Tell the whole world about the Governments that make a bad job of using the funds they are granted. Criticise them and get them to wake up to the seriousness of the problems.

Kodji Blowoussi Aziadou, Lomé, Togo

Changing and adapting the institutions

Is it really possible to talk about development without mentioning the institutions that govern the countries?

As far as the developing countries are concerned, I think, the institutions that need to be altered and adapted are also — and maybe above all — one of the keys to development.

Are not the African countries' institutions one of the main obstacles to development? And are we sufficiently aware of their importance and their scope?

Edouard Kouvinga, Reims, France

"Full of details"

Your No. 105 contained various articles that would be of use to Europeans interested in helping Black Africa. They were on:

- AIDS in Africa, seen by an African doctor;
- African cadres going home;
- what the catholic church thinks about the Third World debt.

But above all, I should like to say that the three articles on Rwanda are extremely valuable to our Association. The long study is full of up-to-date details and prospects and the catalogue of EEC schemes in Rwanda is a mine of information.

Paul Pistre, Toulouse, France

Comprehensive and enlightening

The Courier No. 103 was the first copy I've ever read. This was in a government department.

The "Dossier" column was well appreciated. What first struck me was the comprehensiveness of the reports that cut across geo-political and economic diversity.

As a regional planning and geography sophomore of the University of Cross River State, Uyo Campus, Nigeria, I find it very educative and enlightening. It blends well into my academic interest and its numerous write-ups have been very satisfying.

Iyang Dennis, Etinan, Nigeria

An eye-opener

Many thanks to you for making The Courier available to readers. Your magazine is very educative and I recommend it to all and sundry particularly those responsible for economic planning in developing countries. In particular your article on population (Courier No. 103) is an eye-opener to the problems of population in the developing countries.

However, in these days of unemployment especially among university graduates, I would like to see The Courier carry elaborate articles on self-employment and establishment of small-scale industries.

Basil Nworah, Onitsha, Nigeria

Setting the record straight

We should like to rectify something you said in the article on Côte d'Ivoire's Palm Plan as an example of successful agricultural diversification, which appeared in No. 106 (November-December 1987). The palm scheme was not in fact run with the help of the IRAT, which works mainly with annuals, but of the IRHO, the Oil and Oilseed Research Institute (France), which is still providing technical back-up for Palmindustrie, the body currently responsible for the Ivorian palm scheme.

This technical assistance covers both the agronomical side of things and crop protection and the supply of highly productive plant stock.

W. Wuidart (IRHO), Paris, France

Astonished

I read No. 106 of The Courier with interest. However, I was astonished to see the chart on page 19. Why refer the population of the USSR to Europe? I would have thought the population of the EEC was more to the point.

The fact that the source is the World Bank does not console me in the least. Quite the contrary. Particularly if it fails to use the French language properly ("hausa" and "inhabitant", for example).

Daniel Vincent, Rhode-St-Genèse, Belgium

The Courier for a people's library

I am a missionary here in Tankesse, a village in the interior of Côte d'Ivoire.

I have read a number of issues of your review and very much appreciated the dossiers and other reports on development cooperation in the countries of Africa.

Our mission would like to provide a local library for the village.

Readers would include one category which would be particularly interested in the review — young school leavers whom the Government has invited to go back to the land and settle in the village environment.

The Courier stimulates thought and action and is therefore very suitable for young people who want to learn about agriculture and rural development in general.

Missionary at Tankesse, Côte d'Ivoire

CDI operations

Your review is very useful, particularly the details of the ACP-EEC cooperation schemes run by the Centre for the Development of Industry.

I should like to take this opportunity of congratulating you and offering encouragement for the effort The Courier is putting in spreading information more widely.

Sadibou Diouf, Dakar, Senegal

ANALYTICAL INDEX (1985-1987)

Note: This index does not include the CDI pages, the Books Column, the News Round-up (with exceptions) nor the Operational Summary.

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THE CONVENTION AT WORK

"SADCC can make it"

The 1988 SADCC Consultative Conference was held on 28 and 29 January in the green and undulating countryside of Arusha in Tanzania. The Conference, which was chaired by the Hon. P.S. Mmusi, Vice-President and Minister of Finance and Development Planning of Botswana, was officially opened by Ali Hassan Mwinyi, President of Tanzania and replies to the opening address were given by P. Koshelev, Deputy Chairman of the USSR State Committee for Foreign Economic Relations, the Rt Hon. Joe Clark, Canada's Secretary of State for Foreign Relations, Mr E.V. Jaycox, Vice-President, Africa Region, of the World Bank and by Chris Patten, the UK's Minister of Overseas Development. Thirty-seven cooperating governments from Algeria to Peru, Bulgaria to New Zealand, took part in the two-day Conference, as well as 33 cooperating international agencies. Liberation movements from Southern Africa, the ANC, PAC and SWAPO, attended as observ-

Last year, for the SADCC Conference in Gaborone, a handsome brochure was produced, mainly for the business community which was invited to hold a seminar on investment and development opportunities just before the main meeting. This year, a similar meeting, with even higher attendance forecast, was held about ten days later in Harare, Zimbabwe. The title of the brochure was "SADCC can make it" and its title has been adopted, without any apology, to encapsulate the atmosphere at the 1988 Conference. SADCC's cooperating partners represent the entire spectrum of economic, social and political organisation. SADCC Member States themselves differ widely in their social and economic outlook. And yet, there was a note of optimism, tempered with realism, which marked the whole two-day session. Speaker after speaker admitted that the world economic outlook was unpromising. President Mwinyi pointed out that "the outstanding debt for the nine SADCC member States increased from US \$ 12.95 bn in 1984 to US \$ 14.64 bn in 1985". The aggression and destabilisation of South Africa had reached new depths of venom and arrogance: the terms of trade were still weighted against the exports and potential of SADCC member countries; and GDP growth was expected to increase by

only 2.4% in 1988, while population growth would increase by 3.2%. But speaker after speaker also praised the aims, organisation and achievements of SADCC, and at the end of the day SADCC Secretary-General Simba Makoni was able to announce "more than US \$1 bn in additional pledges" as well as significant shifts towards the SADCC position on a number of matters of vital concern.

SADCC and the wider world

Four main speakers, representing the wider world, underlined SADCC's growing international significance. The Soviet delegate chose Arusha as a platform to announce that "economic reforms, amounting almost to a revolution" inside the USSR would result in a profound shift of emphasis in that country's economic relations with developing countries. While the nature of the "revolution" and the shift of emphasis were left undefined, it is a measure of the importance of SADCC that the intimation of changes to come was made in that particular forum. Mr Jaycox, the World Bank's representative, began his contribution with the re-statement of his organisation's strong line on structural adjustment, and the need to involve the private sector more fully in the economic development in sub-Saharan countries. But, he added, the second imperative was "increased economic cooperation among African countries, and, eventually, integration of African market economies". Many obstacles, he added, stood in the way of such integration. The existence on the continent of 65 international borders demarcating the region into 51 countries, of which 11 had populations of less than 1 million was merely a single one. Others included "political

resistance because of ideological differences and disputes about the sharing of expected benefits". In addition there were the "excessively inward-looking policies of national governments which have created inefficient production structures and which have discriminated against other African producers as well as overseas competition". The results of all this were "not nearly enough intra-African trade; markets that are too small: inefficient unofficial cross-border exchanges; costly excess industrial capacity in many countries; growing dependence on non-African sources for food; and increasing unemployment and poverty". Then, Mr Jaycox said, "cooperation is not easy. But... fortunately we have a functioning example of how regional cooperation in Africa might work: SADCC. It has already achieved some substantial successes at several broad levels". These successes concerned "specific project implementation, the nurturing of a genuine regional identity and the ability to garner international support and understanding". Further, said Mr Jaycox, "SADCC has avoided the pitfalls of creating a large bureaucracy and has been active in fostering cooperation at the level of the private sector".

To these expressions of solidarity and support from East and West was added a concrete gesture from the North. Uffe Ellemann-Jensen, Danish Foreign Minister, speaking on behalf of the Nordic Group of countries, pledged US \$ 450 m to SADCC in the years 1988-92, bringing total Nordic ODA (Official Development Aid) to the region up to US \$4 bn. He then announced the creation of a joint Nordic/SADCC fund, totalling US \$ 32 m. to assist joint ventures in the SADCC region — the NORSAD Fund - with Nordic participation in obtaining access to foreign exchange needed, for instance, for the import of spare parts. This, he explained, was the response to the region-to-region dialogue instituted to identify obstacles to in-



The tribune (from right to left): Mr P.S. Mmusi, Botswana's Vice-President and Minister of Finance and Development, who presided over the conference; Mr Ali Hassan Mwinyi, President of Tanzania and Mr Simba Makoni, Secretary-General of SADCC

creased trade and investment. Foreign exchange shortages were identified as a major constraint. The NORSAD Fund was an initiative designed to mitigate the problem.

It was the South, especially South Africa, from which no gleam of hope could be discerned. Chairman Peter Mmusi lamented that "our region has had no respite from the atrocities of the apartheid regime and its surrogates. In Mozambique, we have seen the so-called MNR intensify terrorist attacks on innocent civilians. The Homoine Massacre and the others after it, have demonstrated the bestiality of these bandits and their masters. In Angola, the South Africans reinforced their permanent occupation force in September 1987 to engage government forces in a major bid to save UNITA from defeat. We observed, in utter shock and disgust, the arrogance of P.W. Botha visiting his occupation forces in Southern Angola. Where else but in South Africa could the Head of State of one country visit the territory of another without the knowledge and consent of his counterpart? And the world remains mute. A major new South African offensive was launched last week aimed at capturing the strategic town of Cuito Cuanavale, thereby completing the South Africanisation of Southern Angola".

Chairman Mmusi paid tribute to the people of Angola and Mozambique who were in the firing line for the "defence of not only their independence, but ours too!" And he went on to plead with the donor Community not to shy away from investing in development because of the security situation, "we cannot accept that development should be indefinitely postponed by this factor... Development and security are mutually supportive and go forward hand in hand". His call did not go unheard. UK Minister Patten announced an increase in military assistance, in training and supplies to the armed forces of four SADCC Member States. And, during a press conference held after the closing ceremony, Commission Development Director-General Dieter Frisch announced that the EEC was actively considering the provision of non-lethal logistical aid — "clothing, food and spare parts" - for the defence of development projects.

SADCC and the EEC

Dr Volkmar Koehler, Germany's Parliamentary Secretary for Foreign Affairs, was the President of the Council of the European Communities for this Consultative Conference. He highlighted four areas of direct concernn to SADCC and

its Member States. On South Africa, he stressed the twofold track along which the Community was advancing, with restrictive and positive measures. The Community's response to the ACP's Kingston Declaration (see Courier No 107, News Round-up, page III) was a positive one. "The request (for an ACP-EEC Council of Ministers meeting on the situation in South and Southern Africa) was carefully considered by the 12 Member States" said Dr Koehler, "and the ACP States have been informed that we are willing ... to hold such a meeting, at which the Twelve would be represented by the Troïka, which means the current President of the Council of the EEC, accompanied by his immediate successor and predecessor. As soon as we receive a favourable response from the ACP States to this offer. a time and place for the meeting ... will be fixed". On positive measures to aid the victims of apartheid he sketched the outlines of actions taken under the Article 953 provisions (see Courier No 107, News Round-up, page XIV) and added that ECU 20 m had been committed so far, for a total of 113 separate projects carried out through the selected non-violent channels.

Dr Koehler also spoke of Community responses undertaken in the last year to cope with the deteriorating situation in sub-Saharan Africa as a whole. He outlined the profound reforms of the Commission's food aid policy which, he expected, would ensure that food aid would henceforth be a developmental, and not just a remedial instrument, and pointed out the growth of triangular operations (see Courier N° 100 page 119

A tangible commitment, says D.G. Dieter Frisch

EEC Development Director-General Dieter Frisch, complementing the political statement made by Dr Koehler representing the Presidency of the European Council, gave a speech which included an array of figures to underline the fact that the European Community has, from the start, supported the efforts of SADCC to achieve its goal, and will continue to do so. Total assistance from the EEC to SADCC states during the 1980-85 period was over \$1500 million and from 1985-1990, it is estimated that the total allocation will be almost \$2 billion. Mr Frisch paid tribute to the use made by SADCC of funds going directly to the body "due mainly to the excellent work carried out by Dr Makoni and his Staff in Gaborone, as well as by the Sector Coordinators in the various Capitals". The commitment of funds had reached 50% in two years and Mr Frisch promised that "the initial amount... will be increased during a mid-term review that the European Commission will soon be making".

Mr Frisch went on to enumerate the major aspects of Community cooperation with SADCC Member States: Angola's \$45 million commodity import programme, Mozambique's \$52 million sectoral import programme, and Tanzania's \$120 million agricultural sector support programme among them. Here, too, he promised that in addition to what has already been allocated to the SADCC region, it is envisaged that all national allocations will be increased during the mid-term review that will also boost the purely SADCC financial component.

Concerning the theme of this year's conference, 'Infrastructure and Enterprise', Mr Frisch pointed out that since 1985, the EEC's contribution to transport infrastructure had totalled \$136 million, divided between the Nacala Railway (\$ 32 million), the Dar-es-Salaam - Blantyre Corridor (\$ 25 million) the Tazara railway (\$ 17 million) and the port of Beira (\$ 62 million). He added that "the recent development concerning the possible reopening of the Benguela Railway and the establishment of an outlet through the port of Lobito is being followed very closely by the Community. When the situation materialises, then Commission will consider contributing to the funding under the Lomé Programme for the repair and upgrading of the Corridor, possibly starting with rehabilitation work in the port of Lobito".

"In conclusion" Mr Frisch said "I would like to underline that the European Community will spare no effort in assisting the Southern African region to achieve its ambitions. In operational terms, the Community will continue its direct support, to SADCC and its member countries, for their development and to reduce their dependence on South Africa. We reaffirm our determination to work effectively for the eradication of apartheid which constitutes a violation of human rights and an affront to human dignity. For we fully accept that the goals of economic growth and development in the region can only be truly achieved by eliminating the main cause of instability and violence in the region, namely the intolerable apartheid system". o

for a description of these operations) which involved, among others, the purchase of ECU 6 m worth of Zimbabwean white maize in 1987. Dr Koehler went on to speak of the debt problem and the painful process of structural adjustment, which more than 30 African countries had now embarked upon. Here, too, the Community was making efforts to mitigate the harshness of the solution. Apart from individual Member States' efforts to cancel or soften the terms of existing debt (the UK had written off £ 245 million so far), the Community had increased to ECU 100 m its Commodity Import Programme for quick-disbursing id for debt-distressed countries. In some countries, the component in the Indicative Programmes of such aid would be allowed to rise to as much as 20%.

Finally, Dr Koehler looked ahead to the future of investment in the SADCC region, and to what Lomé IV might be able to contribute to its improvement. He mentioned the studies, joint ACP-EEC ones, being carried out by independent experts, on increasing and stabilising flows of private capital to ACP countries, and on the creation of a joint ACP-EEC investment insurance and guarantee scheme. Both reports were due before the summer, and their conclusions "would be taken into account during the preparatory work on the future ACP-EEC Convention, which is expected to start in the autumn".

SADCC: progress despite the obstacles

SADCC Chairman Mmusi, in his address quoted earlier, did not confine himself to enumerating the obstacles to SADCC's progress. On the contrary, he cited those obstacles in order to throw into relief the considerable progress notched up since the last meeting of the Consultative Conference. "In the transport and communications sector" he began, "major works on the Beira, Dar-Es-Salaam and Nacala Corridors have made steady progress and are beginning to bear fruit through increased traffic flows. Rehabilitation work on the Limpopo line is gaining momentum. The major new development in this sector is the launching of a Ten-Year Development Programme for the Lobito Port Transit System, addressing mainly the reconstruction of the Benguela Railway and rehabilitation of Lobito Port. In the area of civil aviation significant progress has been achieved in providing direct flight connections by our national airlines between our national capitals. It is no longer necessary for any of us to use Johannesburg as a transit stop to our various countries. Those who do so, do it only for convenience rather than necessity!"

"In the energy fields, one power interconnection project between Botswana and Zambia was commissioned only last week, and the contract for the Botswana/Zimbabwe power interconnector will be awarded soon. A study on the strategy for the supply of petroleum products to the region has been completed and is being reviewed by Member States.

"In the food, agriculture and natural resources sector, a new strategy has been adopted which will address the major problems of the exploitation and conservation of natural resources and the environment. The implementation arrangements for the Regional Food Reserve Project have now been approved. A special Technical Coordination Conference for this project will be convened later this year to agree on allocations and commitment of resources".

With our new emphasis on investment, production and trade, the industry and trade sector now takes centre stage in the SADCC Programme of Action... Our dialogue with the business community, initiated in Gaborone last year, is continuing. Although it proved difficult to bring our business colleagues to Arusha, we have arranged for them to meet with us... on 8-9 February in Harare. The responses to our invitation are promising and we hope to have another useful exchange with them. We regard as vital the support of our official development partners in encouraging and facilitating your business communities to invest in our region". Certainly, as far as this latter was concerned, there were promising signs from many quarters. Canadian Foreign Minister Joe Clark promised that at the Harare meeting Canada would provide "almost as many businessmen as bureaucrats!

Secretary-General Makoni also stressed the business community's involvement in his final communiqué. The three major steps forward in the past year, and those he wished to bring to the Conference's particular attention, were the launch of the Lobito Corridor plan, the approval by SADCC of the policy document on Environment and Natural Resources, and the measures proposed and action taken in pursuit of the initiative on investment in production.

East, West and North, the world registered its moral solidarity with SADCC, as well as its faith in its economic future. To make the picture complete a change of heart was needed in the South. Independence for Namibia and non-racial, democratic institutions and governments

in South Africa were the common goal and the avowed aim of SADCC. And increasingly so of its partners who gathered at Arusha.

Tom GLASER

Also in the Yellow Pages

The Convention at Work

IV. ACP Group's 1988 programme

V. EDF financing

XIV. ACP Embassies

European Community

XVIII. Brussels summit

CORRIGENDA

Equatorial Guinea

An error in the title of the interview with Equatorial Guinea's Minister of Planning (The Courier N° 107) led us to confuse the present holder of the post with his predecessor. Equatorial Guinea's Minister of Planning, whose photo we published with the interview, is called Hilario Nsue Alene and not Mba Ondo. The Courier apologises to the Minister and to the Government of Equatorial Guinea for this unfortunate error.

Ireland

In the Dossier of N° 108 we incorrectly captioned the picture on page 68 as "Daniel O'Connel, the Great Liberator of Ireland". The statue photographed is in fact that of Charles S. Parnell. We are grateful to Mr J.S. Egan of Dublin for drawing our attention to the error.

Kenya

In the News Round-up of Courier Nº 106, November-December 1987, on page IX, the Northern Corridor Transport Programme which appears under Kenya mentions only the special loan of ECU 10 000 000, giving the impression that the entire project was being financed out of that sum. The grant of ECU 27 000 000 was omitted. The total sum made available by the EDF for the project is ECU 37 000 000. Also on page X, the correct title under Kenya is "Agricultural/Livestock Research Programme". We regret any inconveniences these errors may have caused our readers.

The ACP Group's 1988 programme

A press conference in ACP House in Brussels on 12 January was the opportunity for Mr Sylla, Guinean Ambassador and Chairman of the ACP Committee of Ambassadors, and Edwin Carrington, Secretary-General of the ACP Group, to sum up what had happened in 1987 and present the Group's programme for 1988. This is based on a document on progress and challenge for the ACPs, which suggested that "in the turmoil of the world economic crisis, economic, social and cultural cooperation between the ACP Group and the 12 Member States of the EEC still brings some measure of support and stability to the 66 ACP countries and their more than 400 million inhabitants, while no doubt also ensuring some major advantages to the EEC". The progress the ACPs had made included, in particular, the declaration on human dignity and the ACP action programme against apartheid adopted in Kingston in October 1986 (see The Courier No 107, January-February 1988, News Round-up, p. III), various ACP meetings such as that of ACP National Authorising Officers (July 1987) and of the heads of regional organisations (Brussels, September 1987 - see The Courier No 106, November-December 1987, pp 39 & 81) and the missions which Euro-MPs had made to investigate and then observe elections in Suriname, at that country's invitation, to "back up the drive to establish democracy" there.

Top priority in 1988 will be on opening negotiations for a further Convention to follow Lomé III. However, the ACP Group also intends to look at other issues. The programme of cooperation within the Group, the ACP-EEC Foreign Ministers' meeting on the situation in Southern Africa, the threat of famine in Africa, external debt, commodity prices and lower aircraft noise standards will have their particular attention.

Ousmane Sylla read out the timetable of the major ACP and ACP-EEC meetings scheduled for 1988. As well as the usual joint and ACP institutions (Joint Assembly in Togo in late March, Committee of Ambassadors in Brussels in April, ACP and then ACP-EEC Councils of Ministers in Mauritius in May immediately followed by a special ACP Council on inter-ACP cooperation, consultation of economic and social circles in June, Joint Assembly in Spain in September and a

Council of ACP (Budget) Ministers in Brussels in November or December), he mentioned the possibility of an ACP-EEC Foreign Ministers' session on the Southern African situation in Bonn at the end of February and the Lomé III evaluation seminar in Senegal in July. Last but not least, the negotiations for the new Convention would be officially opened in Brussels in September.

On this last point, the Ambassador reminded the meeting that the ACP Group had begun to discuss the matter in December 1987 (see The Courier No 107, News Round-up, page II). They would be continuing with this in the light of an assessment of Lomé III, where it fell short and where it succeeded. Mr Sylla felt that the effort the EEC had made with the ACPs actually reflected its commitments. The national indicative programmes had been negotiated and timetabled and were now being implemented. There had been a consensus on focal areas. And Lomé III was also being implemented under "abnormal conditions", such things as locust invasions.

But this is not to say that the ACPs are completely satisfied. The "inadequate" amount of Convention funds and the EEC's "evasive" behaviour on South Africa were two of their main grievances.

The ACP position on extending the Convention to other countries such as Haiti and the Dominican Republic also came up. Mr Carrington said that it would all depend on the outcome of the elections and the political situation. What is needed, he said, is a "minimum amount of democracy" to apply to join the Lomé Convention as an ACP State. The ACPs were not, for the moment, in a position to take a stand, as they did not have enough information on this point. Ousmane Sylla thought that Lomé III made it possible to tackle a whole series of issues human rights, for instance — and that, without wishing to interfere in other people's business, the Group was determined to honour its commitments here and do its best to project the image of a group of peaceful countries.

As the document said, "the success of the ACP Group ultimately depends, essentially, on its own efforts". o

M.H.B.

African School of Brussels - Seminar on the Single European Act and the ACPs -

The Winter Seminar run by the African School of Brussels at ACP House in January discussed ACP-EEC relations and the Single Act under the direction of Dr Kagabo Pilipili. Guinean Ambassador Ousmane Sylla, Chairman of the ACP Committee of Ambassadors, made an opening speech, saying that the idea of the seminar was to "tell us about the effects the Single European Act has on the ACPs". Although the ACPs realise that the Single Act is "an internal European measure aimed at regulating internal European affairs... nothing related to the existence of Europe... can leave them indifferent". The meeting was one of questions. Mauritius' Ambassador Raymond Chasle, for example, refused to entertain the idea of "the ACPs being a wagon behind the EEC train", worrying particularly about cooperation within the ACP Group. Even if Europe gets stronger and the ACPs are of course glad to see the Commission's powers stronger too, and Parliament's, Mr Chasle said, "is that any reason for us to restrict our institutional relations to the Community alone"? The answer, to his mind, was no. The ACPs had to cooperate with the EEC in a privileged but by no means exclusive manner, reserving the right to speak their mind freely on the Single Act and its consequences.

Intra-ACP cooperation was also Senegalese Ambassador Sy's main point. He thought that "the ACPs' only power in relation to the EEC" was their unity. The Single Act, he said, was "Europe's challenge to itself and one which has created an almost mythical dynamism, with each Member paving the way in a kind of exorcism, so that Europe really does become the biggest "hypermarket in the world". Would the response be an "ACP common market"? Alas, the Ambassador said, "the negotiations for renewal of the Convention are too early. We will not have had time to assess the effects of the Single Act on the ACPs". However, he was sure that the right response was to boost cooperation with the ACP Group. For the Europeans "are giving us something to think about with the Single Act... for European integration is the answer the Europeans have come up with for their problems. We too

should integrate. If we fail to do so, we shall always be the ones everyone else assists and exploits".

Other speakers had the same message. Ghanaian Ambassador Joseph Laryea stressed the ACPs' trade problems. Mr Graziosi, EEC Economic and Social Committee Director-General, stressed the dialogue between ACP and EEC socio-professional circles. And Paule Bouvier, Professor at the Free University of Brussels, made the very necessary point about what could reasonably be expected from Lomé, the potential effects of which tended to be overestimated when the Convention was only an often underutilised framework of possibilities. She went on to say that the Single Act could well boost the "dual asymmetry" between Europe and the ACPs ("the European partner is not in a comparable situation to the ACP partner") and between the ACPs themselves. "Trinidad's per capita GNP is far higher than it is in many other ACPs and even in Greece which belongs to the European Community", she said. A stronger Europe was likely to look to trade partners who put up a better performance than the ACPs, she went on, to Latin America and Asia, for example. This was an opinion other speakers - the Ivorian representative particularly - shared.

So, in spite of all Europe's own hesitation when it came to making the Single Act a reality (and it was emphasised by Professor Witterwulghe, President of the Institute of European Studies at Belgium's Catholic University of Louvain, who nevertheless ended on a "relatively optimistic note about Europe's future"). there seems no doubt in the ACP mind that Europe will get stronger and the ACPs themselves will have to parry this thrust. This means being constantly "extremely vigilant", to prepare themselves carefully with 'thorough-going studies' and seminars concentrating on the discussion of trade matters and, last but not least, to get the Governments moving to make progress with the "political issue" of cooperation within the ACP Group. M.-H.B.

Foundation for ACP-EEC Cultural Cooperation - Action programme -

The start of World Culture Decade (1988-97) was marked by a meeting at

ACP House in Brussels on 29 January when Basile Kossou introduced the UN-ESCO-organised decade for which he is the Secretary.

Raymond Chasle, Mauritius' Ambassador and Secretary-General of the ACP-EEC Cultural Foundation, outlined the very broad action programme, ranging from training to women's status through support for young people, anti-drug action, child health, literacy, university cooperation, assistance for migrants etc. Mr Chasle also announced that the Foundation would be setting up a group to research into ways of raising the barriers to inter-cultural communication, the projected seminar on culture and industry and his intention of creating a network of national and regional committees in several big towns. Lastly, he mentioned the contacts he had made with a view to publicising the Foundation and getting it support. o

Ethiopian prices: important trends

The Government of Ethiopia has just taken some important decisions on agriculture. In particular, these new measures involve a big increase in the price the producers get from AMC (the Agricultural Marketing Company) for quotas of various kinds of produce, particularly the cereals it markets.

This price increase, which is subject to periodic review, goes hand in hand with the possibility of the producers being able to sell their surpluses to traders on the free market once the quotas have been filled.

These recent measures reflect the general policy of the Three-Year Plan (1987-89), whereby top priority in national development is on agriculture with a view to a greater degree of self-sufficiency in food. They are also the subject of a continuous dialogue by the Ethiopian authorities and the Commission, particularly in the context of establishment and implementation of the indicative programme signed under Lomé III.

By encouraging the peasant to improve and increase his agricultural output, these measures are decisive when it comes to the viability and success of rural development programmes in the Shewa — which are expected to get priority financing under Lomé III.

So the Commission is now completing both its assessment of these programmes

— they involve some ECU 90 million — and the evaluation of the operational impact of the Ethiopian Government's recent measures, o

EDF

Following a favourable opinion from the EDF Committee, the Commission has decided to finance the following projects.

Cape Verde

Prospecting for underground water supplies

Fifth and Sixth EDF Grant: ECU 2 200 000

The idea here is to improve the quality of the drinking water in Praia, where there is currently a deficit of 650 m³ per day (35% of consumer requirements).

The main part of the project is the construction of a 700 m gallery with an estimated output of 350-800 m³ per day. There is also to be a series of short-term schemes, in particular the sinking and fitting out of boreholes and the construction of an underground dam.

Sierra Leone

Fadugu-Kabala road

Sixth EDF

Grant: ECU 17 500 000

Under Lomé I, the Community cofinanced the building of the 80 km Makeni-Fadugu section of the Makeni-Kabala road (all-weather asphalting) with the Federal Republic of Germany.

This project is to build the remaining 35.2 km of the Makeni-Kabala road — the Fadugu-Kabala stretch.

This will ensure an all-weather link with Kabala, the administrative capital of the district of Kalnadugu in north-eastern Sierra Leone.

Guinea

Maritime Vocational Training Centre Fifth EDF

Grant: ECU 858 000

The idea here is to complete schemes run at the Conakry Maritime Vocational Training Centre (CFPM) under the 4th and 5th EDFs by sending out technical teachers and supplying equipment and products required for teaching purposes.

Zaïre

Rehabilitation of the Matadi-Kinshasa-Kenge road

Sixth EDF

Grant: ECU 22 500 000

This project is to rehabilitate 103 km of asphalted road on the worst stretches of the Matadi-Kinshasa-Kenge road. It also includes improving the Road Office Training Centre at Kikwit, in particular by setting up a maintenance brigade for asphalted roads.

It fits in well with the Lomé III indicative programme which concentrates on infrastructural support for the production of food and firewood in the economic hinterland of Kinshasa, one of the areas of concentration. It is vital to supplies to the capital and to the importexport trade, as it links Matadi, the country's only port, with Kinshasa.

Repairs to this road, which carries an average of 405-1130 vehicles per day (according to section), will ultimately cut the cost of transport, boost transport capacity and facilitate the distribution of agricultural and industrial products in the agricultural development regions.

Zaïre

Oso-Osokari road

Fifth and Sixth EDF

Special loan: ECU 29 500 000

The aim here is to build and asphalt the Oso-Osokari stretch (73.5 km) of the Kisangani-Bukavu highway, the 629 km link between Haut Zaïre and Kivu.

This is the last stretch. It is part of the Kivu development programme, one of the two focal sectors of the Lomé III indicative programme.

Completion of the project will mean a big drop in the cost of transport between the Kivu regions, with their sound agricultural potential, and Haut Zaïre-Matadi-Kinshasa, the Lake region's traditional suppliers of manufactures.

Zaïre

Lubuto-Oso road

Sixth EDF

Grant: ECU 5 000 000

This is the additional financing needed to complete work on the Lubuto-Oso road for which ECU 19 000 000 were allocated under the 4th EDF.

Gabon

Village rubber plantations

Fifth EDF

Special loan: ECU 2 300 000

The village rubber programme is a

complement to the Gabonese rubber plan which has already had Community assistance (Mitzio region) under the 5th EDF and help from the CCCE, the Development Bank of the Central African States and the ADB.

The project is being run in the Mitzio and Bitam sub-regions. It should cover a total of 500 ha, worked by village planters and their families, and lead to an extra 880 tonnes of dry rubber being produced for export every year once things are turning over normally.

Jamaica

Sangster Airport Terminal - Montego Bay

Fifth EDF

Special loan: ECU 7 100 000

This project aims to improve infrastructure in the tourist sector, the nation's main source of foreign exchange. Tourist arrivals have gone up by an average of 10% p.a. and the tourist trade currently accounts for a third of the foreign exchange earnings. The project includes building a new terminal for charter flights at Montego Bay to cater for extra traffic, plus the outside work, development of the existing terminal and extensions and improvements to the aircraft parking areas and fuelling systems.

Jamaica

Training Centre — Jamaica Public Service Company Ltd

Fifth EDF

Grant: ECU 540 000

This project is part of a US \$ 31.7 million investment programme which the Jamaica Public Service Company (JPS) is running in 1987-91. JPS is in charge of generating and distributing electricity on the island. The training part of the investment programme covers construction of a permanent training centre, the supply of laboratory equipment, handbooks and training materials, training for staff training course leaders and courses abroad for higher cadres and specialists.

Djibouti

Health improvement programme

Fourth and Fifth EDF Grant ECU: 855 000

The health service improvement programme is included in the Lomé III indicative programme for this country and will complete the programmes run in the

focal sectors of rural and urban development.

It is in three parts:

- improvements to the nation's health coverage and formation of flying teams to improve access to health care in the underprivileged parts;
- construction of a health staff training centre offering basic and advanced training for ancillary personnel on a proper, permanent basis;
- hygiene and environmental schemes to improve food hygiene and drainage.

Uganda

Renovation of Makerere University

Sixth EDF

Grant: ECU 8 000 000

Makerere is East Africa's oldest university. It used to have a considerable reputation, its qualifications were respected the world over and it was famous for its beautiful campus.

Events in Uganda since 1971 have profoundly marked the university. Large numbers of teaching staff have left and the level has lowered and an inadequate budget has led to a shortage of teaching material and equipment. There has been virtually no maintenance of either buildings or campus and the university now is in no position to offer useful or serious training.

The new Government is determined to right the situation, raise the standard and revive the reputation of Makerere.

The aim of this project is to help make the university an efficient part of the Ugandan education system again by renovating the main faculties and improving services and staff training.

Mozambique

Eduardo Mondlane University — Basic science courses

Sixth EDF

Grant: ECU 2 300 000

The aim here is to improve the basic scientific knowledge (mathematics, physics, chemistry and biology) of science faculty students by setting up a sixmonth pre-university course to be run by Eduardo Mondlane University (UEM) in Maputo.

Similar experiments have already been run in other SADCC countries (Botswana, Swaziland, Lesotho and Zimbabwe). In Mozambique, this basic science course, primarily aimed at making up for the inadequacies of the secondary school and introducing a more advanced teaching method, has been tried out for the past two years, with the help of the Free University of Amsterdam (Netherlands).

Malawi

Rural health programme

Sixth EDF

Grant: ECU 9 300 000

This programme reflects the concept of agricultural and rural development laid down in Malawi's national indicative programme for Lomé III. It is also an integral part of the Second Family Health Programme (SFHP) designed with the help of the World Bank/IDA which is to be financed by six donors alongside this. The idea of this Second Family Health Programme is to improve the health of families, mothers and children especially, and offer a full range of services to ensure that births are better spaced. Both supply (development and improvement of the existing health and family planning services) and demand (broad distribution of information about family health and birth control via multisectoral education and a teaching campaign) are to be tackled. The SFHP is scheduled to last five years.

Malawi

Small business development organisation, phase III

Sixth EDF

Grant: ECU 2 222 000

SEDOM, a semi-public body offering loans and commercial and technical advice to Malawi's SMEs, has had EDF assistance since it started up in 1983. The results so far are satisfactory. Phase III (April 1988 to March 1991) involves SEDOM developing its activities in the regions.

This means extra funding for its loans and other financing activities, as well as for its capital investments. This money will come from German bilateral aid (Kreditanstalt für Wiederaufbau KFW — ECU 4.09 million), while the EDF will be financing further technical assistance and the recurrent costs tied to the development of the labour force.

Madagascar

Small irrigated plots in the North Sixth EDF

Grant: ECU 12 800 000

One of the agricultural priorities of the country's five-year plan (1986-90) is self-sufficiency in food, with priority on cer-

eals, especially rice, a target which should be achieved by 1990.

This programme, which covers the rice plots of the North, includes:

- an agricultural scheme, with rehabilitation of 10 small irrigated plots (2075 ha), 120 micro-hydraulic installations (2400 ha), support for extension workers (extension, organisation, supplies, input etc) in both irrigated and non-irrigated areas and optimalisation of the system of agricultural production (R & D);
- a tracks operation with rehabilitation of 203 km, including works supervision and track maintenance until completion of the programme.

Angola

Sectoral import programme

Sixth EDF

Grant: ECU 35 000 000

The Angolan economy is going through a particularly difficult phase at the moment, with structural imbalance combined with the economic effects of declining oil revenues (virtually the State's only resource and the country's main source of foreign exchange). The decline has led to a deterioration in the balance of payments and a drastic reduction in the supply of consumer goods, raw materials and equipment.

This is the setting for the sectoral import programme which the Community is to finance with a grant of ECU 35 million. The main aim is to help ease the foreign exchange shortage and encourage the rehabilitation and development of agro-food production and the SMEs in the sector that supports it. It will also help with the policy to decentralise, reduce State involvement in the economy, boost the private sector and get the marketing circuits working again.

This programme covers the focal sectors of the nation's indicative programme and comprises four sections (directly and indirectly linked to the food and agriculture sector):

- direct support for agricultural production;
- support for SMEs linked to the agricultural sector:
- support for the development of rural marketing;
- support for the fisheries sector.

The counterpart funds accruing from the sale of the imported goods will be paid into a special account and used to back up the aims of the focal sectors of the indicative programme, particularly coverage of the local costs of the Community-financed projects and programmes to be defined by joint agreement.

Rwanda

Food strategy support programme

Sixth EDF

Grant: ECU 51 000 000

The idea here is to back up Rwanda's drive for greater food security through support for Government-defined national theme operations. Rwanda, with a per capita GNP of \$ 290, is one of the least-developed countries of the world. The programme will be extended at local level by continuation of the rural development projects started on the Zaïre-Nile Crest and in the Prefecture of Butare under Lomé II and there will be improvements to the infrastructure involved in implementation.

Together with other funders, it will help achieve the aims of the 4th five-year development plan (1987-91), which is primarily geared to a strategy of self-sufficiency in food.

The projected programme involves a series of coordinated, coherent schemes to: define and run a national input policy; develop and diversify animal and plant production and improve the communal extension structures; maintain the natural balance by reafforestation and land rehabilitation and protection schemes; create the rural infrastructure needed to deploy economic activity in the communes and raise the standard of living of the people; foster the development of the cooperative movement and a secondary sector; run a programmelinked training scheme; support the institutions responsible for running the programme and monitoring progress and evaluating impact.

The programme is of direct or indirect concern to 600 000 people — 10% of the national population. It is expected to raise the standard of living, improve the basic infrastructure, protect the ecosystem and boost agricultural output.

Guinea Bissau

Rural development in the eastern province

Sixth EDF

Grant: ECU 23 800 000

The Government's economic and financial recovery programme has led it to a policy of rural development, currently the basis for any national economic improvement. Support for this sectoral policy will be getting 85% of the Lomé III funding. Community action is concentrated on the Bafata-Gabu region (agricultural production) and the Cacheu region (artisanal fishing) and involves:

- making the private sector more dynamic by granting lines of credit for the various economic operators;
- offering support for agricultural production, in particular by developing valley floors and supplying small farm tools, input and consumer goods through a sectoral programme;
- assisting artisanal fishing (Cacheu centre):
- improving the trade circuits by rehabilitating tracks;
- improving the framework and conditions of living of the people via a programme of social infrastructure and village water engineering facilities;
- sending out technical assistance to implement the various schemes and train national staff.

The main beneficiaries of these programmes will be the rural population as a whole. The State will see its foreign exchange increase as food imports are cut and agricultural exports expand.

ACP States and OCT

Global commitment authorisation

Sixth EDF

Grant: ECU 10 000 000

This is a global commitment authorisation (expedited procedure) for small assistance schemes for refugees and returnees

Somalia

Animal feed

Fifth EDF

Grant: ECU 1 900 000

The idea here is to make as much capital as possible out of the nation's agro-industrial by-products by bringing in the appropriate techniques and setting up a commercial distribution network. Somalia's herds, cattle in the main, are chronically short of food resources, particularly between growing seasons. Activity will be centred on the Afgoya Dairy Farm (in the Mogadishu area).

Mogadishu Dairy, phase II

Sixth EDF

Grant: ECU 1 570 000

The EDF and the EIB provided about ECU 3 983 500 over the period 1982-87 to repair, fit out and manage a dairy, known as the Mogadishu Dairy, in the

capital. The EDF monies covered the initial revolving fund, the cost of the management team, technical assistance and one or two small management advice services.

The cost of phase II is an estimated ECU 1 570 000. This should supply the funds for the relevant technical assistance to the factory (96 man-months), staff training, some of the equipment and extra management advice services (eight man-months).

Tanzania

Management of the Morogoro canvas factory

Sixth EDF

Grant: ECU 4 000 000

Between 1978-87, ECU 29.1 million was allocated under Lomé for the design, construction, fitting out and management of the canvas factory at Morogoro 200 km west of Dar-es-Salaam. This latest decision covers maintenance (until 1991) of a management team in charge of running the factory and training Tanzanian staff.

Uganda

Forestry regeneration programme

Sixth EDF

Grant: ECU 8 500 000

Uganda's forestry potential could be a major and lasting contribution to the national economy, but it cannot be capitalised on until the forestry services in charge of managing the way the forests are used are more motivated and have more resources to underwrite their activities. This project is part of a general programme to rehabilitate the whole sector.

The aim is to improve the management of the country's natural forests and recreate and subsequently develop woods around the towns to produce firewood and posts. Agro-forestry, regeneration of resinous species for industrial purposes, management assistance and training for the department of forestry are also included and the resources of the biomass are to be inventoried. Aid will also be forthcoming from the World Bank, DANIDA, the UNDP and NGOs.

Benin

Rehabilitation of the Coulibaly polytechnic complex

Fifth EDF

Grant: ECU 400 000

The urgent work covered by this project is to rehabilitate Benin's only voca-

tional training school turning out middle-range cadres for industry. It was built in Cotonou in 1928 and its age and dilapidated state are a daily threat to teaching work. Rehabilitation is part of a programme to bring technical training into line with the job market, a programme which is being cofinanced by France, the Federal Republic of Germany, (SVAP) and the EEC (through the 6th EDF northern Benin study of training and employment) and in which the Coulibaly polytechnic has a pilot part to play in the reform of the nation's system of technical education.

Cameroon

Rural development in the Bénoué Basin Sixth EDF

Grant: ECU 25 000 000

The Government of Cameroon and the EEC Commission have agreed to focus the bulk of the resources of the Lomé III indicative programme of financial and technical cooperation on rural development.

This programme, which is part of this drive, will be run in the Bénoué Basin in northern Cameroon which, in view of its natural resources, attracts migrant populations from the underprivileged regions of the Province of the Extreme North. It follows on from previous Community cooperation and will continue to develop the still considerable fishing and farming potential of the area. This will be of particular help with the installation of about 1500 peasant smallholdings every year.

The programme comprises a number of complementary sections:

- improvements to agricultural land, rural motivation schemes and support for farming and fishing;
- protection of the environment and the ecological balance;
- support for the region's development organisation.

It will be of particular benefit to some 30 000 migrants and contribute to the success of the Government's rural development policy aimed at ensuring regular supplies, consolidating the country's self-sufficiency in food and containing the rural exodus via the rational exploitation of natural resources and a higher standard of living in the country.

Burundi

Socio-economic development of the Cankuzo and Rutana Provinces

Sixth EDF

Grant: ECU 34 815 000

The support offered to these two regions, which are in eastern Burundi in

the natural region of the Mosso-Buyogoma, reflects the action the Government has taken or is to take gradually to transform the production structures and develop the rural environment.

It is in line with the Lomé III indicative programme - which focuses on rural development and food security and will be coordinated with schemes being financed by other sources.

The idea is to protect the land, make for bigger and better food rations by intensifying food crops, improving the productivity and quality of cash crops, organising the rural world, training people involved in running schemes, raising the standard of communications in the provinces and improving drinking water supplies.

Socio-economic development of the Cankuzo and Rutana Provinces (Mosso-Buyogoma) includes: an agro-forestry project in Cankuzo and Rutana; improvements to tracks and bridges in the Mosso-Buyogoma area; drinking water supplies in Cankuzo and Rutana; support for cooperatives in these two provinces.

All ACP States

Trade promotion Sixth EDF

Grant: ECU 2 376 000

ACP and OCT involvement at international trade fairs means constant financial and technical assistance from the European Community to boost the commercial impact of their products and ensure continuation of the successful sales promotion schemes of the past few years.

The Commission contribution to the programme involves: evaluating ACP and OCT trade targets; handling the invitations to tender for the construction of stands; organising participation on a fair-by-fair basis; reserving and paying for places; designing, developing and controlling 160 ACP and 16 OCT stands and the relevant payments; reimbursing the cost of staff travel and the transport of exhibits.

Swaziland

Technical assistance for the Swaziland **Industrial Development Company** Sixth EDF

Grant: ECU 1 220 000

The main idea here is to send out two technical assistance experts (a directorgeneral and a controller of operations) for the Company, for whose staff a complete training programme is also to be provided. This programme includes training for the local opposite numbers who will be taking over from the expatriate personnel once their tour of duty is over.

The Company is a new development financing body and was set up in 1986 to promote SME projects.

Tuvalu

Coastal protection

Sixth EDF

Grant: ECU 800 000

Tuvalu's coral islands and atolls are suffering from erosion of the shore. This had a bad effect on villages along the coast and is particularly harmful to the pulakas, the well-like gardens full of humus which keep the country supplied with food crops.

The idea of the project is to continue building dykes suitable to local physical conditions.

Senegal

Reconstruction of the Noirot bridge at Kaolack (additional financing)

Fifth EDF

Special loan: ECU 950 000

Further financing of ECU 950 000 has been decided on to complete the rebuilding of the Noirot bridge at Kaolack. The extra money is needed to cover the costs of the initial works contract which were higher than anticipated because of technical problems encountered when the foundations of the bridge were being

Botswana

Support for training

Sixth EDF

Grant: ECU 4 400 000

The programme to support training with a view to better utilisation of resources is part of a number of schemes aimed at achieving the central target of Botswana's national indicative programme - to develop and protect national resources. The programme is also part of the country's 6th National Development Plan (1985-90).

It is in four parts:

- basic scientific training (pre-university science courses - CPU);
- prospection and management of underground water resources;

- use of natural resources;
- agriculture and environment.

Djibouti

Urban development in the town of Dji-

Sixth EDF

Grant: ECU 4 000 000

The town of Diibouti, which has 65% of the country's total population is the driving force of all the nation's economic activity. The living conditions of its inhabitants, particularly those in the old districts and Balbala, tend to be precarious.

The Government has decided to put priority on improving the present situation and has produced an urban development plan for Djibouti with this in mind.

The project is a two-part one:

- part one, to help people in underprivileged housing areas by rehabilitating their districts:
- part two, to help the urban population as a whole by organising proper cleansing, by extending the household waste dump, expanding the cleansing services and building and fitting out the workshop responsible for the maintenance and operation of the fleet of vehicles.

Comoros, Madagascar, Mauritius and Seychelles

Inventory and study of medicinal and aromatic plants

Sixth EDF

Grant: ECU 2 200 000

The Indian Ocean Commission (IOC), whose members are the four ACP States of the Indian Ocean, plus France (i.e. Réunion), has been invited to organise the regional programme with the Commission of the European Communities. The idea is to encourage members to pool their resources and potential in a whole series of fields, including trade, economic development and research.

This programme is an agricultural research project aimed at inventorying aromatic and medicinal plants growing in the region and, in phase two, improving the methods of studying these plants and the techniques used to extract the active ingredients. The direct result of this will be an immediate improvement in scientific knowledge and aid for the development of the region's research institutes to which it supplies equipment. It will also train researchers and technicians.

Comoros, Madagascar, Mauritius and Seychelles

Assistance for craft Sixth EDF

Grant: ECU 3 500 000

Ever since the Indian Ocean Commission was set up in 1982, the members have been aware of the importance of craft to their respective economies and of the need to develop it both to improve economic activity (employment, foreign exchange, SME development etc) and to back up the tourist sector.

They have decided on the areas in which regional cooperation can boost national schemes and thus avoid duplication and make for coordinated action in the craft field.

Regional cooperation funds are being sought for: aid for manufacture; training for craftsmen; the promotion and marketing of products, to be achieved through the relevant technical assistance, the creation of specialised centres, training seminars and trade promotion operations.

Comoros

Moroni bridge

Sixth EDF

Grant: ECU 7 880 000

Development of Moroni's port infrastructure is part of the maritime communications policy and this project was designed with this in mind.

The idea is to provide berthing facilities for vessels of about 1000 t (laden), inter-isle shipping and regional coasters.

The project includes civil engineering to develop the existing port, the supply of handling equipment and a coaster, plus the cost of technical assistance for works supervision, exploitation of the port and training.

Bahamas

Rural energy supplies

Sixth EDF

Grant: ECU 1 500 000 Special loan: ECU 1 000 000

This programme is to back up the Government's development policy aimed at laying on electricity, water, telephones, means of transport, roads and wharves for the people. The fact that most of the Family Islands are without these facilities has held up their development and triggered permanent migration

to the more developed islands of New Providence and grand Bahama.

The programme is in two main parts:

- installation of a public electricity supply network on Cat Island (about 180 km south-east of New Providence), which has a population of slightly less than 2000;
- a substitute energy programme designed to familiarise people with nontraditional sources of energy and their various uses in isolated communities.

Benin

Hospital infrastructure rehabilitation programme

Fifth and Sixth EDF Grant: ECU 14 300 000

The Community is planning a series of schemes in the focal sector of the 6th EDF indicative programme to provide support for the Government's sectoral hospital infrastructure policy.

They make up the present rehabilitation programme whose two sections improvements to the health system in Ouémé Province and consolidation of Cotonou maternity - are a substantial contribution to the Government's aims. Included are: rehabilitation of Porto-Novo hospital; rehabilitation and modernisation of the district health centres (CSDS) in urban and rural Ouémé; consolidation of Cotonou maternity; supply of equipment for Porto-Novo hospital, the urban and rural district health centres and Cotonou maternity; drugs and consumables for Porto-Novo hospital, the Ouémé CSD and Cotonou maternity; training and retraining for medical and ancillary staff; technical assistance in the long and the short term.

Togo

Rural development programme in the Savannah region

Sixth EDF

Grant: ECU 6 415 000

This rural development programme reflects both regional priorities and Togo's new rural development strategy.

It continues the agricultural extension drive in the Savannah region which was financed by the 4th EDF and completed in 1987. This first project has focused on an area with 35 000 inhabitants (3500 holdings), limited rainfall, high demographic density, limited land and a food imbalance. It was an opportunity to use the popularisation of new farming methods and new rural infrastructure to make

substantial improvements in the income and standard of living of the peasants.

The idea of Phase Two is to extend the original geographical area to the frontiers of Ghana and Burkina Faso in the east and north, thus bringing in some 9800 farms.

Togo

Support for the development of draught animals

Fifth and Sixth EDF Grant: ECU 3 000 000 Special loan: ECU 2 500 000

This project is an extension of the operations already run under previous funds to develop rural productivity.

There are three main types of scheme: continuation of the Adélé ranch scheme; research into introducing new draught animal methods (single ox draught and use of heifers) and a scheme to capitalise on unsuitable beasts; establishment of a line of credit to the National Agricultural Credit Fund for loans to encourage the development of draught tillage and its environment.

Burkina Faso

Industrial development programme Sixth EDF

Grant: ECU 44 000 000

This is in line with the Government's top priorities — self sufficiency in food and the conservation and restoration of the land. These targets reappear in the focal sector of the 6th EDF indicative programme and the Five-Year Plan. The programme region is spread over the quasi-desert of the north, which is under constant threat of desertification, and a zone of cereal potential, housing one of the country's rare all-year rivers.

The idea is to boost the peasants' food production potential via water control by:

- creating a 500 ha irrigated plot using the main existing infrastructure of the Sourou valley;
- creating water points by building dykes and sinking boreholes and using water for many purposes small irrigated plots (3200 ha), cereal crops, market gardening, reafforestation, herding and domestic activities;
- creating anti-erosion sites making for deeper infiltration, preventing erosion and retaining earth so harvests are bigger.

Although anti-desertification, accompanied by the promotion of more environment-friendly farming, is primarily

aimed at making production move secure in the medium and the longer term, other schemes will also have a direct and indirect effect on the conditions of production:

- supplying the producers with input and equipment by granting agricultural credit facilities;
- improving the road network to guarantee the accessibility of the developed areas and the shifting of produce;
- offering support for initiative on the part of the villagers themselves particularly as regards primary education, basic health care and drinking water. O

EIB

West Africa: ECU 12 million for SMEs

The European Investment Bank (EIB) is lending ECU 12 million (approx. CFAF 4.2 billion), under the Third Lomé Convention, to the Banque Ouest Africaine de Développement (BOAD) to assist in financing small and mediumsized enterprises in the industrial, agroindustrial, mining, tourism, energy and telecommunications sectors in Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, Senegal and Togo.

The funds are being advanced in the form of:

- a global loan (line of credit) for ECU 10 m from EIB own resources (chiefly the proceeds of its borrowing operations on the capital markets) for a term of 12 years with interest payable at 5% per annum, allowing for an interest subsidy drawn from European Development Fund resources;
- a conditional loan for ECU 2 million from risk capital resources provided for under the Convention and managed by the EIB. Interest will be payable at 2% per annum, while the term of the loan will vary in line with actual use made of the proceeds: it will run to 10 years in the case of allocations for study financing and to 20 years where the funds are used for acquiring equity participations.

BOAD, the regional development bank of the Member States of the West African Monetary Union, will use the two loans to help finance ventures selected with EIB agreement. BOAD's capital is subscribed largely by these States and their issuing bank, Banque Centrale des Etats de l'Afrique de l'Ouest, while Deutsche Finanzierungsgesellschaft für Beteiligungen in Entwicklungsländern mbH (DEG), France and the EIB, on behalf of the European Economic Community, are also shareholders.

In 1980, the EIB granted a conditional loan for ECU 140 000 to BOAD from risk capital resources for financing feasibility studies, followed, in 1981 by a global loan for ECU 5 million.

West Africa: ECU 21 million for telecommunications

As part of financing provided for under the Third Lomé Convention, the EIB is lending ECU 21 m to help complete the second phase of a programme to extend and interconnect the telecommunications networks of the Member States of the Economic Community of West African States (ECOWAS).

The Bank has granted a conditional loan to the ECOWAS Fund for Cooperation, Compensation and Development for 20 years at a rate of 2% to be drawn from risk capital resources provided for under the Convention and managed by the EIB. The Fund, which has been entrusted by the Member States of ECOWAS with overseeing the project's implementation, is an international financial institution which in 1983 received a loan from the EIB (ECU 10 m, also from risk capital resources) for the first phase of the same investment programme.

The new project concerns the establishment of three microwave radio links, for international and national communications, in Guinea, Guinea-Bissau, Mali and Mauritania, and the installation of exchanges and related equipment, together costing a total of ECU 52 m. The works and installations should be ready for service in 1992.

This new phase of the programme will increase the reliability of telecommunications in the region by the installation of digital radio systems powered with solar energy and a control system capable of monitoring the functioning of individual components. The project is also being supported by other financing institutions.

Niger: ECU 14.3 million for a power line

The EIB (EIB) announces a loan of ECU 14.3 m under the Third Lomé Convention, for constructing a high voltage (132 kV) transmission line between Niger and Nigeria to supply Niger with electricity generated in Nigeria using hydro and gas resources and surplus to that

country's requirements. Imported power will supplement more costly local production based on diesel generating sets.

The funds have been advanced in the form of a conditional loan for 20 years at 2% per annum to the Republic of Niger from risk capital resources provided for under the Convention and managed by the EIB. The State will on-lend the proceeds to Société Nigérienne d'Electricité, a public utility responsible *inter alia* for the country's power supplies.

The project, costed at ECU 29.6 m and scheduled for completion by end-1990, encompasses the supply and erection, between Maradi, Zinder and the border, via Gataova, of 298 km of three-phase overhead transmission line on steel lattice towers as well as the construction of three substations and provision of auxiliary facilities such as telecoms, and measuring and protection equipment.

The scheme will also benefit the environment by reducing air pollution and noise through partial replacement of diesel-generating capacity.

East Africa: ECU 12 million for SMEs in Tanzania, Uganda and Kenya

The EIB has lent the East African Development Bank (EADB) ECU 12 m for financing small and medium-sized enterprises in East Africa. EADB is a regional development financing institution whose principal shareholders are Tanzania, Uganda and Kenya, the three countries in which it operates and in which it will onlend the funds.

This operation is being mounted under the Third Lomé Convention and comprises:

- a global loan for ECU 6 m to EADB from the EIB's own resources, granted for 10 years at a rate of 5% after deduction of an interest subsidy from the resources of the European Development Fund (EDF):
- a conditional loan for ECU 2 million (25 years, 2%) to each of the three States, from risk capital provided under the Convention and managed by the EIB.

The three conditional loans will enable the three States to increase EADB's share capital to strengthen its capital base. EADB will use the funds provided to finance small and medium-sized industrial, agro-industrial and tourism projects selected in agreement with the EIB in the three countries concerned.

In 1983 the EIB granted EADB a loan for ECU 0.5 m under the Second Lomé Convention for financing feasibility studies.

Kenya: ECU 13.5 million for tea production

As part of financing provided for under the Third Lomé Convention the EIB has lent ECU 12.5 m (235 m Kenyan Shs.) to the Kenya Tea Development Authority (KTDA) for increasing capacity for processing tea with a view to boosting smallholder tea production in Kenya.

The funds provided comprise a loan for ECU 11 m from the EIB's own resources for 15 years at a rate of 5%, after allowing for an interest subsidy from the European Development Fund, and a conditional loan for ECU 2.5 million (at 2%, for up to 25 years) from risk capital resources provided for under the Convention and managed by the Bank.

The loan from own resources will go towards the construction of four new factories and the acquisition of related transport vehicles and other equipment; the conditional loan will be used by KTDA to acquire equity participations in the companies constructing the four new factories.

KTDA is a public body created in 1964 to develop smallholder tea plantations. The EIB granted it a first loan for ECU 7.5 m in 1980 for the construction of three tea factories. For the present project, costing an estimated total of ECU 33 m and expected to be completed in 1990/91, it is also receiving financing from the Commonwealth Development Corporation in the United Kingdom.

Somalia: ECU 13 million for improving electricity generation and supply

The EIB is lending a total of ECU 13 m under the Third Lomé Convention, for rehabilitating and expanding electricity generation, transmission and distribution facilities in Mogadishu, the capital of the Republic of Somalia.

The funds are being made available to the State in the form of two conditional loans — one for ECU 10 m over 20 years at 2%, the other for ECU 3 m over 20 years at 1% — drawn from risk capital resources provided for under the Convention and managed by the EIB. The proceeds of the operations will be onlent to Ente Nazionale Energia Elettrica (ENEE), a state-owned corporation, both for improving transmission and

distribution facilities (ECU 10 m) and for acquiring spare parts (ECU 3 m).

The works, which will be implemented by ENEE, are designed to enhance the reliability of power supplies and to meet demand in the Mogadishu region in the short and medium term, notably by allowing new customers to be connected to the grid. The scheme involves rehabilitating diesel generators at Gezira and Centrale and acquiring related spare parts, installing new generating equipment and a new power station at Gezira, rehabilitating and extending supply facilities in Mogadishu and providing technical assistance.

The project, scheduled for completion in early 1991 and costed at ECU 82.8 m is also being financed by the International Development Association (IDA, World Bank Group) and the African Development Bank, as well as through Italian bilateral aid.

Angola: ECU 4 million for SMEs

As its first financing operation in Angola, the EIB has granted a loan for ECU 4 m (approximately 130 m kwanzas) for investment in small and medium-sized projects in industry, mining and tourism

The funds are being made available in the form of a global loan (line of credit) for 20 years at a rate of 2% to the Banco Naçional de Angola (BNA) and are being drawn from risk capital resources provided for under the Convention and managed by the EIB.

BNA, which is answerable to the Minister of State for Economic and Social Affairs, will onlend the proceeds of the loan to finance feasibility studies or actual implementation of small and medium-sized projects approved by the EIB, especially those intended to help meet the population's basic needs or enable the country to replace imports with local products. Financing for such projects will be provided through a national investment fund (FUNIN) being set up specially for this purpose.

Zimbabwe: ECU 14 million for new abattoirs and meat processing centre

The EIB announces a loan of ECU 14 m under the Third Lomé Convention, for part-financing reconstruction of two abattoirs in southern Zimbabwe and a meat processing centre in the capital, Harare.

The loan has been granted to the State for 15 years at 5%, allowing for an inter-

est subsidy drawn from European Development Fund resources. The State will pass on the proceeds to the Cold Storage Commission (CSC), a State-owned company responsible for livestock slaughtering and meat distribution in Zimbabwe.

Works to be financed by the EIB include construction of a modern abattoir in Bulawayo with a capacity of 600 cattle/day, replacing an old facility which will be demolished. A new abattoir is also to be built at Masvingo with a capacity of 400 cattle/day, retaining some of the existing installations. In Harare, a new processing/distribution complex will also replace a very old facility which no longer complies with safety and hygiene requirements.

The project will help to develop and maximise stockfarming in the south of the country, a region which possesses few other resources. The works, costed at a total of more than ECU 100 million are scheduled for commissioning between end-1989 (Harare) and early 1991 (Masvingo). The Commonwealth Development Corporation has also been asked to part-finance the scheme.

Bahamas: ECU 9.1 million for electricity supplies

The EIB is advancing a loan of ECU 1 m towards expanding and improving the electricity supply services on ten of the outer Family Islands, as part of an investment programme to achieve a more balanced distribution of economic growth throughout the numerous islands which make up this Caribbean state.

The loan has been granted under the provisions of the Third Lomé Convention, for 15 years at 5%, after deduction of an interest subsidy drawn from European Development Fund resources. BEC is the public utility responsible for power generation and distribution in the Bahamas.

The project, costed at ECU 26.3 million and scheduled for completion by the end of 1989, embraces construction of a new power plant on the island of Abaco with four 1.5 MW diesel units, three similar-sized diesel units on Bimini island and four on Eleuthera island. The works also include increases in generating capacity adding up to some 10 MW and extensions to networks and exchange facilities on North, South and Central Andros, Mangrove Cay, Cat Island, Exuma and San Salvador, to provide supplies to areas not served at present.

STABEX

The Commission has just decided to make various transfers — as advances for 1987 application year — to the following countries.

Country	Product	Amount
Côte d'Ivoire	Coffee	20 000 000
CAR	Cotton	1 000 000
Western Samoa	Cocoa	225 000
Western Samoa	Coconut oil	975 000
Chad	Cotton	5 000 000

These advances, which, for reasons of careful management of the resources of the system, only represent about 20% of the estimated loss, will enable the States receiving them partially to solve the financial problems posed by the decline in export earnings.

At the same time, the Commission decided on a transfer of ECU 736 814 to compensate Niger for its loss of export earnings from hides and skins in 1986. o

Sysmin

Guinea: Application for a contribution under Articles 176-184 of Lomé III to compensate for lost alumina earnings eligible.

The Commission has just decided that Guinea's application for Sysmin help with righting the Friguia alumina plant is eligible. It will therefore be contributing (on terms yet to be decided) to long-term exploitation of the plant and to the financing of projects to diversify the country's sources of export earnings.

VISITS

Natali at CILSS Summit

The eighth bi-annual summit of Heads of State and Government of the Inter-State Committee for Drought Control in the Sahel (better known by its French acyroym CILSS (1) took place in the Chadian capital, Ndjamena, from 27 to 29 January 1988. Although essentially an internal meeting, Commission Vice-President and Commissioner for Development, Lorenzo Natali, was personally invited to the conference, along with other donors. The EEC, it should be noted, is by far the largest donor to CILSS and the most steadfast supporter of its objectives. There are some ECU 90 million in the kitty under the Lomé Convention for a wide-range of projects in the West African sub-region.

The meeting, which was the most important ever held in the Chadian capital, is an illustration of the growing confidence of the international community in the country, which has been in the throes of civil war for many years.

The CILSS conference examined a number of issues: the fight against drought and desertification, the relaunch of agriculture, the pursuit of structural readjustment in the CILSS countries, the difficult economic situation facing the countries as a result of the debt burden and the fall in the prices of raw materials. The issues were, in fact, examined in

detail in closed door sessions of a ministerial conference which preceded the summit from 19 to 27 January.

In his welcoming address to the summit, President Hissène Habré revealed that climatic disruptions last year have created uncertainty in the Sahel with the increase in cereal deficits estimated at between 200 000 tonnes to 1.7 million tonnes (2). It was urgent and imperative, he added, to refine and apply CILSS common strategy to better confront the situation.

In his opening address, the outgoing President of CILSS, Senegalese President Abdou Diouf called for the strengthening of solidarity among the Sahelian countries and the extension of that solidarity to other regions of Africa in the fight against desertification.

That call was addressed to by Commission Vice-President Natali in his speech to the Conference. He expressed satisfaction with the achievements of the organisation and praised the convergent approach by the Member States to the problem of drought and desertification - an approach which emerged clearly in their cooperation with the EEC on both the national and regional levels. They have given priority under their national indicative programmes to agriculture and desertification control with irrigation forming the most crucial element in improving food security. Most of the countries have gone as far as using 100% of the available EDF resources to rehabilitate this sector. Mr Natali recalled the decision reached in Praia by representatives of the organisation to devote the greater part of the resources made available for regional cooperation under the Lomé Convention to the priority area of the fight against the advance of the desert: their emphasis on a programme of the use of solar energy, the promotion of the use of butane gas instead of firewood, the training of primary school teachers and pupils in conservation matters and the permanent watch of the food situation in the Sahel.

Mr Natali said he knew that one of the main preoccupations of the CILSS Member States was the question of debt which is becoming too heavy a burden to bear. "How could it be possible", he asked, "to require efforts to fight against desertification from financially exhausted countries?" He gave account of the efforts being made by the Community to help solve the problem: in New York at the UN Special Session on Africa. at the Venice summit of Western Industrialised nations and the EEC's special measures to help poor and heavily indebted ACP countries in sub-Saharan Africa. "Naturally we are conscious that this programme will bring only a partial solution..." but "this attention which we are giving to the debt problem is a clue to you all as to our present thinking concerning the next Convention".

After his speech, Mr Natali had bilateral talks with various Heads of State and Government or heads of delegation, notably with Presidents Abdou Diouf of Senegal, Hissène Habré of Chad, the host, Moussa Traoré of Mali, Campaore of Burkina Faso, João Bernardo Vieira of Guinea Bissau, Gambian Vice-President Bakary Dabo, Niger's Prime Minister Algabid as well as CILSS Secretary-General Brah.

⁽¹⁾ Member States are: Burkina Faso, Cape Verde, Gambia, Guinea Bissau, Mali, Mauritania, Niger, Senegal and Tchad.

⁽²⁾ The Secretary of CILSS, Mr Brah, estimated CILSS, real cereal requirement at between 500 000 and 600 000 tonnes.

President Hissène Habre of Chad was named President of CILSS for the next two years while Guinea Bissau's Carlos Correia, State Minister for Development of Agriculture and Fisheries was named minister co-ordinator of CILSS. *The Courier* will return to the outcome of the conference. O

Togolese Ministers at the Commission

Togo's Planning and Mining Minister Barry Moussa Barqué who is also the National Authorising Officer and Finance Minister Komla Alipui visited the Commission in Brussels on 3 February 1988.

They were received by Dieter Frisch, the Director-General for Development with whom they had a working breakfast.

The visit was part of the Togolese Ministers' tour of the different European capitals (which included Paris, London, Brussels and Bonn) aimed at discussing Togo's debt problems and getting the support of external aid for the Government's structural adjustment drive.

Mr Frisch set out the aims and arrangements of the Community's special programme for the indebted poor countries of sub-Saharan Africa which the Council adopted in December.

Discussions also covered implementation of the Lomé III indicative programme — the Commission has just taken two financing decisions, one for a rural development programme in the Savannah region and the other for a draught animal support operation.

Lastly, views were exchanged on the Togolese authorities' request for Sysmin help with phosphates. \circ

ACP EMBASSIES

Three new ambassadors, Mr Kapembe Nsingo of Zambia, Madame Simone Mairie of Cameroon and Mr Farouk Al Rahman A. Eisa of Sudan have presented their credentials to the Presidents of the Council and of the Commission of the European Communities.

Zambia

Mr Kapembe Nsingo holds a Bachelor's degree in Economics from the University of Zambia. Before being appointed ambassador to the Kingdom of Belgium and the EEC, he has held a



Kapembe Nsingo

number of posts in his country, among them Senior Economist National Import and Export Corporation (1976-1977), Permanent Secretary and Deputy Director of Research Bureau at the headquarters of the ruling United National Independence Party (1979) and Minister of State Finance and Member of Parliament (1986). Mr Nsingo is 35 years old, married with six children.

Cameroon



Simone Mairie

Madame Simone Mairie studied at the Sorbonne and the Institut de Hautes Etudes d'Outre-Mer in Paris where she obtained respectively a Bachelor's degree in history and geography and a diploma in diplomatic studies. She worked in various capacities in the Cameroon embassy in Paris (1963-67) and in the Foreign Ministry (1968-87) before being appointed her country's Permanent Representative at the United Nations in 1982. In 1984 she was named ambassador to Spain. Madame Mairie is 48 years old and has two children.

Sudan



Farouk Al Rahman A. Eisa

Mr Farouk Al Rahman A. Eisa is a graduate of Economics and Political science of the University of Khartoum. Since joining the Ministry of Foreign Affairs in 1963, he has served in a number of posts abroad — Kinshasa, London, New York (Deputy Permanent Representative at the United Nations) and Bangui (ambassador 1981-85). Mr Eisa is 46 years old, married with three children. \circ

EMERGENCY AID

The Commission has allocated the following emergency aid:

Lesotho: ECU 190 000

This aid will finance the most pressing repairs to Lesotho's road network to get things moving again following the torrential rains and heavy snowfalls which resulted in serious damage to the roads towards the end of last year.

Sudan: ECU 650 000

The continuing conflict in the south of the country has prevented the delivery by road of essential food supplies to Juba and has caused many people to flee to the north, and in particular to the Khartoum area, which now houses hundreds of thousands of displaced persons.

This aid will finance an airlift from Khartoum to Juba and a feeding programme for the displaced persons living in Khartoum.

Guinea Conakry: ECU 85 000

This is an emergency aid to help Guinea handle an outbreak of yellow fever

which has already caused some deaths. It is a response to an appeal from the Government and will be implemented, in the form of a vaccination campaign, by Médecins sans Frontières (MSF).

Guyana: ECU 235 000

This emergency aid to Guyana is to help with a widespread outbreak of malaria in the north-west of the country, where 22 000 of the 38 000 inhabitants are affected.

It will be implemented by Médecins sans Frontières (Netherlands) in the form of a treatment and drainage programme.

Lebanon: ECU 2 000 000

This is the Commission's response to the urgent appeal for international aid which the UN Secretary-General made on behalf of the people affected by 12 years of civil war and the present economic crisis. The funds will be channelled into programmes run by the following organisations:

UNDRO ECU 500 000 UNRWA ECU 390 000 ICRC ECU 550 000 MSF ECU 360 000 Order of Malta ECU 200 000

This is in addition to the ECU 24 m (ECU 4 m emergency aid and ECU 19.8 m food aid) which the Commission has provided for the people of Lebanon since early 1987.

UNRWA: ECU 200 000

In response to the appeal launched by the United Nations Relief and Works Agency for Palestinian refugees (UNR-WA), the Commission has approved emergency aid of ECU 200 000 for the Palestinians living in the occupied territories.

The aid is above all intended for the 600 000 Palestinians in the Gaza Strip who are affected to varying degrees by current events. The aid will be used to provide medicinal products, small items of medical equipment, baby food and to pay for hospital expenses.

The aid is part of the Community's long-standing policy to provide the Palestinian people with assistance and development aid. Community aid channelled through the UNRWA amounted to ECU 35.1 m in 1987, compared with ECU 31.5 m in 1986. This represents roughly 20% of UNRWA's budget and

makes the Community the second largest contributor to the organisation.

The aid supplements that provided by the Member States themselves and also other actions financed by the Community or in conjunction with other organisations.

Morocco: ECU 170 000

The aid is intended for continuing the campaign against grasshoppers launched by the FAO using emergency funds (ECU 500 000) granted by the Commission in November. The new allocation will be used to finance additional flying time for pesticide spraying.

Algeria: ECU 375 000

Swarms of grasshoppers have come to the Tindouf and Adrar areas of Algeria and the southern border with Mali, affecting some 100 000 ha. The aid, which the Commission decided to grant following the Government's appeal, will be used for supplying pesticides and possibly for other pest control measures.

FOOD AID

Ethiopia:

The Commission has decided to supply 60 000 tonnes. of cereals to Ethiopia. Over and above this additional aid, ECU 2.4 m will be provided in order to increase storage capacity within the country.

Emergency aid from the Community to Ethiopia began on 30 November with the arrival of the first Hercules plane (chartered through the ICRC) to start the airlift between Asmara and Mekele. The second plane has been operational since 3 December and the third since 12 December (both chartered through the NGOs). Since November the ships carrying the cereals supplied as aid from the Community have started to arrive in Ethiopia's ports (27 500 tonnes of the 154 000 tonnes allocated). A further 60 000 tonnes of cereals are now being provided, together with ECU 2.4 m for financing additional storage facilities.

Taking into account decisions already taken (food aid and emergency aid), with the new decisions the Community's total contribution will amount by the end of December to ECU 74.3 m.

These operations are being coordinated with operations undertaken by other donors, in particular the Member

Declaration by the Twelve on Ethiopia

In their Declaration of 13 November the Twelve expressed their concern over the obstacles facing the distribution of food aid in Ethiopia. While welcoming the recent establishment of the emergency air-lift, they recognise that the smooth and uninterrupted movement of humanitarian supplies by land remains essential. In this context and in the light of renewed attacks on food convoys, they appeal to all concerned to take the necessary actions to secure free passage for international relief in the drought-affected areas of Ethiopia, in order to feed those most seriously affected as close as possible to their homes and to avoid the creation of refugee flows. The Twelve also reiterate their call, in the Foreign Ministers' Statement of 21 July 1986, for further steps to be taken by the governments concerned in the Horn of Africa to achieve the peaceful settlement of internal conflicts and the full respect of human rights.

States, with which the Commission has already organised two briefing and coordination meetings in Brussels. The next meeting is to be held in January or February 1988 (the coordination in Brussels is being supplemented by a similar exercise in Ethiopia with the active participation of the Commission Delegation there).

Aid requirements in the form of cereals are estimated at 1 300 000 tonnes (calculation resulting from an FAO evaluation visit in December, and very similar to the result reached by the team representing a number of different donors, viz. 1 200 000 tonnes). The quantity cereals pledged to date of 584 522 tonnes (45% of total requirements), 362 000 tonnes of this having been promised by the Community and the Member States.

Between December and March 558 000 tonnes of foodstuffs (mainly cereals) will reach the Ethiopian ports and Djibouti's port, but a long time will elapse before they are moved on (six months in the case of the consignments for Massawa), unless the handling capacity of the ports is increased and forwarding facilities are improved.

It is therefore essential that the port equipment which the Member States promised in order to cover requirements should be supplied as soon as possible. It is also essential that, for the regions of Eritrea and Tigre, in addition to the airlift which has been set up and for which current requirements seem to have been met, the donors should lose no time in supplying additional trucks (about 165) over and above the 105 transferred from the south to the north, since the number transferred should be increased to 170. It is also important to deliver quickly the spare parts which have apparently been allocated.

As regards the other requirements (additional foodstuffs, medicines, basic essentials, storage facilites, etc.), what is most urgently needed is storage equipment.

Grenada: ECU 247 000 (480 tonnes of cereals and 150 tonnes of vitamin-enriched milkpowder)

The idea here is to maintain a proper level of nutrition among certain classes of the population, particularly the most vulnerable ones — i.e. children, old people and pregnant women.

Angola: ECU 9 175 000 (30 000 tonnes of cereals, 1 500 tonnes of beans, 500 tonnes of vegetable oil and 200 tonnes of sugar)

This food is to help cover the very serious food shortfall that is still facing people in the big towns — where there is already famine — and the growing problems of refugees and displaced persons.

Fighting, which is affecting much of the productive areas of the country, is behind the 12% drop in the latest cereal harvest in relation to the average for the past five years.

China: 6 210 tonnes of milk powder and 2 070 tonnes of butteroil

This food aid is being provided in the context of the programme for developing the milk sector launched by the Chinese authorities in 1984 with the help of the World Food Programme (WFP). China's programme, which is designed to develop the dairy industry, to raise the standard of nutrition of the beneficiaries and at the same time to help them to achieve balanced economic and social development, initially covered six towns and has now been extended to a further 14 towns.

The Community is supplying milk powder and butteroil, which will be sold

and the counterpart funds will be used under the programme.

The allocation amounts to some ECU 8.5 million.

NGOs: 5 420 tonnes of cereals, 880 tonnes of milk powder, 960 tonnes of butteroil, 1 400 tonnes of sugar, 1 000 tonnes of vegetable oil, 800 tonnes of beans and 240 tonnes of dried fish.

This aid will go to all the NGOs which work with the Community on the distribution of food aid throughout the world.

Sudan:

The Commission has just decided to give to Sudan an advance of ECU 6 million on the funds already approved for two rural development projects (Jebel Marra and Nuba Mountains). This advance permits the purchase of approximately 30 000 tonnes of sugar and meets the country's immediate sugar requirements.

In the framework of its negotiation with the IMF, the Sudan has decided to abolish consumer subsidies on sugar; the result is an increase of 70% on sugar prices as from 1 October 1987. The Sudanese government considers it essential that sufficient quantities of sugar are available on the market in order to avoid social disturbances which could threaten the political stability of the

country and jeopardise the recent political and economic decisions which have been welcomed by representatives of the Member States and aid donors in Sudan

The Sudanese government, supported by the IMF, has requested the Community to supply sugar on highly concessional terms. Since other financial solutions are not available, it is proposed to give an advance of ECU 6 million on the hard currency equivalent of the local cost component of two rural development projects which have already been approved for financing from 6th EDF credits. This advance permits the purchase of approximately 30 000 tonnes of sugar; the exchange rate guarantee will ensure that the counterpart funds of this operation will allow the implementation of the two agricultural projects according to the conditions foreseen in the financing agreements concerned.

It should be stressed that at a meeting of the Heads of Delegation of the Consultative Group for the Sudan, held on 2 December last in Paris, the Sudanese government received the unanimous approval from the donors on its current economic and financial policy. At this meeting, the Sudanese delegation, headed by the Minister of Finance and Economic Planning, again stressed Sudan's urgent need for sugar.

GENERAL INFORMATION

1986 International Cocoa Agreement: finally a consensus

At long last, after three successive failures in July, September and December last year, the Council of the International Cocoa Organisation (ICCO) reached agreement in the small hours of 16 January on a package of measures designed to reactivate the Agreement after a halt of almost seven months. The International Cocoa Agreement has been suspended since May last year when the Buffer Stock Manager (BSM) had exhausted the first purchasing tranche 75 000 tonnes. The main points of disagreement had been over:

- (i) the need for a downward revision of the price range because of the drop in the market;
- (ii) the adoption of the special withholding rules;

- (iii) the call by some producer countries for the introduction of a differentiated levy system which would penalise non-member countries;
- (iv) the problem of collecting substantial arrears accumulated by some exporting countries (particularly Côte d'Ivoire with arrears of approximately US \$ 30 million and Brazil with approximately US \$ 7 million to date).

Positive signs

It was clear from the start of negotiations that all parties wanted to reach an agreement after the main producer, Côte d'Ivoire, had given the go-ahead towards the end of the year.

In this connection, it should be

pointed out that the special session was convened at the initiative of the Executive Director who, following a visit to Africa had noticed encouraging signs, especially in Abidjan, and also in Europe particularly in the Netherlands, which then held the Presidency of the Council of Ministers, which showed that the producing countries were finally prepared to engage in constructive negotiations aimed at reaching a compromise.

The two groups of consumer and producing countries therefore agreed from the outset to resume discussions on the basis of the Presidency's draft compromise which had been rejected in December 1987. Each point was discussed at length and in detail.

The working party on special withholding rules, which met after the opening session of the Council, examined the Executive Director's proposal for a draft regulation based on a consolidated text including all the amendments put forward at previous discussions.

The issues which proved most difficult to resolve were reimbursement for exporting countries of costs incurred as a result of storing withheld cocoa (for instance warehouse rental, insurance, replacement costs and so on) and the system for financing a scheme of this type.

After lively discussions, particularly with the Côte d'Ivoire delegation, (which was criticised by the producing countries for its delay in payment), a compromise was reached whereby the Executive Director may reimburse not only storage costs but also insurance and handling costs and interest payments, provided there are sufficient funds available for this purpose.

Another point which was also the subject of lengthy negotiation was the call by the producing countries for a differentiated levy which would penalise countries which are not Members of the Agreement.

That measure was firmly rejected by all the consumer countries both for legal reasons under the GATT and on political and economic grounds.

Although some of the Member States of the Community showed signs of being prepared to give way on certain points in order to reach a consensus, they were nonetheless quick to align themselves with the majority.

The two sides finally arrived at a compromise but at the same time re-

cognised the need to thoroughly study all the legal and economic ramifications. Accordingly they decided to include the point on the agenda of a working party which will be responsible for examining additional back-up measures to the Agreement.

Other measures

Other important measures adopted by the Council include:

(i) a downward revision of 115 SDR to the price range established in Article 27 (1). This measure is accompanied by the suspension of buffer stock purchases in accordance with Article 27 (7). From 16 January the new thresholds are amended as follows:

Upper intervention price 2 155 SDR
May-sell price 2 100 SDR
Median price 1 820 SDR
May-buy price 1 540 SDR
Lower intervention price 1 485 SDR
(ii) an undertaking by importing
members to limit their imports of bulk
cocoa from non-member countries;

- (iii) for a period of six months after resumption of operations buffer stock purchases are to be restricted to cocoa from member countries only;
- (iv) future purchases for replacements are to be restricted to cocoa from member countries only;
- (v) the adoption of a draft regulation on the withholding scheme based on the compromise described earlier in the report;
- (vi) the setting-up of a working party to examine supplementary measures in accordance with Article 34 of the Agreement, with special reference to: (a) the possibility of applying a differentiated levy;
- (b) using the cocoa held in the Buffer Stock for non-traditional purposes;
- (c) supply management measures other than the withholding scheme;
- (vii) a mandate for a delegation to be-

gin consultations with non-member countries with a view to their joining the Agreement.

The EEC protests against arrests in South Africa

In a letter which was conveyed to the South African Government on 16 December, Mr De Clercq and Mr Natali expressed, on behalf of the Commission, their dismay and grave concern at the arrest and detention of members of South Africa's black community.

This protest followed the arrest on 7 December of Mr Eric Molobi, a founding member of the Kagiso Trust, for his activities in connection with the National Education Crisis Committee, and of Mr Khotso Crutse, the Kagiso Trust's representative in the northern part of Cape Province.

The Commission pointed out that these two men were members of an organisation which was recognised and respected by the international community, and with which the European Community maintained close contact.

LAST MINUTE

The representative of the anti-apartheid organisation, the African National Congress (ANC), escaped an attempt on his life on 5 February 1988 in Brussels. Many ACP personalities and representatives of Belgian political parties strongly condemned the attack during a press conference organised on 11 February by the Belgium National Committee of Action for Peace and Development.

Ministerial conference on the relations between development and the environment

At the end of the Euro-African Ministers' conference on environmental protection in economic development in Dakar (Senegal) recently, representatives of African and European nations, the European Commission and the UN Environmental Programme adopted a joint declaration. In thetext, which was approved on 15 January after two days' discussion, the

various parties said that lasting development was needed and that it was essential, in this, to ensure the protection of the environment and nature and natural resources at national, regional and international level by adopting a preventive approach. Without it, it would be very difficult, if not impossible, to cope with problems such as desertification and deforesta-

tion, unsuitable methods and programmes and the urban development The conference therefore stressed that consideration of the protection of the environment and natural resources was a factor of development and no barrier to economic growth. The parties represented at the meeting agreed to better integrate the protection of the environment and natural resources into their economic and social development, to start or continue with the appropriate processes of adaptation and to boost Euro-African cooperation over the coming years. They would, for this purpose, be using "an active policy, knowing that the process was a long one".

The conference, which was organised by the Government of Senegal and the European Commission, with the help of the UN Environmental Programme and bilateral aid from France, brought together Ministers and representatives of 18 countries of West Africa and 11 EEC Member States. Commissioner Stanley Clinton Davis and the UNEP Executive Director Dr Tolba described their respective organisations' guidelines and actions in this field. Experts and representatives from the World Bank, the African Development Ban and various NGOs took part in the preparatory meetings of two technical committees on the marine and coastal environment and the antidesertification campaign. o

EUROPEAN COMMUNITY

European Council: overall compromise

The extraordinary Brussels Summmit ended on 12 February just after midnight, with an agreement which should now allow, as Chancellor Kohl and Commission President Delors stressed, for a speeding up of work with a view to the completion of the single market, which will be at the centre of discussions at the European Council in Hanover on 27 and 28 June.

In order to achieve this result, what proved necessary, after numerous bilateral meetings or plenary sessions in the morning and beginning of the afternoon, was the holding of bilateral meetings on the Presidency's last global compromise (in close cooperation with the Commission). This global compromise includes some concessions to those who want austerity, and also some to the defenders of the farmers.

The main points are:

Structural funds

Funding and geographical concentration

The European Council confirms the decisions taken on 29 and 30 June 1987.

Commitment appropriations for the Structural Funds will be doubled in 1993 by comparison with 1987. In ad-

dition to the resources earmarked for the financial year 1988 (ECU 7 400 million), commitment appropriations will increase by ECU 400 million in 1988 and ECU 1 300 million each year from 1989 to 1992, representing ECU 13 000 million in 1992.

Budget discipline in agriculture

The reference basis for 1988 will be set at ECU 27 500 million.

The annual rate of increase in EAGGF Guarantee Section expenditure must not exceed 80% of GNP growth, adjusted by an amount of ECU 200 million corresponding to the financing of set-aside, i.e. approximately 74%.

Depreciation of existing surplus stocks will be financed outside the agricultural guideline.

The period for payment of advances to the Member States by the Commission will be extended from 2 to $2\frac{1}{2}$ months.

Own resources

The overall ceiling of own resources will be set at 1.2% of total Community GNP for payment appropriations. A ceiling of 1.3% of total Community GNP shall be set for commitment appropriations.

Agricultural stabilisers

Cereals

The guarantee threshold will be set at 160 million tonnes for the marketing years 1988/89, 89/90, 90/91 and 91/92.

At the beginning of each marketing year an additional co-responsibility levy (CL) of 3% maximum will provisionally be charged in order to keep expenditure on market management within the budgetary limits.

If at the end of the marketing year the guarantee threshold proves not to have been overshot or to have been overshot by less then 3%, the provisional CL will be entirely or partially reimbursed.

If the guarantee threshold has been overshot at the beginning of the next marketing year the intervention price will be reduced by 3% per year.

Oilseeds and protein products

The annual guarantee thresholds for the marketing years 1988/1989, 1989/1990 and 1990/1991 will be fixed as follows:

- colza: 4.5 million tonnes (Community of 10) (*)
- sunflower seed: 2 million tonnes(Community of 10) (*)
- soya: 1.3 million tonnes (Community of 12)
- protein products: 3.5 million tonnes (Community of 12)

Withdrawal of land (set-aside)

The European Council agrees to accept a mechanism for limiting supply by withdrawing agricultural land from production. This will complement the other stabilisers; application will be compulsory for the Member States, but optional for producers. Regional exceptions to compulsory application will be possible.

In order to qualify, a producer must set aside at least 20% of his arable land for at least 5 years. A producer who sets aside at least 30% will, in addition to the premium, be exempted from the co-responsibility levy for 20 tonnes of cereals marketed by him.

^(*) A corresponding adjustment in the guarantee thresholds for colza and sunflower seed is provided for in the case of Spain and Portugal.

(ACP-EEC Lomé Convention)



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INDUSTRIAL OPPORTUNITIES

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GERMAN MINISTRY AND CDI SIGN AGREEMENT

Dr. Isaac Akinrele Director of CDI and Mr. Wolfgang Buch Director of the Industrial Cooperation Division of the Federal Ministry for Economic Cooperation (FMEC) Germany, signed a cooperation agreement on behalf of their respective organizations at CDI's office in Brussels on 16 December 1987.

Under this agreement the Ministry will finance an expert to be placed for two years in DEG (the German development finance institution) to work full-time, in close liaison with CDI, on developing industrial projects with German firms in ACP countries.

The agreement also incorporates a modest budget allocation to facilitate the expert's work with short term consultancies, travel, promotional activities, etc.

It is hoped that the agreement will intensify cooperation between small and medium sized industries (SMIs) in Germany and ACP countries. The prospects for this have been improved by DEG's recent decision to open up to smaller investments and its current determined efforts to finance projects in less developed countries, particularly in sub-Saharan Africa. CDI's increasingly selective approach to the study and promotion of projects is also likely to produce a higher proportion of bankable projects for DEG financing.

CDI recognizes that adequate investment financing is the primary condition for the success of an industrial project and finds that de-



CDI Director Dr. I.A. Akinrele (left) and Mr. Wolfgang Buch, Divisional Director FMEC, Germany, during the signing of the agreement between the two bodies in Brussels last December.

velopment finance institutions in the EEC (such as DEG) have become the most important source of finance for joint ventures in ACP countries.

Under the agreement CDI will present ACP industrial projects to DEG for possible financing and for the identification of potential German technical, marketing and investment partners. CDI will also consider the co-financing of studies and technical assistance, for projects identified by DEG.

STRENGTHENED COOPERATION

In a speech at the signing ceremony, CDI Director Dr. I.A. Akin-

rele said that such agreements were seen by CDI as a means of enabling European SMIs "to extend investment operations" to ACP States. Similar agreements have also been signed with:

- The French Ministry of Cooperation
- The Walloon and Flemish Regions of Belgium
- The Italian Institute of Foreign Trade (ICE)
- EOMMEX (Hellenic Organization for Small and Medium Sized Industries and Handicrafts), Greece
- The Portuguese Institute for Foreign Trade (ICEP)

Continued on page 2

Continued from page 1

 The Institute for Industrial Promotion and Reconversion (SPRI), Basque Region, Spain.

Moreover, agreements for investment financing of ACP industrial projects have been signed between CDI and the following institutions:

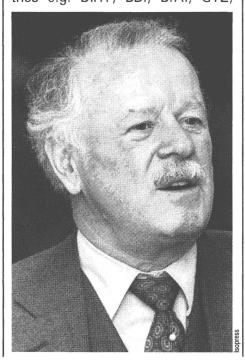
- The Danish Industrialization Fund for Developing Countries (IFU)
- The International Corporation for Development Financing in Africa (SIFIDA), Geneva
- Proparco (the French development finance institution)

Such agreements, said Dr. Akinrele, have strengthened CDI's cooperation with each country concerned.

The agreements belong to a new trend to get private sector SMIs involved in ACP operations for which they need a substantial degree of subsidized assistance at the initial stages.

"Germany", he said, "has enormous potential for assisting ACP industrial development".

He was pleased to note that the agreement with Germany opens up the possibility of involving, in CDI-assisted projects, a number of German institutions with existing operational contacts with ACP countries e.g. DIHT, BDI, BfAI, GTZ,



SES, Afrika Verein, South Pacific Society, etc.

Mr. Jens Mosgard, Deputy Director of CDI, said that recent surveys undertaken by CDI of the German wood, building materials and ceramic industries, indicated many specific opportunites for industrial cooperation with ACP countries.

German furniture manufacturers, for instance, would rather have some of their wooden furniture components made in ACP countries.

Dr. Ulf Siebel, CDI's Joint Governing Board member for Germany, said that in addition to implementing projects, CDI has helped many EEC and ACP entrepreneurs to avoid spending money on industrial projects that might have ended in failure.

He was happy about CDI's emphasis under the Third Lomé Convention on the rehabilitation of existing enterprises which can enable one "to achieve more for less investment".

PRIVATE INDUSTRY

Mr. W. Buch said that he hoped the agreement would "improve CDI's antenna system in Germany to strengthen links between ACP firms and German industrialists".

He stressed the importance of balanced industrialization to the development of ACP countries and said that private investment is vital to the industrialization process. His ministry is involved in business cooperation projects in 30 developing countries.

Professor Dr. Hans-Gert Braun, DEG's Director of Project Promotion, said that his organization could cooperate with all ACP countries but that it could not finance projects unless a private German or European technical and investment partner were also involved.

DEG-financed projects can be initiated, he said, either by private EEC firms or ACP entrepreneurs.

Dr. Ulf R. Siebel, member for Germany of CDI's Joint Governing Board.



Professor Dr. Hans-Gert Braun, Director of Project Promotion, DEG.

DEG, as a shareholder, takes a place on the Board and thus brings its wide experience to each project.

It has so far financed 350 projects. In its current porfolio it has 249 projects in 71 countries. Its average contribution is DM 2.5 million.

DEG's investments generally have a mobilization effect: "when we put in DM 1 M it can be followed by DM 9 M from other sources".

Professor Braun added that the new agreement would enable DEG to put its full promotional package into action for CDI-assisted projects.

"I think", he concluded, "that we should be optimistic and that we can promote and finance many proposals from ACP countries for implementation with German partners".

CDI Director Dr. Akinrele said that he hoped eventually to follow up the FMEC agreement by a separate project financing agreement with DEG.

Dr. Eckhard Hinzen, CDI's project finance expert, announced that currently 13 ACP projects, involving German partners, are under promotion by CDI.

NEWS IN BRIEF

AGREEMENT WITH FLEMISH REGION (BELGIUM)



Mr. Paul Deprez (left), Minister of External Relations of Belgium's Flemish Region, exchanges greetings with CDI Director Dr. I.A. Akinrele, following the signature of the Agreement between the Region and CDI last November.

On 5 November 1987, Mr. Paul Deprez, Minister of External Relations of Belgium's Flemish Region, signed a cooperation agreement with CDI.

This agreement, which will remain in force until the end of Lome III, commits CDI and the Flemish Region to jointly supporting the involvement of Flemish firms in ACP industrial projects.

A similar agreement was signed in 1986 with Belgium's Wallon (french-speaking) Region, as reported in issue N° 51 of ''Industrial Opportunites''.

The agreement covers activities like feasibility studies, pilot plants for new or appropriate technologies, travel for negotiations, start-up, management and technical expertise, diagnostic missions (to rehabilitate or expand existing enterprises).

A handful of projects already under discussion between CDI and Flemish industrialists, may soon benefit from this agreement.

VISITORS TO CDI

Amont the recent visitors received by CDI Director, Dr. I.A. Akinrele, were:

- H.E. Mr. Wilson, Ambassador of Jamaica to the European Community;
- H.E. Mr. L. Keita, Ambassador of Mali to the European Community;
- Dr. Luis Fontoura, President of the Portuguese Institute of Foreign Trade (ICEP).

RECENT PUBLICATIONS

Recent publications from CDI include:

- CDI's Origin, Structure and Services, a 16-page explanatory brochure;
- Guide to Partnerships in Industry, which aims to inform ACP industrialists and investors of the main financial, legal and practical features of the types of partnerships they can establish with EEC firms, including joint ventures, licencing, franchising, marketing and technical assistance agreements;
- Financial Resources (for industrial

projects in ACP countries), gives details of the main features and modes of operation of finance institutions (other than ACP national bodies), to help ACP and EEC investors to identify and select the institutions most likely to provide the financing required; also described are export credit financing and insurance agencies, investment guarantee schemes, foreign exchange retention accounts and various pre-investment facilities.

Relevant institutions and individuals may obtain these publications, free of charge, from CDI.

NEWS IN BRIEF Continued on page 4

ACP ENTREPRENEURS' CONTRIBUTIONS TO CDI-ASSISTED INTERVENTIONS

CDI has decided to rationalize the contribution of ACP parties to CDI-assisted interventions. CDI's financial assistance generally applies to external costs, as in many ACP countries an investor has only limited access to foreign exchange. Neither, in many cases, can ACP projects bear the burden of all the local costs of a CDI-assisted intervention.

CDI henceforth will use the following guidelines to determine the level of the ACP contribution to any CDI-assisted intervention.

The percentage figures given for the ACP contribution are merely indicative. They are mainly intended to put a ceiling on the ACP entrepreneur's contribution to an intervention.

CATEGORY		ACP CONTRIBUTION (as % of total costs)	
OF PROJECT	CDI INTERVENTIONS	LDCs	Other states
New investment projects	Pre-feasibility study, completion of pro- ject data forms, in-depth evaluation, pro- motion & negotiation, identification of		
SG Te ba Fe je up se Sa	sources of finance (& syndication). Testing and pilot schemes, for projects	0	0
	 based on adapted technologies. Feasibility studies of joint venture projects with potential EEC partners, startup assistance, training, market re- 	5	10
	search. • Same as above, but not involving poten-	10	15
	tial EEC partners.	15	20
Existing industries	• In-plant training.	10	15
	Diagnostic studies, technical assistance, implementation assistance, marketing & trade fairs.	15	20
Non-profit- making institutions (or industries) • All forms of CDI assistance.		0	0

NEW STAFF FROM ETHIOPIA AND TOGO



Mr. Berhanu Kidane

Mr. A.T. Adade-Helledy

Mr. Berhanu Kidane of Ethiopia and Mr. Anani T. Adade-Helledy from Togo, are the latest recruits to CDI's professional staff.

Mr. Kidane took over responsibility for CDI's marketing assistance programme and the co-ordination of the Investment Promotion Division.

He was previously CDI's antenna (or field representative) in Ethiopia, in addition to running his own legal and financial consultancy service.

He has been general manager of a tourist business and of a major tyre factory. He was also Accounting Director of Ethiopian Airlines and a Divisional Chief in the Office of the Auditor General of Ethiopia.

Mr. Kidane also held senior administrative and financial positions in the bottling and hotel industries. He is a qualified lawyer and has also studied accounting, business management and economics.

Mr. Adade-Helledy is CDI's new area officer for Central Africa. He has closely observed many development projects, particularly in the industrial sector, in the context of the ACP-EEC Lomé Convention.

Before joining CDI he worked for the Secretariat of the ACP Group, as an expert in financial and technical cooperation and investment.

He had previously spent five years as an expert with the Commission of the European Communities, evaluating development projects.

Mr. Adade-Helledy qualified in business engineering with the Solvay Institute (Belgium) and is currently completing a doctorate in applied economics.

CBI AND CARIBCAN

THE CARIBBEAN: STEPPING-STONE TO NORTH AMERICAN MARKETS

By Rhonda Wilson, of the Caribbean Industrial Research Institute, Trinidad (*)

The industrial and economic giants to the north of the Caribbean, namely Canada and the United States of America, have both announced major trade and assistance programmes for the region.

The USA's Caribbean Basin Initiative (CBI) applies to the wider Caribbean as well Central America, while Canada's CARIBCAN is for the benefit of the Commonwealth Caribbean only.

CARIBCAN became effective from June 1986 while the CBI was formalized in October 1983. The major aspects of both programmes are summarized in the table below.

DUTY-FREE ELIGIBILITY

To be eligible for duty-free entry under CARIBCAN, goods must be certified as being bona fide the growth or manufacture of the Commonwealth Caribbean, that is, a minimum of sixty percent (60%) of the ex-factory price of exported goods (which includes factory overheads and reasonable profits) must originate in any of the Commonwealth Caribbean countries or in Canada.

As far as the CBI is concerned, products must meet the following three requirements:

- The products must be exported directly from a beneficiary country;
- Thirty-five percent (35%) of the direct manufacturing costs, inclusive of labour and overheads, must be added locally; and
- Any product with a foreign component must be substantially transformed into a different article.

(*) The Caribbean Industrial Research Institute (CARIRI) is CDI's antenna for Trinidad and Tobago.

BENEFICIARY COUNTRIES

Those countries which may take advantage of both programmes are Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guvana, Jamaica, St. Christopher-Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago.

The two programmes differ significantly in their geographic applicability. CAR-IBCAN applies to the Commonwealth Caribbean only, while the CBI is applicable to the wider Caribbean as well as Central America.

From the Caribbean perspective therefore, the more limited geographical scope of CARIBCAN makes it more attractive, in that less goods are competing for market opportunities in Canada.

PROSPECTS FOR THE EEC

For European industrialists, the Caribbean therefore offers some encouraging

Both programmes enable goods manufactured within the region duty-free access to the prosperous markets of the United States of America and Canada, which have a combined population of over two hundred and fifty-five (255) million inhabitants.

This therefore suggests that enterprising European industrialists may wish to consider joint venture arrangements in the Caribbean, because of the opportunities afforded via both CARIBCAN and the

It is hoped that the European investors will take up the challenge, as the export capabilities of many of the Caribbean countries are still untapped.

NORTH AMERICA-CARIBBEAN AGREEMENTS

CARIBCAN

- · Duty free access for Commonwealth Caribbean imports to Canada.
- · Programme to strengthen the exporting capabilities of the region, including training assistance by way of fifty (50) more scholarships.
- Double taxation treaties to be nego-
- Excluded are textiles, clothing, footwear, luggage, handbags, leather garments, lubricating oils and methanol.

CBI

- Free trade for Caribbean Basin countries for twelve (12) years.
- An assistance programme worth US\$ 350 million.
- Technical assistance and training in investment promotion, exporting, marketing and technology transfer.
- · Tax incentives for US investors.
- · Excluded are bananas, bauxite, sugar, petroleum derivatives, leather and gar-

(2ND) INDUSTRIAL FORUM OF CENTRAL AFRICA

"We must boost private investment in Africa, foster the emergence of a modern African industrial sector, promote a new policy of cooperation between private operators to complement multilateral and bilateral political cooperation..."

Thus, the opening speech of the Forum, delivered at Libreville's "Palais des Congrès" by Mr. L. Nebiame, Prime Minister of Gabon, went right to point of the event.

Subsequently, in Libreville, 450 participants from Central Africa and the EEC, worked for four days with a shared optimism for the development of small and medium-sized industries (SMIs) in Central African countries.

Every effort went into making a success of the Forum. It was organized by the Gabonese Centre for Foreign Trade, under the aegis of the Customs and Economic Union of Central Africa (UDEAC) and the Commission of the European Community, with the assistance of the Centre for the Development of Industry (CDI).

ATTRACTING INVESTMENT

CDI Director Dr. Isaac A. Akinrele, in his address at the opening ceremony, said that there can be no doubt about the contribution which private capital can make to economic development.

In order to create an appropriate climate for investment in manufacturing industries, he went on, African countries would need to introduce:

- Measures to widen markets;
- Measures to strengthen financial institutions and to encourage entrepreneurship; and
- Measures to preserve the greatest possible stability in laws and regulations affecting domestic and foreign private investment.

A team of six CDI experts, led by Dr. I.A. Akinrele, attended the Forum. They were joined by representatives of CDI's Central African antennae organizations (who advised and guided promoters from their countries, throughout the negotiations which they held at the Forum).

Twelve Central African promoters,

identified by the antennae, were brought to Libreville by CDI, to effect a vital step in the implementation of their projects i.e. the attraction and selection of the best possible European partners.

CDI also co-financed the participation in the Forum of European companies likely to meet the needs of these African promoters. The outcome did not disappoint, as this second Forum gave rise to several promising contacts.

The last day of the Forum was devoted entirely to discussion of the key factor — the **financing of investments in industrial companies**.



This day-long discussion, organised by IFU (1), included presentations by specialists in investment finance from the Caisse Centrale (France), DEG (2), the African Project Development Facility (World Bank) and CDI.

Dr. Eckhard Hinzen of CDI reminded participants that CDI has funds neither for risk capital nor loans. Its principal task is to prepare project documentation acceptable to banks, for industrial investments in ACP countries.

Dr. Hinzen outlined, to a full hall, the complete process of putting together a financial package. He explained, by way of example, the financing of two CDI-assisted projects (a tannery and a dairy). The questions which followed amply demonstrated that access to sources of finance is still the main problem for African entrepreneurs.

PROSPECTS

The SMI projects discussed at Libreville are currently being pursued elsewhere. They have now become the objects of confidential meetings, technical correspondence and visits to financiers.

The creation and strengthening of SMIs is the *raison d'être* of CDI. This mandate was given to it under Lome III and requires the bringing together of potential partners, for joint investments in viable private projects in ACP States.

The mandate is very much in line with the present development strategies of most ACP States, which envisage greater reliance on the private sector (and on SMIs in particular).

Four of the twelve African promoters brought to the Forum by CDI made significant progress with negotiations for their projects.

The promoters of a soap factory (Burundi) and of a project for the drying and salting of fish (Congo), have already obtained finance; they were due to be visited by potential European partners, at the beginning of this year.

BNDE ⁽³⁾ has already agreed to contribute to the financing of a project for the production and packaging of milk products (Burundi); and DEG and SO-FIDE ⁽⁴⁾ have both agreed to contribute to the financing required to re-start a yeast plant (Zaire).

Mr. Lorenzo Natali, vice-President of the Commission of the European Community, said in his closing address to the Forum: "It is vital that we go beyond contacts between individuals, to create a political and especially a financial climate conducive to the development of an industrial base and pluri-national partnerships, in Central Africa". He concluded with a strong appeal to participants: "The future of Africa demands a courageous response by people willing to accept the risks and challenges involved. I ask you nothing other than to take your place among such people".

⁽¹⁾ IFU - Industrialization Fund for Developing Countries (Denmark).

⁽²⁾ DEG - development finance institution (West Germany).

 ⁽³⁾ BNDE - Banque Nationale pour le Développement Economique (Burundi).

⁽⁴⁾ SOFIDE - Société Financière de Développement (Zaire).

INDUSTRIAL POTENTIAL SURVEYS OF ACP STATES

For over one year now, "Industrial Opportunities" has been carrying summaries of some of the industrial potential surveys undertaken by CDI in all ACP States.

The surveys are a form of assistance to the ACP States and include recommendations on how best to promote industrial development. In this issue we publish a summary of the survey undertaken in 1986 in the major West African State of Nigeria.

Nigeria: basis for growth lies within

"The dynamism of the average Nigerian, and his realisation that industry or business would contribute to personal and national wealth, are encouraging signs."

These are not the only encouraging signs for industrial development in Nigeria, believe the authors of an independent industrial potential survey, sponsored by CDI.

The country is endowed with valuable mineral resources, many still untapped; agriculture provides an array of raw materials like cotton, groundnuts, palm kernels etc.

Livestock is raised, fish is available from the rivers and sea, and trees for numerous industrial applications abound. Human resources are quantitatively staggering, with a population projection for 1990 of 110 million.

Why, then, is Nigeria, as the survey says, "in a state of economic emergency" and why has the "distortion in the country's industrial development become obvious"?

OIL BOOM DAYS

Going back to the 1960s, the years when Nigeria's economy witnessed steady growth, the manufacturing sector although small as a percentage of GDP (5%) was the fastest growing sector of the economy. Industrialization was, however, largely based on import substitution.

The survey underlines that the emergence during the 1970s of petroleum, as Nigeria's main foreign exchange earner, had a two-fold effect on industrial development.

On the one hand new plans, like the 1975-1980 3rd National Development Plan, aimed at giving the economy a solid foundation, could be embarked upon; and on the other hand, the private sector could set up industries following the pattern of import substitution.

Within a decade however, the easy access to foreign exchange was over. World oil prices collapsed, production ceilings were imposed and the expected raw material base for many industries was no longer apparent.

Curbing imports of the raw materials needed for manufacturing was a direct consequence of the need to save foreign exchange. This resulted in the under-utilization of production capacities with negative implications for invested funds and employment



NEW DIRECTION

The present industrial effort, according to the survey, is being forced to channel itself into a new direction — that of finding and using more local materials and of stepping up industrial exports.

Since 1981, the government has welcomed greater involvement by the private sector in projects formerly earmarked for government execution e.g. cement manufacture and agro-allied projects.

An Industrial Development Coordinating Committee (IDCC) has been set up, to simplify procedures for industries in their dealings with the government.

VAST RESOURCES

In terms of resources, available facilities and the investment climate, how well is Nigeria equipped to meet the challenge of changing direction on the road to industrial prosperity?

The mineral potential, apart from crude oil, which still earns the country much of its foreign exchange, is huge.

Besides limestone (now being used for cement making), iron ore (exploited for iron and steel production) and coal, the exploitation of a host of minerals vital for industrial development (and for export) is still at the stage of being investigated.

"The potentialities of agriculture are immense" says the survey. The resources of

this sector are grouped into: food crops, drug plants, livestock, fisheries and forests. Each group can in turn be sub-divided into numerous further resources, many with industrial uses.

Having been declared the highest priority sector, agriculture now attracts investors. Agro-allied industries have found it easier than others to respond to the call to use local resources. Breweries, for example, are going into maize growing whilst one of the leading textile manufacturers is investing in cotton growing.

It is now important that agricultural production should be linked and planned with related industries, to avoid wastage.

As mentioned, Nigeria's population offers enormous human resource potential. However, the country still needs to train many more people to be able to satisfy the needs of its industrial base. The question of adequate managerial manpower is currently receiving particular attention.

With respect to financing industrial projects, local and foreign financial institutions play an important role.

Locally there are development banks like the Nigerian Industrial Development Bank (NIDB), which in addition to long term lending may also take up equity shares in some ventures. NIDB has itself embarked on project development and is beginning to identify projects for entrepreneurs to take up, rather than waiting for ideas to come in. (NIDB is one of CDI's antenna organizations in Nigeria).

Nigeria's banks are perhaps too conservative, suggests the survey, particularly with respect to the level of equity demanded as a condition for lending.

INVESTMENT CLIMATE

Industrial projects meeting the government's immediate priorities (i.e. using local raw materials, supporting agriculture or being export-oriented), can now qualify for government incentives such as *pioneer status*. This provides for a tax holiday of up to five years.

A further incentive (the "approved status" incentive) enables dividends on a foreign investment to be repatriated and also provides for the repatriation of capital upon the disposal of the investment.

Concessions are available to back up the export drive. They range from exemptions from levies on raw materials imported for

export manufacturing, to the provision of Export Credit Guarantees and Insurance.

Existing industries in Nigeria are still geared very much towards the production of consumer goods for the local market.

There is a marked absence of machinery or equipment manufacturing. Industries such as chemicals, iron and steel, engineering products, assembly and electrical goods, are mostly based on imported raw materials.

The value of foreign investment is recognised in Nigeria, but only about 30% of private joint ventures with foreign partners have been successful, says the survey. This is attributed to the poor choice of foreign

partners, or to the lack of adequate commitment by Nigerian promoters.

The ownership structure for Nigeria's private sector is set out in the Nigerian Enterprises Promotion decree of 1977, the aim of which is to foster joint participation between Nigerian and foreign investors.

Trading, services and small-scale projects are reserved for Nigerians. Otherwise foreign investors, are allowed up to a maximum of 60% ownership (fertilizers, distilling, glass manufacture, agricultural machinery, etc.).

However, certain specified industries (brewing, biscuit making, cosmetics, furniture...), are given a 40% ceiling.

Since CDI's survey was carried out there have been a number of significant developments inspired by Nigeria's structural adjustment programme. A long-awaited blueprint has been finalized, to simplify procedures and incentives for foreign investors wishing to set up production in Nigeria.

The government's privatization programme has been announced. It makes provision for debt-for-equity conversion, to reduce foreign debt.

Moreover, export earnings may now be retained; and a "domiciliary account" in foreign currency may be opened, by foreigners and Nigerians alike.

C.B.

INITIAL ASSISTANCE TO NIGERIA UNDER LOME III

Below we list some of the projects alreay assisted (or about to be assisted) under CDI's initial programme for Nigeria under Lome III. Some of these projects were derived from the industrial potential survey undertaken by CDI in Nigeria in 1986.

FEASIBILITY STUDIES

- Limestone quarry diversification CDI co-financed a feasibility study for the production of lime, whiting and limestonebased bricks.
- Poultry complex CDI co-financed a feasibility study for an integrated project involving a hatchery, chicken rearing and the production of animal feed.
- Poultry feed mill CDI co-financed a feasibility study for the project.

TRAINING

- Grain milling the promotor was given further assistance to enable two Nigerian technicians to undertake pre-production training in the factory of the joint venture partner in Denmark. (CDI had earlier co-financed the feasibility study). The mill is now in operation.
- Extruded breakfast cereals CDI has agreed to train a technician in Europe as soon as the installation of equipment has been completed.
- Hermetic compressors (for air conditioning, refrigerators, etc.) — CDI financed the pre-production training of four technicians in the plant of the UK joint venture partner. It also provided travel assistance to the promoter for the finalization of negotiations.

TECHNICAL ASSISTANCE

- Furniture CDI assisted three furniture factories:
 - an expert was provided for 1 year to start up a new plant to produce domestic furniture;
 - technical assistance was provided over 1 year to help improve production in an existing plant manufacturing household and modular office furniture;
 - an expert was provided to train staff on new equipment purchased by an existing company, to produce metal and wooden furniture.
- Brick factories CDI financed a rehabilitation study of six brick factories and has provided travel assistance to enable project officers from the Nigerian Industrial Development Bank to visit a Belgian brick manufacturer, to discuss implementation.

- Shoe manufacturing CDI provided further assistance to a Nigerian company to allow experts from an Italian firm to update their proposals for the restoration of production at the Nigerian plant. (This is a rehabilitation project for which CDI co-financed a feasibility study under Lome II).
- Information centre CDI provided an expert for the study and the setting up of an industrial information centre for the Lagos Chamber of Commerce.
- Sorghum malting CDI provided a technical project appraisal and advice on possible technical agreements, for the production of malt from locally grown sorghum.
- Steel boats CDI provided an in-depth substantiation of a project for the production of trawlers.

ADAPTED TECHNOLOGIES

- Solar still CDI is financing the development of a prototype solar still, for the production of pure water.
- Perfusion solutions CDI provided start-up assistance for this "adapted technology" project, which is now in production. (The project was initiated by the promoter upon reading a profile of the technology published by CDI in "Industrial Opportunities").

PROJECT PROMOTION

- Industrial rubber CDI provided travel assistance to enable the promoter to visit Europe to examine equipment and meet a potential joint venture partner. (CDI co-financed the feasibility study for this project under Lome II).
- Prospection for partners CDI sponsored a consultant to identify potential EEC partners for two Nigerian projects: the production of aluminium door and window frames and an integrated fishing operation.
- Melamine tableware CDI provided travel assistance to enable the promoter to come to Europe to meet potential joint venture partners.
- West Africa Industrial Forum (Dakar, 1985) CDI brought to the forum the Nigerian promoters of projects for salt production, the manufacture of woven polypropylene sacks, fruit juice and ceramic tableware.
- Salt production CDI provided travel assistance to the promoter to allow him to meet potential partners in Greece (as well as bringing him to the Dakar forum see above). CDI is now financing an in-depth evaluation of the project.



INDUSTRIAL PROPOSALS FROM EEC FIRMS ACP ENTREPRENEURS, PLEASE REPLY

The proposals outlined below have been put forward by EEC firms interested in setting up production in ACP countries, under joint venture, franchising, or licencing arrangements, with local businessmen. ACP entrepreneurs interested in any proposal are invited to write to CDI quoting the reference number. However, CDI will not be in a position to act upon letters received unless ACP entrepreneurs provide all the information requested in the box below.

Where a joint venture is under consideration, the EEC companies are willing to contribute (depending on the country and the project) some 20% of the equity investment.

Where second hand equipment is suggested, CDI may sponsor an evaluation by an independent expert of the quality, cost, suitability and condition of such equipment.

All equipment costs are quoted in Ecus (European currency units). The value of the Ecu may easily be ascertained from its relationship to other European currencies. Thus, in November 1987: 1 Ecu = £ 0.694742, or FF 6.97917, or DM 2.06233.

Please ALWAYS mention the CDI reference numbers if reproducing the following proposals,

Product(s)	Minimum capacity (to break even)	Minimum investment (for equipment at FOB price)	Type(s) of cooperation offered	Country of origin (Ref. No.)
Cheese (protein-rich, from milk or vegetable fat)	Flexible (up to 2 tons per hour)	Ecu 195 000	Equity participation Management assistance	Italy (88/1)
Fruit/vegetable processing	1 ton to 10 tons per hour (depending on the project)	Ecu 830 000	Equity participation Know-how Technical assistance	Italy (88/2)
Raw cotton, cotton yarns, cotton oil	12 tons per day of cotton yarn	Ecu 830 000	Equity participation Know-how Technical assistance	Greece (88/3)
Maize, starch and by-products	1 tonne of starch per hour	Ecu 3.45 million	Licensing agreement Equity participation Training	Nether- lands (88/4)
Compound feedstuffs and pre-mixes	3 to 5 tonnes per hour (1 shift)	Ecu 345 000 to Ecu 518 000	Studies Equipment Equity participation Training	Nether- lands (88/5)
Fermentation vinegar Bakers' yeast	500 tons per year of vinegar 1 000 tons per year of dry yeast	Ecu 291 350 for vinegar Ecu 3.64 million for yeast	Technical assistance Know-how Equity participation (possibly)	Germany (88/6)
Gari (processed cassava) Tropical fruit juice Avocado oil Palm oil (containerized plant) Coconut processing Combustible briquettes (from agricultural waste)	1,500 kg of tubers per hour 700 kg of fresh fruit 1 300 kg of avacados 650 kg of stripped fruit per hour 3 000 to 4 000 nuts per hour 150 kg to 450 kg of waste products per hour	Ecu 532 400 Ecu 440 000 Ecu 266 200 Ecu 81 020 Ecu 27 780 Ecu 162 040	Studies Equipment Equity participation Training Technical assistance	Luxern- bourg (88/7)

Information required of ACP entrepreneurs when replying

- Show why it would be worth-while to manufacture the products in question in your country, e.g. give market data, indicate that raw materials are available locally, etc.
- Describe your present activities plus your industrial and/or commercial experience, enclosing any available information such as your latest balance sheet.
- State how much capital you yourself could contribute.
- State the maximum portion of the equity your country legally allows to an EEC partner.
- . Can you obtain finance and if so from where?
- If you need a foreign loan or supplier's credit, can you obtain a local guarantee?
- Is your project a national priority?
- Outline the incentives your country offers to foreign investors.

OPERATIONAL SUMMARY

No. 44 - March 1988

(position as at 23rd February 1988)



EEC-financed development schemes

The following information is aimed at showing the state of progress of EEC development schemes prior to their implementation. It is set out as follows:

Geographical breakdown

The summary is divided into three groups of countries, corresponding to the main aspects of Community development policy:

- the ACP countries (Africa, the Caribbean and the Pacific), which signed the multilateral conventions of Lomé I (28 February 1975), Lomé II (31 October 1979) and Lomé III (8 December 1984), plus the OCT (overseas countries and territories) of certain member states of the EEC, which get the same type of aid as the ACP countries;
- the Mediterranean countries (Maghreb and Mashraq), which signed cooperation agreements with the EEC in 1976 and 1977;
- the ALA developing countries of Asia and Latin America, beneficiaries since 1976 of annual aid programmes.

The information within each of these groups is given by recipient country (in alphabetical order).

Note

As the information provided is subject to modification in line with the development aims and priorities of the beneficiary country, or with the conditions laid down by the authorities empowered to take financial decisions, the EEC is in no way bound by this summary, which is for information only.

Information given

The following details will usually be given for each development scheme:

- the title of the project;
- the administrative body responsible for it;
- the estimated sum involved (prior to financing decision) or the amount actually provided (post financing decision);
- a brief description of projects envisaged (construction work, supplies of equipment, technical assistance, etc.);
- any methods of implementation (international invitations to tender, for example);
- the stage the project has reached (identification, appraisal, submission for financing, financing decision, ready for implementation).

Main abbreviations

Resp. Auth.: Responsible Authority Int. tender: International invitation to tender Acc. tender: Invitation to tender (accelerated procedure)

Restr. tender: Restricted invitation to tender

TA: Technical assistance

EDF: European Development Fund mECU: Million European currency units

Correspondence about this operational summary can be sent directly to :

Mr. Franco Cupini
Directorate-General for Development
Commission of the European Communities
(ARCH.25/1/1)
200, rue de la Loi
B-1049 Brussels

Please cover only one subject at a time.

DESCRIPTION SECTOR CODE

A1	Planning and public administration	A5B	Industrial development banks
A1A	Administrative buildings	A5C A5D	Tourism, hotels and other tourist facilities
A1B	Economic planning and policy	A5D A5E	Export promotion Trade, commerce and distribution
A1C	Assistance to the normal operations of	A5E A5F	
	government not falling under a different	A5F A5G	Co-operatives (except agriculture and housing)
	category	A5G A5H	Publishing, journalism, cinema, photography Other insurance and banking
A1D	Police and fire protection	A5I	Archaeological conservation, game reserves
A1E	Collection and publication of statistics of all kinds,	ASI	Archaeological conservation, game reserves
	information and documentation	A6	Education
A1F	Economic surveys, pre-investment studies		
A1G	Cartography, mapping, aerial photography	A6A	Primary and secondary education
A1H	Demography and manpower studies	A6B	University and higher technical institutes
		A6Bi	Medical
A2	Development of public utilities	A6C	Teacher training
	•	A6Ci	Agricultural training
A2A	Power production and distribution	A6D	Vocational and technical training
A2Ai	Electricity	A6E	Educational administration
A2B	Water supply	A6F	Pure or general research
A2C	Communications	A6G	Scientific documentation
A2D	Transport and navigation	A6H	Research in the field of education or training
A2E	Meteorology	A6I	Subsidiary services
A2F	Peaceful uses of atomic energy (non-power)	A6J	Colloquia, seminars, lectures, etc.
А3	Agriculture, fishing and forestry	Α7	Health
A3A	Agricultural production	A7A	Hospitals and clinics
A3B	Service to agriculture	A7B	Maternal and child care
A3C	Forestry	A7C	Family planning and population-related research
A3D	Fishing and hunting	A7D	Other medical and dental services
A3E	Conservation and extension	A7E	Public health administration
A3F	Agricultural storage	A7F	Medical insurance programmes
A3G	Agricultural construction	40	
АЗН	Home economics and nutrition	A8	Social infrastructure and social welfare
A3I	Land and soil surveys	A8A	Housing, urban and rural
		A8B	Community development and facilities
A4	Industry, mining and construction	A8C	Environmental sanitation
A4A		A8D	Labour
	Extractive industries	A8E	Social welfare, social security and other social
A4Ai A4B	Petroleum and natural gas Manufacturing		schemes
A4B A4C	Engineering and construction	A8F	Environmental protection
A4C A4D	Cottage industry and handicraft	A8G	Flood control
A4D A4E	Productivity, including management, automation,	A8H	Land settlement
~~c	accountancy, business, finance and investment	A8I	Cultural activities
A4F	Non-agricultural storage and warehousing		
A4G	Research in industrial technology	A9	Multisector
7+0	nescaron in maastnar teelinology	A9A	River development
A5	Trade, banking, tourism and other services	A9B	Regional development projects
A5A	Agricultural development banks	A10	Unspecified



PABLI — Blue page informatics

Direct access to the blue pages via on-line terminal or telex

The blue pages are on computer and available either directly via a terminal or micro-computer.

Selected extracts of the blue pages may be obtained.

The cost of these two services has been fixed and will be applied from 1987.

To obtain any information concerning PABLI please write, specifying the option chosen (terminal or telex) to:

Mr A. BOLDRIN

"Data base Section" — B9/69
Directorate-General for Development
Commission of the European Communities
200, rue de la Loi
1049 Brussels
Belgium

ACP STATES

New projects are printed in italics and offset by a bar in margin at left

Projects under way are marked with an asterisk and with words or phrases in italics

ANGOLA

Sectoral Import Programme. Auth.: Ministère du Plan. 35 mECU. Supply of seeds (maize, potatoes, for market garden crops) fertilizers, tools, vehicles, raw materials, rural equipment. T.A. and evaluation. ★ Date financing December 87. 6th EDF

EDF ANG 6005

BAHAMAS

Rural economic infrastructure (Family Islands Energy). Resp. Auth.: Bahamas Electricity Corporation. 2.5 mECU. Works, installation, supply of generators, cables, ★renewable energy systems. Date financing January 88. 6th EDF

EDF BM 6001

BELIZE

Belize City Hospital. Phase I. Estimated cost 7.494 mECU. Work constructions and supply of equipment. 4th and 5th EDF. Project stage: identification.

EDF BEL 4007-5002 A7a

5.6 mECU. Road reconstruction. Study to be done: design plan and bridge and int. tender dossier. Short-list already drawn up. Project stage: identification. 6th EDF.

EDF BEL 6001

Community Development Programme. Resp. Auth.: Ministry for Social Services. 0.150 mECU. Project preparation study. Short-list done. Project on appraisal. 6th

EDF BEL 6002 A6b

BENIN

Upgrading of health service infrastructure. Resp. Auth.: Ministère de la Santé Publique. Estimated cost 14.3 mECU: renovation and construction of the hospital ★ building and equipment. Date financing January 88. 5th and 6th EDF.

EDF BEN 5010 A7a

Mono rural development programme. Development of the rural production. Cofinancing with BAD. Estimated total cost 44 mECU. EDF 29 mECU, BAD 10 mECU, local 5 mECU.Project stage: identification. 6th

EDF BEN 6003 A3a

BOTSWANA

Initial measures for the conservation of the Kalahari ecosystem. T.A. and supply of equipment. Monitoring and protection of the natural reserves. 2 mECU. Project in exe-★cution. 2 Int. tenders for supplies launched in February 88. 6th EDF. **EDF BT 6001**

Kasane airport. Resp. Auth.: Ministry of Works and Communications, Estimated to-

tal cost 10.6 mECU. EDF 6 mECU, Italy 1.5 mECU, local 3.1 mECU. Construction of 2 000 m runway, bush clearance of 170 ha, buildings, two main apron stands, air traffic control equipment, telecommunication network, crash fire and rescue equipment, car **Project in execution. 6th EDF. park. Works supervision. Project on apprais-A3a ★al. Date foreseen for financing March 88. 6th EDF

EDF BT 6002

Support programme for dry land agriculture. Resp. Auth.: Ministry of Agriculture and Ministry of Lands. 3.5 mECU. Masterplan for Pandamatenga, soil laboratory, Pandamatenga Research Farm, price study. Works, supply of laboratory equipment, agricultural machinery, studies and T.A. Studies: Pandamatenga masterplan. Price study: short-lists already drawn up. Project in execution. 6th EDF.

EDF BT 6005

Manpower development for sustainable resource utilisation. Resp. Auth.: Ministry of Finance and University of Botswana. 4.4 mECU. T.A. and training for basic science, ground water exploration and management, environmental resource and sus-Hummingbird Highway. Estimated cost * tainable agriculture. Date financing Januarv 88 6th FDF

> **EDF BT 6003** A6

BURKINA FASO

Rural water supply. Comoé, 3rd phase. Resp. Auth.: Ministère des Ressources Financières. 3.1 mECU. 210 bore-holes and rehabilitation of 30 water-points. Supply of handpumps and equipment. Project in execution. 4th EDF.

EDF BK 4023

Rural integrated development programme in the provinces of Sourou, Yatenga and Passoré. Resp. Auth.: Ministère de l'eau, Ministère de l'Agriculture et Elevage, Ministère de la Santé, Ministère de l'Education Nationale. 44 mECU. Development and security of rural production, land capital protection, drinking water supply, rural health improvement, training and monitoring, planning and coordination at regional level. Works for water control, training, T.A., supplies, coordination and follow-up. Date financing February 88. 6th EDF. EDF BK 6001 A3a

BURUNDI

Roads and bridges in Bujumbura. 15.6 mECU, Road and bridge construction, Supervision of works. Study of the execution and preparation of the int. tender dossier for roads : short-list done. Project on appraisal Date foreseen for financing March 88. 5th and 6th EDF. **EDF BU 5023**

Rural development in the Mosso Buyogoma. Resp. Auth.: Ministère de l'Agriculture et de l'Elevage and Département des Eaux et Forêts. 34.815 mECU. Improvement of the feeder roads and secondary roads, rural hydraulics, rural stock-farming and reafforestation development. Support to cooperatives. Feasibility study for secondary roads and hydraulics: short-list done.

EDF BU 6001

Rehabilitation of the R.N. 1-Bujumbura-Rwanda border. Resp. Auth.: Ministère des Travaux Publics. Estimated cost 22 mECU. Rehabilitation works plus the town section up the port of Bujumbura. Study to be done: technical study for the execution and int. tender dossier preparation. Shortlist already drawn up. Project on appraisal. 6th FDF.

EDF BU-REG 6305

Rehabilitation of the R.N. 2 (Bugarama-Giteca). Resp. Auth.: Ministère des T.P. Estimated cost 6 mECU. Works and supervi-A3a timated cost o integer. Asion. 68 km. Project on appraisal. Int. tender (conditional) launched end of January 88. 6th EDF. **EDF BU 6006**

A2d

CAMEROON

Rural development programme in the Bénoué basin. Resp. Auth.: Mission d'études pour l'aménagement de la vallée supérieure de la Bénoué (MEAVSB). Total estimated cost 30 mECU, EDF part 25 mECU. Roads network, schools, health centres, rural water supply. Support to crop production and fishery. Irrigated agricultural areas, fight against soil and surface vegetation degradation. Works, supplies, T.A. and training. Study to be done: sectoral studies to implement different sectors of the pro-A2b *gramme. Short-list already drawn up. Proiect in execution. 6th EDF.

EDF CM 6002 A3a

CAPE VERDE

Groundwater research. Resp. Auth.: Ministère du Développement Rural. EDF part 2.2 mECU. Cofinancing with France 0.5 mECU, Kowait 1.3 mECU. Construction of a gallery in Bota Rama, supply of drilling equipment. T.A. Date financing December 87. 5th EDF. **EDF CV 5001**

Town development of Praia. Estimated cost 19.8 mECU. Works and supply of equipment, T.A. and supervision of works. Project on appraisal. Date foreseen for fi-★nancing April 88. 6th EDF.

EDF CV 6001 A2d

CENTRAL AFRICAN REPUBLIC

National Livestock Programme. Supply of agricultural inputs, monitoring training, T.A. Feeder roads. EDF part 10 mECU. Cofinancing with France, EIB, local, IFAD. Project in execution. 6th EDF. EDF CA 6001 A3a

Conservation programme for the ecosystem in the North. National game and natural reserves. Supervision for protected areas. Monitoring, management. Supply of infrastructures. EDF 25 mECU. Project in execution. 6th EDF.

EDF CA 6002 A3a

Development programme of the Central and Southern region. Resp. Auth.: Ministère du Dév. Rural. 20.3 mECU. To strengthen coffee plantations in the villages and the infrastructure, diversifications in excotton zones; rural health and human hydraulics, T.A., studies, following and evaluation. Studies to be done: hydro-geological study and health expertise; studies to reconvert cotton zones and on producers cooperatives; if necessary, expertise on agriculture and reafforestation. Short-lists already drawn up. Project on appraisal. Date foreseen for financing February 88. 6th EDF. **EDF CA 6005**

CHAD

in the concentration zone. Resp. Auth.: Office National de Dév. Rural (ONDR). 15 mECU. Hydro-agricultural works, infrastructure, education, health. Works, supplies and T.A. Project in execution. 6th EDF. EDF CD 6002 A3e

Support programme to strengthen primary education. Resp. Auth.: Ministère de l'Education Nationale. 1.275 mECU. Supply of teaching equipment and training and integration scholarships. Project in execution. 5th EDF.

EDF CD 5022

Strengthening of the health sector in the Sahelian prefectures. Resp. Auth.: Ministère de la Santé Publique. 12 mECU. Supply of essential medicines, training programme and T.A. Project in execution. 6th EDF.

EDF CD 6003 A7e

COMOROS

Artisanal fishery. Resp. Auth.: Ministère de la Production et des Industries Agricoles et de l'Artisanat. 1.092 mECU. Supply of * short-lists already drawn up. Date financequipment, boats, engines, T.A. and training. Project in execution. 5th EDF. **EDF COM 5017** A3d

Moroni port. Resp. Auth.: Ministère du Plan et de l'Equipement. Total estimated cost 14 mECU. EDF 8 mECU, France 6 mECU. EDF part: maritime civil engineering. Construction of a jetty, a pier and a quay and dredging. Int. tender (conditional) health care equipment, T.A. to the Health ★ launched in September 87. **Date financing** ★ and Epidemiological service. **Date financing** January 88. 6th EDF. EDF COM 6001 A2d

CONGO

FEDAR (EDF regional action for the Pool and Cuvette). Resp. Auth.: Ministère du Plan. Estimated cost 36 mECU. Roads, wells, rural infrastructure, supervision of appraisal. 6th EDF. **EDF COB 6002**

A3a

COTE D'IVOIRE

Rural oil palm plantations for the 2nd palm plan. Resp. Auth. : Ministère de l'Agriculture. EDF 20.850 mECU. 22,945 ha in rural areas. Project in execution. 6th EDF. **EDF IVC 6001**

Research and development of the orcharding in the savannah region. Resp. Auth.: Ministère de la Recherche Scientifique (MRS) I.R.F.A. EDF 1.120 mECU. Works by direct labour or direct agreement. Supply of scientific equipment, vehicles, agricultural equipment and office equipment. Fertilizers, pesticides, laboratory products. Supplies by int. tender. Project in execution. 5th EDF. **EDF IVC 5020**

Strenghtening of the research capacies for the "Institut des Savanes" ties for the (IDESSA). Resp. Auth.: Ministère de la Recherche Scientifique (MRS). IDESSA. EDF 2 mECU. Works by direct labour or direct agreement. Supply of scientific equipment, vehicles, rural equipment, furnitures, laboratory products, fertilizers, pesticides. All by Rural development priority programme *int. tender. Project in execution. 5th EDF. **EDF IVC 5020** A3a

DJIBOUTI

Rural development programme. Resp. Auth.: Ministère de l'Agriculture. EDF part estimated at 4.9 mECU. Improvement of the rural development, farm and livestock monitoring, rural hydraulics, palm-tree plantations, pump-station maintenance. Studies to be done: evaluation of the rural development programme; study on possibilities to improve rural development. Short-lists, already drawn up. Project stage: identification. 6th EDF. EDF DI 6001

Urban development programme. Resp. Auth.: Ministère des Travaux Publics, de l'Intérieur. 4 mECU. Rehabilitation, construction of waste water controlled network, works and supplies, road assessments to improve rain waters. Studies for rehabilitation and to prepare int. tender dossiers (drainage, roads, drinking water, fire protection): ing January 88. 6th EDF. EDF DI 6002

Health programme. Resp. Auth.: Ministère de la Santé Publique. Estimated total cost 1.016 mECU, EDF 0.855 mECU, France 0.116 mECU, local 0.045 mECU. Building of the training centre for health care staff, and of Rural Health Centres. Supply of mobile December 87. 4th and 6th EDF.

EDF DI 6003

EQUATORIAL GUINEA

Rehabilitation of the cacao-tree plantation in the Bioko Island. Resp. Auth.: Ministère de l'Agriculture, de l'Elevage et du Développement Rural. 0.900 mECU. 2nd works, line of credit, monitoring. Project on *phase. Supply of agricultural inputs. Project in execution. 5th EDF.

> A3a EDF EG 5008

ETHIOPIA

North Shewa rural reclamation and development programme. Resp. Auth.: Ministry of Agriculture. Estimated total cost 28.5 mECU. EDF 24 mECU, local 4.5 mECU. Soil and water conservation, reafforestation, rural infrastructure development and feeder roads. Works, supply of equipment, vehicles, T.A. and line of credit. Project in execution. 6th EDF. **EDF ET 6001** A3a

GABON

Experimental rural rubbertree cultivation programme Mitzic/Bitam. Auth.: Ministère de l'Agriculture et du Développement Rural. 2.3 mECU. Special loan to support development of rural rubber tree cultivations in the concentration area assisted by the EEC. Works, supplies and T.A. * Date financing December 87. 6th EDF. EDF GA 6004

Audit and diagnosis of the public and semi-public sector. Resp. Auth.: Haut Commissariat au Plan, au Développement et à l'Economie. 2 mECU. T.A. Project on appraisal. 5th and 6th EDF. Date foreseen for ★financing *March 88*.

EDF GA 6006

A1f

A4f

GAMBIA

Brikama College, Phase II. Resp. Auth. : Ministry of Works and Communications. 1.925 mECU. Construction and equipment of academic and residential buildings. Works by mutual agreement. Equipment for ★phase II: int. tender, 1st half 88. Project in execution. 4th EDF. **EDF GM 4005** A6b

Development of the non-industrial fil'Urbanisme et du Logement et Ministère de * sheries. 3 mECU. Works and supplies. Project in execution. 6th EDF. **EDF GM 6003**

> Fuel import programme. Resp. Auth.: Ministry of Finance and Trade. Estimated cost 5 mECU. Supply of petrol (15 million litres, ron 93-95) and gasoil (25 million litres). Supply by int. tender. Project on appraisal. Date foreseen for financing March 88. 6th EDF. EDF GM 6008

GHANA

Programme for the improvement of the transport infrastructure in the South Western part. First actions. 21 mECU. Rehabilitation of the Axim-Axim junction road, construction of a road link (including bridge) to Enchi and studies. Feasibility and design study for Wiawso-Awaso-Mim corridor, short-list drawn up. Project in execution. 6th FDF

EDF GH 6001 **A2d**

Support to Ghana Regional Appropriate Technology Industrial Service (GRATIS). Resp. Auth.: Ministry of Industries, Science and Technology. EDF part estimated at 1.200 mECU. Supply of equipments, vehicles, T.A. and training. Project in execution. 6th EDF.

EDF GH 6004 A4a

Rehabilitation of Dawhenya smallholder rice irrigation scheme. 2,4 mECU. Rehabilitation works over 244 ha. Provision of ★agricultural equipment and other inputs. Project in execution. 6th EDF.

EDF GH 6005 A3a

Accra Plains Livestock Development Project (APLDP). Estimated total cost 4 mECU. EDF part 3 mECU, local 1 mECU. Provision of veterinary and animal husbandry extension services, including construction of cattle treatment centres, water points and other inputs. Project on appraisal 6th FDF

EDF GH 6006

Transport infrastructure programme. Phase II. Resp. Auth.: Ghana Highway Authority. 5 mECU. Rehabilitation of drainage structures and minor bridges of first priority on trunk and feeder roads. T.A. and supervision of works. Technical study: short-list already drawn up. Project in execution. 5th FDF

EDF GH 5030 A2d

Twifo oil palm development. Maintenance aid 1988-1991. Resp. Auth. : Minis-(M.F.E.P.). Total estimated cost 12.6 mECU. EDF 5 mECU, local 7.6 mECU. Works, supply of equipment and T.A. Study to be done: financial reappraisal of the Twifo oil palm plantation. Short-list already drawn up. Project on appraisal. 6th EDF.

EDF GH 6007 A3a

GRENADA

Eastern Main Road. Phase III. Resp. Auth.: Ministry of Communications and Works. EDF 3.5 mECU. Strengthening the road base by coal mix surface course and improving drainage structures. Works by direct labour. Supply of equipment by int. tender. Project in execution, 6th EDF. EDF GRD 6001

Pilot project. Model farm. Resp. Auth.: Grenada Model Farms Corporation (GMFC). 0.275 mECU. Access roads, drainage, irri-★ gation, supply of equipment. Project in execution. 6th EDF.

EDF GRD 6002 A3a

GUINEA

Rural development programme in Upper-Guinea. Resp. Auth.: Coordination team composed by representation from: Ministère du Plan et de la Coopération internationale, Ministère du Finances, Secrétariat d'Etat à la Décentralisation, Ministère du Dév. Rural, 30 mECU. To modernise agricultural systems and to improve the way of living. Development of the crop production, infrastructure (roads, social, rural hydraulics), micro-projects, lines of credit, T.A. and training. Project in execution. 6th EDF. **EDF GUI 6002** A3a

Rural development programme in Maritime-Guinea. Resp. Auth.: Coordination team (see EDF GUI 6002). 40 mECU. Crop production and fishery, road network, social infrastructure, rural hydraulics, micro-projects, lines of credit, research actions, vulgarisation, T.A. and training. Project in execution. 6th EDF.

FED GUI 6001 A3a

Strenghtening of health infrastructure. Resp. Auth.: Ministère de la Santé. Estimated cost 9.4 mECU. Continuation and achievement of the Ignace Deen hospital rehabilitation, T.A. and training. Project on appraisal. Date foreseen for financing February 88. 6th EDF.

EDF GUI 6005

A7a, e

GUINEA BISSAU

A3a

Minor bridges. Resp. Auth. : Ministère de l'Equipement Social. Estimated total cost 3.7 mECU. Construction of 4 bridges to open four agricultural regions. Works and supervision. Project on appraisal. 5th EDF. **EDF GUB 5011**

Rural development programme. 23.8 mECU. Improvement of the food and fishery production, line of credit, micro-protry of Finance and Economic Planning **jects, T.A. and training. Date financing December 87. 6th EDF.

EDF GUB 6001

A3a

GUYANA

Economic infrastructure sector support programme. Resp. Auth.: Ministry of Finance. 14.5 mECU. Rehabilitation of sea defences, quarries, transport, water supplies. Supply of equipment, training. First int. tender for supplies foreseen in the 1st quarter 88. Project on appraisal. 6th EDF. A2b, d

EDF GUA 6003

JAMAICA

Jamaica Public Service Company (JPSCO). Training centre. Resp. Auth.: JPSCO. Estimated total cost: 2.710 mECU. EDF part 0.540 mECU, Italy 1,350 mECU, local 0.730 mECU, JPSCO 0.090 mECU. EDF part: supply of laboratory equipment, ★ pedagogical equipment and T.A. Date financing December 87. 5th EDF. EDF. IM 5014 AAd

Rural water supplies. Phase I. Resp. Auth.: National Water Commission. 5.750 mECU. Extension, upgrading of five existing water supply schemes: South Manchester, Lionel Town/Kempshill, Elderslie/Niagara, Castleton, South Chapelton. Works and supplies. Project on appraisal. 6th EDF. **EDF JM 6003**

Montego Bay airport. Charter terminal. Resp. Auth.: Airports Authority of Jamaica. 7.1 mECU. Works and supply of equipments. Works by acc. tender. Supplies by ★int. tender. Supervision. Date financing December 87. 6th EDF.

EDF JM 6004 A2d

Cocoa rehabilitation and expansion. Resp. Auth.: Cocoa Industry Board. Estimated cost 4 mECU. Supply of farm and processing plant, research, management, T.A., marketing. Project on appraisal. 6th EDF.

EDF JM 6007 A3a

KENYA

Minor roads rehabilitation and maintenance programme. Estimated cost 5 Works by direct labour. Project stage: identification. 6th EDF. **EDF KE 6002** A2d

Agricultural research programme. 20 mECU. Soil and water management research. Soil fertility and plant nutrition. Civil works and libraries. Project in execution. 6th FDF

EDF KE 6003

Development of commerce and industry. Estimated cost 5 mECU. Export promotion and marketing, trade development promotion and support to informal sector and small scale industries. Studies, short-lists already drawn up. Project stage: identification. 6th EDF.

EDF KE 6004 A5de

Cereal sector reform programme. Resp. Auth.: Ministry of Finance, Agriculture and Supplies and Marketing and NCPB. National Cereals and Produce Board. 65 mECU. T.A., studies, training. Storage and rolling stock, sectoral import programme purchase of agricultural inputs, short and longterm T.A., cooperatives and reserve funds. Studies, T.A. and training: short-lists not yet drawnup. Works by int. tender and acc. tender. Supplies by int. tender. Project on appraisal. Date foreseen for financing April 88. 6th FDF

EDF KE 6008 A3a

LESOTHO

Mphaki area development. Phase II. Resp. Auth.: Ministry of Agriculture. 3.7 mECU. Feeder roads, livestock, veterinary and marketing installations, supplies and T.A. Project in execution. 6th EDF. EDF LSO 6002

Asparagus expansion programme. Resp. Auth.: Ministry of Trade and Industry. 4.75 mECU. The project aims to increase within 10 years smallholders asparagus growing areas from present 80 to 670 ha. Works: wells, tracks, houses and other infrastructures. Supplies: vehicles, tractors and farm equipments, T.A. and training. Project in execution. 6th EDF.

EDF LSO 6003

Manpower development project to support Lesotho's natural resources sector. Resp. Auth.: National Manpower Development Secretariat (NMDS). Ministry of Planning Economic and Manpower Development. 7.7 mECU. Construction of schools, class-rooms, laboratories, supply of T.A., scholar-ships and training. Project on appraisal. Date foreseen for financing February 88. 6th FDF. A6b

EDF LSO 6007

Mekaling-Quthing road. Resp. Auth.: Ministry of Works. Estimated total cost 11.450 mECU. Reconstruction to bitumi- ★ Date financing December 87. 6th EDF nous surfaced standard of 26.5 km. Works, T.A., training and supervision. Project on appraisal. Date foreseen for financing March 88.6th EDF.

EDF LSO 6008

LIBERIA

Rural health training centre. Estimated cost 2 mECU. Provision of services, supplies and equipment (including drugs), T.A. for management and training. Project in execution. 5th EDF.

EDF LBR 5020

Bong Mining Company. Rehabilitation project. Resp. Auth.: Government and BMC. 49.3 mECU. Supply of specialized equipment, shovels, conveyor belts, dumpres, locomotives, spare parts. Project in execution. 5th EDF.

EDF LBR/SYS 0000

South-East development programme. Estimated cost 27 mECU. Works, supplies ★and T.A. Project in execution. 6th EDF. **EDF LBR 6002** A3a

MADAGASCAR

Microhydraulic programme in the village sector: consolidation and extension. Programme to improve the management of water in the village sector on 21 000 ha of small enclosed irrigated rice fields. Works by direct labour. Acquisition of equipment and supplies by int. tender and tech. assistance by restr. tender. 8.35 mECU. T.A. Short-list done. Project in execution. 6th EDF.

EDF MAG 6001

Soalala iron: prefeasibility study. Resp. Auth.: Ministère de l'Industrie. Estimated total cost 6.1 mECU. EDF 1.9 mECU, Italy 4 mECU, local 0.2 mECU. EDF part : soil prospection by acc. tender and supply of vehi-★ cles. Project in execution. 5th EDF. **EDF MAG 5032**

Water supply in the South (phase III). Improvement of water supply conditions for population and livestock. EDF part 5.1 mECU, local 0.700 mECU. Wells, boreholes, supply of specialised equipment, T.A. and evaluation. Project in execution. Supplies: Int. tender launched in December 87. 6th **EDF**

EDF MAG 6003

Rehabilitation of the R.N. 4 road (PK 58 to PK 177). Resp. Auth.: Ministère des Travaux Publics. 10 mECU. Int. tender for rehabilitation works. 119 km. Supervision. Project in execution. 6th EDF.

EDF MAG 6005 A2d

Small irrigated areas in the North: rehabilitation and support programme for rice-growing in the region of Antsohihy. Resp. Auth.: For rural part: Ministère de la Production Agricole et de la Réforme Agraire (MPARA) for feeder roads: Ministère des Travaux Publics. 12.8 mECU. Works by acc. tender. Supplies by int. tender. Feeder roads by int. tender. Supervision of works: restr. tender. T.A. and training. **EDF MAG 6007**

Maize development programme in the Middle West. Resp. Auth. : Ministère de la Production Agricole. EDF part 11.3 mECU, local 1.717 mECU. Building of a nursery and farmers training. Works, supplies, T.A. evaluation and training. Project on appraisal. 6th FDF

EDF MAG 6006

MALAWI

Strategic fuel reserve. Resp. Auth.: Office of the President and Cabinet. Contingency Planning Unit. 4.2 mECU. Construction of tanks for diesel, petrol, ethanol. Associated infrastructure and equipment. T.A. Project on appraisal. 5th EDF.

EDF MAI 5020

Small Enterprise Development Organization of Malawi (SEDOM) - Phase III. Resp. Auth.: Sedom secretariat. EDF ★2,2 mECU. T.A.: GITEC (D). **Date financing** December 87. 6th EDF.

EDF MAI 6008

programme. Resp. Auth.: Ministry of Agriculture. 28.2 mECU. Establishment of fertiliser buffer stock of 70 000 tons, building of 3 warehouses + auxillary facilities, T.A. Project in execution. 6th EDF. EDF MAI 6005 A3a

Rural health programme. Resp. Auth.: Ministry of Health and Ministry of Community Services (MOH and MOCS). 9.3 mECU. Construction of an hospital, two health centres supply of equipments, T.A. Works by acc. tender. Supplies by int. tender. A2b ★T.A.: short-list not yet drawn up. Date financing December 87. 6th EDF.

> **EDF MAI 6009** A7a, e

MALI

Support programme to the food strate-★gy. 19.5 mECU. Project in execution. 6th EDF.

EDF MLI 6001 A3a

Strengthening of the health infrastructure in the district of Bamako. Resp. Auth.: Ministère de la Santé Publique. 1.3 mECU. Extension of 2 health centres and construction of a new Blood Transfusion Centre. Supply of equipment by int. tender. Works by acc. tender. Project in execution. 5th EDF

EDF MLI 5026

Stock-farming in North-East Mali. Resp. Auth.: Ministère des Ressources Naturelles et Elevage. 2.2 mECU. Improvement of water points, building construction for cooperatives, supplies, training, follow-up, logistics. Project on appraisal. Date foreseen for financing February 88. 5th EDF. EDF MLI 5006 A3a

Rice-growing intensification programme in the large irrigated areas. Resp. Auth.: Ministère de l'Agriculture. 66 mECU. Improvement of the irrigated areas, roads. Supply of equipment for maintenance and for agriculture, study, T.A., training and experimentation. Study: short-list done. Project on appraisal. 5th and 6th EDF. EDF MLI 6004 A3a

Food security programme in the 5th region. Resp. Auth.: Gouverneur de la région. 24 mECU. Soil and ground water resources, rehabilitation of Bamako. Mopti road. Works, supplies, supervision, study, T.A. A3a * training. Project on appraisal. Date foreseen for financing February 88. 5th and 6th

EDF MLI 6005

A2b, d

MAURITANIA

Aioun El Atrouss hospital. Resp. Auth.: Ministère de l'Equipement. 1.050 mECU. Renovation and supply of equipment for 3 buildings. Works by acc. tender. Supplies by int. tender. Project on appraisal. 5th EDF. **EDF MAU 5012**

Rehabilitation of Nouakchott National Hospital. Resp. Auth.: Ministère l'Equipement. 4 mECU. Renovation and upgrading for building, supply of medical-technical and surgical equipment. Project on ap-Smallholder agricultural input support * praisal. Date foreseen for financing 1st

EDF MAU 6003 A7a

Road maintenance programme. Resp. Auth.: Direction des Travaux Publics. 15 mECU. Upgrading strenghtening of the road Nouakchott-Rosso (93,5 km) and 78 km of the road Boutilimit-Aleg. Supply of equipment for a road maintenance brigade. Supervision, T.A. and training. Works and supplies by int. tender. Project in execution. 6th **EDF**

EDF MAU 6004

Rehabilitation programme for the "SNIM". Resp. Auth.: Société Nationale Industrielle et Minière (SNIM). 18 mECU. Renovation of railway track equipment and wagons. Modernization of the repair-shops. Supply of equipments and spare parts by int, tenders. Project on appraisal. Date foreseen for financing February 88. 6th EDF. **EDF SYS MAU** A4a

MAURITIUS

Development of Ile Rodrigues - Phase II. Resp. Auth.: Ministry of Agriculture. 3.250 mECU. Development centred on agricultural production. Works and supplies. Project in execution. 5th EDF. **EDF MAS 6003**

Programme to diversify productive sectors to improve, employment prospects (1st part: industry). 10 mECU. Actions to strengthen export and industry promotion institutions, actions to incite development of small enterprises. Project in execution. 6th **FDF**

EDF MAS 6002

A5e

MOZAMBIQUE

Import support programme for rural development. Resp. Auth.: Ministry of Commerce. 40 mECU. Direct support to the agricultural production and consumer foods production, development of the rural marketing and infrastructure. Importation of seeds, fertilisers, pesticides, raw materials for light industry: textiles, food, tobacco, shoes, soap. Purchase of vehicles and trucks, cranes, loading platforms (containers), importation of raw materials for manufacture of tyres, building materials. T.A. and valuation. Supplies by int. tender. Project in execution. 6th EDF.

Eduardo Mondlane University. Basic science courses. Resp. Auth.: Universidade Ed. Mond. (UEM). 2.3 mECU. Construction works, supply of furnitures and pedagogical equipment. T.A. Works by acc. tender. Supplies by int. tender. T.A. by restr. tender. Date financing December 87. 6th EDF.

EDF MOZ 6015 A6b

NIGER

Rice-growing in the river valley. Resp. Auth.: Ministère de l'Agriculture. Cultivation of 1,800 ha, electrification, feeder roads, T.A. for management. Project preparation study: short-list already drawn up. Project on appraisal. 6th EDF.

EDR NIR 6001 A3a

Small irrigation programme. Resp. Auth.: Ministère de l'Agriculture. 21.560 mECU. Rehabilitation of the Tarka down valley, irrigation, boreholes and wells. Feeder roads, environmental protection, T.A. Works and supplies. Studies: short-lists already drawn up. Project in execution. 6th FDF

EDF NIR 6002 A3a

Road maintenance on R.N. 1. Resp. Auth.: Ministère des Travaux Publics. 15 mECU. Maintenance works for 160 km and supervision. Project in execution. 6th EDF.

EDF NIR 6003 A2

Rehabilitation project for the medical district of Mainé-Soroa. 0.779 mECU. ★ Supplies and T.A. Project in execution. 4th FDF

EDF NIR 4021 A7

NIGERIA

Kaduna afforestation project. Resp. Auth.: Federal Department of Forestry. 9.4 mECU. Works, supplies and T.A. Project in execution. T.A.: Hedeselkabett (DK). 5th EDF.

EDF UNI 5001 A3c

PAPUA NEW GUINEA

EDF PNG 5011a

Diesel Power Replacement Programme. Resp. Auth.: Electricity Commission (ELCOM). Estimated cost 4.850 mECU. 4 small hydroelectric power plants with transmission line extensions from existing grids. 1st int. tender (conditional) launched in October 85. Project in execution. 5th EDF.

RWANDA

Food strategy support programme.
Resp. Auth.: Ministère du Plan. 51 mECU.
Development of the rural activity, monitoring, training, maintaining of natural environment stability. Infrastructures, supply of agricultural inputs, vehicles, T.A. studies and training. Date financing December 87.

EDF RW 6001 A3a

ST. LUCIA

Roseau agricultural resettlement and diversification project. Phase II. 1.4 mECU. Works, supply of equipment and T.A. Project in execution. 6th EDF. EDF SLU 6001 A3a

Mabouya valley development project. Resp. Auth.: Central Planning Unit. Estimated cost 2.6 mECU. Works and supply of equipment and T.A. Project on appraisal. 6th EDF.

EDF SLU 6002 A3a

ST. VINCENT & THE GRENADINES

Orange Hill development. Resp. Auth.: Rabacca Farms Ltd (RFL). Estimated total cost 8.350 mECU. EDF 3.080 mECU, UK 1.118 mECU, Caribbean Dev. Bank 1.258 mECU, local 2.854 mECU. Land surveys, settlers housing sites, feeder roads, marketing and trade. EDF part: construction of farm roads, building rehabilitation and refurbishment, monitoring and evaluation. Roads by acc. tender. Building by direct labour. Supplies by Caribbean Dev. Bank. T.A. by UK. Project on appraisal. Date foreseen for financing March or April 88. 5th and 6th EDF.

EDF SVG 6001 A3a

SAO TOMÉ & PRINCIPE

Riberia Peixe rural development. Resp. auth.: Ministère de la Coopération. Development of agricultural output (palm oil) and industrial exploitation. Estimated total cost: 6.79 mECU as follows: EDF 4.00 mECU. BIB 2.00 mECU and local 0.791 mECU. T.A., works, training and supplies. T.A.: Short-list done. Project in execution. 6th EDF.

EDF STP 6001 A3a

Strengthening of the electricity production capability. Supply and installation and works for electricity production of ±2 000 KVA. Estimated cost 0.950 mECU. Project on appraisal. Date foreseen for financing 1st quarter 88. 6th EDF.

EDF STP 6002 A2a

Improvement of the Port of São Tomé.
Resp. Auth.: National Authorizing Officer of STP. 1 mECU. Supply of fixed equipment and off-shore equipment. T.A. Project on appraisal. 6th EDF. Project partly regional. *Date foreseen for financing March 88.
EDF STP-REG 6102

SENEGAL

Consolidation of the livestock development programme. Resp. Auth.: SODESP. Estimated cost 1.6 mECU. Study under way by Bessel Ass. (UK). Project on appraisal. 5th EDF.
EDF SE A3a

Artisanal fishery development in the Casamance Region. Resp. Auth.: Secrétariat d'Etat à la Pêche Maritime. EDF 1.6 mECU. Works, supplies and training. Project in execution. 5th EDF. EDF SE 5024

Support programme to the development of the Podor region. Estimated cost 97 mECU. Rural hydraulics, support to promote S.M.E., micro-irrigation, road and urban infrastructures, telecommunications, electrification, health, training, promotion of women, fight against desertification. Int. tender for works launched in July 87 and int. tender for supplies launched in September 87. Project in execution. 6th EDF.

EDF SE 6002 A3a

Building, development and management of two regional vocational training centres. Resp. Auth.: Ministère de l'Education Nationale. 2.3 mECU. Works by acc. tender, or direct labour. Equipments: furnitures, pedagogical equipment, workshop equipments, vehicles. T.A. to follow works, equipments and training actions. Project on appraisal. Date foreseen for financing April 88. 5th EDF.

SEYCHELLES

Craft industry development programme. Resp. Auth.: Ministère du Développement National. 1.2 mECU. Renovation works and supply of furnitures. Supply of equipment, T.A. and training. Works by acc. tender. Supplies by direct agreement and int. tender. Project in execution. 6th EDF. EDF SEY 6003

SIERRA LEONE

Port Loko rural development programme. 6 mECU. Infrastructures, T.A., training and supplies. T.A.: Short-list done for restr. tender. Project in execution. 5th EDF.

EDF SL 5006 A3a

Creation of regional centres for small enterprises. Estimated cost 1.25 mECU. Project stage: identification. 5th EDF. EDF SI 5017

Tourism development project. Estimated cost 0.850 mECU. T.A. for Ministry of Tourism and supply of equipment. Project stage: identification. 5th EDF. EDF SL 5026 A5c

Construction of the road Fadugu-Kabala. Resp. Auth.: Ministry of Public Works. 17,5 mECU. Bituminised road, 35 km. Int. tender (conditional) launched in August 87. *Date financing December 87.* 6th EDF.

EDF SL 6001

A2c

SOLOMON ISLANDS

Coconut industry development project. Resp. Auth.: Ministry of Land and Natural Resources. Study under way by Agrar und Hydrotechnik (D). Project stage: identification. 5th EDF

EDF SOL 5009

Rehabilitation programme after cyclone Namu. Resp. Auth.: Ministry of Economic Planning. 1.722 mECU. Works and supply of equipment. Project in execution. 6th **FDF**

EDF SOL 6002 A7a

Development of human resources in the rural sector. Resp. Auth.: Ministry of Economic Planning. 4 mECU. Supply of equipment, T.A. and training. Project in execution. 6th EDF.

EDF SOL 6003

Small holder development project. Resp. Auth.: Ministry of Agriculture. 3.32 mECU. EDF 3 mECU, local 0.320 mECU. Works, supplies, T.A. and training. Project on appraisal. Date foreseen for financing February 88. 6th EDF.

EDF SOL 6006 A3a

SOMALIA

Bardheera Dam. Resp. Auth. : Bardheera Dam Authority (BDA). 600 mECU. (Estimated) Dam Project 500 mECU. Powerline to Mogadishu 100 mECU. Funding: EDF, Italy, Germany, France, Saudi Arabia, Abu-Dhabi, Kuwait Funds, FADES, Isl. Dev. Bank. Local. Power and river regulation for agricultural development. Construction of a concrete gravity dam with hydro-power station, associated infrastructure and electrical transmission lines. The dam will provide water, flood protection and power for up to 223 000 ha of irrigated agriculture in the Juba Valley, and energy to Mogadishu. Civil works: first int. tender launched in 1984. Transmission lines int. tender in 1988. Equipment: powerhouse main equipment and auxiliary equipment, int. tenders in 1988. Gates, valves, intake equipment, int. tender in 1989. Int. tender with prequalification launched in February 86 for hydraulic tests. Project in execution. 5th EDF. **EDF SO 5003**

Upgrading of the road Afgoi-Shalambot-Goluen. Resp. Auth.: Ministry of Public Works. Works by int. tender in 88. Supervision of works. Studies: AIC. PROGETTI (I). Project on appraisal. 5th EDF. EDF SO 5017 A2d

Animal feed by agricultural sub-products. Resp. Auth.: Ministry of Livestock, Forestry and Range. 1.9 mECU. Rehabilitation of a part of a dairy farm, supply of equipment and vehicles, T.A. Date financing December 87. 5th EDF.

EDF SO 5027 A3a

Mogadishu dairy. Phase II. Resp. Auth.: Ministry of Industry. 1.570 mECU. T.A., training and supply of equipment. Project in execution. 6th EDF.

EDF SO 6004 A3a

Drought preparedness programme. Resp. Auth.: Water Development Agency. 2.6 mECU. Supply of generators (\pm 25 KVA diesel), submersible pumps (10 m 3 /h, 100-300 m), pipes, water tankers (6 tons), spare parts. T.A. Supplies by int. tender. Project on appraisal. Date foreseen for financing April 88. 5th EDF. A3a

EDF SO 5028

SUDAN

Nuba Mountains rural development programme. Phase II. Resp. Auth. : Ministry of Finance and Ministry of Agriculture. EDF 11.450 mECU. Construction works, supply of vehicles and equipment and rural inputs, T.A. Int. tender for supplies launched in October 87. Project in execution. 6th EDF.

EDF SU 6002

Programme of assistance to spontaneoysly settled refugees in Sudan. Resp. Auth.: Commission of Refugees (COR). 16.33 mECU. Rehabilitation of 12 hospitals, 48 schools and construction of one school. Supply of equipment, T.A. and training. Project on appraisal. Date foreseen for financing February 88. 6th EDF.

EDF SU 6104 A8a, b, c

Sectoral import programme for the subsector: irrigation. Resp. Auth.: Sudan Gezira Board (SGB). 17.8 mECU. Supply by int. tender of ± 100 000 T of urea. T.A. Project on appraisal. Date foreseen for financing February 88. 6th EDF.

EDF SU 6010 A3a

SURINAME

Biomass energy project at Wageningen. Resp. Auth.: Government. Installation of an energy generator on the basis of rice husks. Project stage: identification. 5th

EDF SUR 5009 A2a

Artisanal fishing centre Nickerie. Estimated total cost 1.3 mECU. Works for offices, repair shop, jetty, cold stores. Supply of ice making unit, vehicles, fishing gears, spare parts for engines. Training and evalua-★ tion. Project in execution. 5th EDF.

EDF SUR 5013 A3d

Sectoral import programme. Estimated cost 5 mECU. Creation of a revolving funds for imports of inputs (fertilizers and chemicals for the rice sector). Project on appraisal. 6th EDF

EDF SUR 6001 A3a

New Nickerie Secondary School. Estimated cost 1 mECU. Construction and sup-

EDF SUR 5014 A6a

SWAZILAND

improvement programme. Resp. Auth.: University of Swaziland. Ministry of Education. 2.3 mECU. Supply of teaching equipment, T.A. and training. Project in execution. 6th EDF.

EDF SW 6003 A6a

Integrated development of trade, tourism and handicrafts in Swaziland. Resp. Auth.: Ministry of Commerce, Industry and Tourism. 2.7 mECU. T.A. and training for the 3 sectors. Short-lists already drawn up. Project in execution. 5th and 6th EDF. **EDF SW 6005** A5c. d. e

Rural water supplies programme. Ministry of Natural Resources. 2.5 mECU. Works and supply of equipment for village drinking water supply scheme. Project on appraisal. 6th EDF.

EDF SW 6008 A3a

Human resources development programme. Resp. Auth.: Ministry of Education. 8 mECU. Works and supply of educational equipment, T.A. and training. Project ★on appraisal. Date foreseen for financing April 88. 6th EDF.

EDF SW 6010 A6a, b

Rural dam rehabilitation programme. Resp. Auth.: Ministry of Agriculture. 2.5 mECU. Works and supervision. Project on appraisal. 6th EDF.

EDF SW 6012 A3a

TANZANIA

Agricultural sector support programme. Resp. Auth.: Ministry of Finance and Planning. 94 mECU. Measures to improve food security, support for coffee production and processing, assistance to co-operative unions, repair and maintenance of vehicles and tractors, feeder road maintenance and assistance to institutions implementing the programme. Supplies by int. tender/restr. tender or direct agreement. T.A.: Short-list done for restr. tenders. Project in execution. 6th EDF.

EDF TA 6001 A3a

Incentive goods production programme. Estimated cost 4 mECU. Provision of imported row materials and other inputs, spare parts, bibycles. Project on appraisal. 6th EDF

EDF TA 6003 A4b

TOGO

Support to the draught animals cultivation. Resp. Auth.: Ministère du Développement Rural. EDF 5.47 mECU. Extension of the Adelé ranch, introduction of new techniques, line of credit. Works: feeder roads, bridges, wells, housing. Supply of vehicles, equipments, veterinary products, T.A. and ply of equipment. Project on appraisal. 5th *training, research. Date financing February 88. 6th EDF.

EDF TO 6005 A3a

Rural development programme in the Savannah region. Resp. Auth.: Ministère du Développement Rural. 6.784 mECU. T.A. for training, research, vulgarization and farmers responsabilization. Works by direct In-service maths and science teaching * labour, supplies by direct agreement. Date financing January 88. 6th EDF.

EDF TO 6003 A3a

TONGA

Vava'u Airport Development Project. Resp. Auth.: Ministry of Civil Aviation. 2.130 mECU. Works, supply of equipment and training. Works by direct labour, supplies by int. tender. Project on appraisal. 5th and 6th EDF.

EDF TG 5003-6001

Integrated regional development study for Vava'u. Short-list done. Project stage identification.

FDF TG

Δ3a

TRINIDAD AND TOBAGO

St. Patrick water supply. Resp. Auth.: WASA (Water and Sewerage Authority). 5.5 mECU. Construction of 9 tanks by acc. tender. Supply of pipes for 63 km by int. tender. Project on appraisal. Date foreseen for financing April 88. 4th EDF. EDF TR 4003

UGANDA

EDF UG 6003

EDF UG 6002

Support to emergency relief and rehabilitation programme. Resp. Auth.: Government of Uganda. EDF 3.860 mECU. Project in execution. 6th EDF. EDF UG 6104 A8e

Forestry rehabilitation programme. Resp. Auth. : Government of Uganda. Estimated total cost 32 mECU. EDF part 9 mECU. Natural forest protection and management; reafforestation; improved charcoal production, fuel wood plantation prepa-★ Project in execution. 6th EDF.

Tea rehabilitation programme. Resp. Auth.: Government of Uganda. Estimated total cost 97 mECU. EDF part 8 mECU. Project will rehabilitate tea factories, estates outgrower tea areas, repair roads, improve 7 fuelwood supplies and assure inputs to the tea sub-sector. Works, supplies and T.A.

★ Project on appraisal. Date foreseen for financing March 88. 6th EDF.

Uganda sectoral import programme. Resp. Auth.: Ministry of Commerce. 15 mECU. Acquisition of agricultural machinery and inputs, repair of trunk and of feeder roads, acquisition of lorries and railway rolling stock, raw materials and packaging for soap production, yarn and dyestuffs for textile manufacture, chemicals and other raw materials for lead battery manufacture, steel flats and auxillary materials for hoe production. T.A. and evaluation; supplies by int. tender. Project in execution. 6th EDF. **EDF UG 6005**

Makarere university renovation. Resp. Auth.: University and National Authorising Officer. 8 mECU. Renovation of 9 faculties, staff housing, supply of printing and library ★ equipment, supervision. Date financing December 87. 6th EDF.

EDF UG 6006 A6b

WESTERN SAMOA

Afulilo hydro power project. Estimated total cost 18 mECU. EDF part 7.5 mECU. Construction of a dam, reservoir, penstock, 4 MW power station, 40 km transmission lines, T.A. and training. Cofinancing under discussion with EIB, IDA and Asian Dev. Bank. Project stage: identification. 6th **FDF**

EDF WSO 6001

A2a

ZAIRE

Goma-Beni high-voltage transmission line. Technical study to be done. Short-list already drawn up Project on appraisal. 6th

EDF ZR 0000

2nd intervention Sysmin. Gécamines Working and SNCZ. EDF part 41 mECU. Supply of mining equipment, machine-tools, engines. Int. tender for SNCZ launched in January 87. Project in execution. 5th EDF. EDF ZR-SYS 5001 A4a

Kivu programme. 40 mECU. Action for crops (coffee, corn, palm-tree, rice) environment (Parc de la Virunga), lines of credit. Project in execution. 6th EDF.

A3a **EDF ZR 6002**

Kinshasa hinterland programme. Estimated cost 35 mECU. To improve crop production. Project on appraisal. 6th EDF A3a **EDF ZR 6003**

Oso-Osokari road. Resp. Auth.: DG Travaux Publics et Administration Territoriale. Construction of an asphalted road. 74 km. Estimated total cost 49 mECU. EDF 29.5 mECU, KfW (D) 19.5 mECU. Int. tender ration. Works, supplies, T.A. and training. *(conditional) launched in April 87. Date financing December 87. 6th EDF.

EDF ZR 6004 A2d

Matadi-Kinshasa-Kenge road. Resp. Auth.: DG Travaux Publics et Adm. Territoriale. 22.5 mECU. Road rehabilitation and training for the staff of "Office des routes Date financing December 87. 6th EDF. **EDF ZR 6006** A2d

ZAMBIA

A3c

A3a

Animal vaccine unit production. Laboratory construction. Supply of equipment and T.A. Estimated cost 3.79 mECU. EDF 3 mECU, local 0.79 mECU. T.A.: Central Diergeneeskundig (NL). 5th EDF.

EDF ZA 5018 A3a

Rehabilitation of 3 grain silos. Resp. Auth.: Ministry of Agriculture. NAMBOARD. 9.6 mECU. Works, supplies and work supervision. Project on appraisal. Date foreseen for financing decision 1st quarter 88. 6th EDF.

EDF ZA 6007 A3f

ZAMSTEP. Zambia Mathematics and Science Education Project. 3.5 mECU. Supplies, training and management. T.A.: Short-list done for restr. tender. Project in execution. 6th EDF. EDF ZA 6002

Agricultural inputs import support programme. Resp. Auth.: Ministry of Finance and Nitrogen Chemicals of Zambia. 40 mECU. Procurement after int. tender of raw materials, catalysts and other chemicals required for the production of fertiliser by NCZ. Supply of agric. inputs, equipments and spare parts. 2 int. tenders for fertilizers launched in July 87. Project in execution. 5th and 6th EDF.

EDF ZA 6003 A3a

Smallholder development in copper belt province. Resp. Auth.: Ministry of Agriculture and water development. 12 mECU. Basic infrastructure by acc. tender. Supply of vehicles and materials by int. tender. T.A. Project in execution. 6th EDF.

EDF ZA 6004

Smallholder development in central province. Resp. Auth.: Ministry of Agriculture and water development. 8 mECU. Basic infrastructure and social facilities. Works, supplies and T.A. Project stage identification. 6th EDF **EDF ZA 6005** A3a

Batoka cross-breeding ranch. Phase II. Resp. Auth.: Ministry of Agricultural and water department. Veterinary Dept. 1 mECU. Provision of further equipment and refurbishment and continued T.A. Project stage identification. 6th EDF.

EDF ZA 6006

A3a

ZIMBABWE

Small-holder Coffee and Fruit Development Programme. Resp. Auth.: Ministry of Lands, Resettlement and Rural Development. EDF 4.2 mECU, local 1.65 mECU. T.A.: I.R.F.A. (F). Project in execution. 5th EDF.

EDF ZIM 5006 A3a

Mashonaland East Smallholder Fruit and Vegetable Programme. Resp. Auth.: Agricultural and Rural Development Authority (ARDA). 2.9 mECU. Works, supply of equipment and materials, T.A. and credit line. T.A.: Short-list done for restr. tender. Project in execution. 5th EDF. EDF ZIM 5012 A3a

Rural water supply in South Matabeleland. Resp. Auth.: Ministry of Energy, Resources and Development (MEWRD). Boring wells, supply of hand pumps. 4.1 mECU. Project in execution. 5th FDF

EDF ZIM 5005 A₂b

Zimbabwe export development programme. Resp. Auth.: Ministry of Trade and Commerce, Export Promotion Dept. Estimated total cost 6.3 mECU. EDF 4.4 mECU. Sector and market development, human resource development and institutional development and T.A. Project in execution. 6th EDF.

EDF ZIM 6001 A4a

Construction of Bulawayo grain silo complex. Resp. Auth.: Grain Marketing Board (GMB). EDF 7.010 mECU. Works by acc. tender. Supply of T.A. and training. Project in execution. 5th EDF. EDF ZIM 5017 A3a

IX

Land Use Project for Kanyati and Gatshe-Gatshe Communal Lands. 3 mECU. Cultivation and development and proper utilisation of wildlife potential. Works, supply of vehicles and rural equip-★ment and T.A. Project in execution. 6th EDF.

EDF ZIM 6004

Assistance to the Agricultural Finance Corporation (AFC). Resp. Auth.: A.F.C. Estimated cost 23.5 mECU. Line of credit (10 mECU), T.A. training supply of vehicles, motor-bikes and computer by int. tender. Pro-★ject on appraisal. Date foreseen for financing April 88. 6th EDF.

ΔЗа **EDF ZIM 6005**

Overseas Countries and Territories (OCT)

NETHERLANDS ANTILLES

Line of credit to the Aruba Dev. Bank to improve agriculture, livestock and fishery. Resp. Auth.: Departement voor ontwik-Estimated kelingssamenwerking. cost 0.3 mECU. Project on appraisal. 4th EDF. EDF NEA 4003

Tourism improvement. Curação. Phase I. Otrobanda sewerage. Resp. Auth.: Ministry of Public Works. 6 mECU. EDF. Sewage, road works, piping, supervision. Project on appraisal. 5th EDF.

EDF NEA 5013 A5c

ARUBA

Aruba Airport Extension. Resp. Auth.: Airport Authority 6 mECU. Supply of navigational aids, equipment and construction of a piects: Short-list done. **Project in execution.** service road. Int. tender (conditional) | 5th EDF. | EDF REG 5206 | A3d praisal. Date foreseen for financing February . 88. 5th EDF.

EDF NEA 5014 A2d

NEW CALEDONIA

Creation of a coconut seedling nursery unit. Resp. Auth.: Direction du Développement de l'Economie Rural (DIDER). 0.350 mECU. Project on appraisal. Date foreseen for financing February 88. 5th EDF.

EDF NC 5010 A3a

Installation of compost units. Resp. Auth.: Direction du Développement de l'Economie Rurale (DIDER) 0.240 mECU. Works: acc. tender. Supplies: direct agreement. Project on appraisal. Date foreseen for financing February 88. 5th EDF.

EDF NC 5011 A3a

Inventory of the mineral resources. Resp. Auth.: Direction des Mines et de l'Energie du Territoire. Estimated total cost 1 mECU. EDF 0.800 mECU, France 0.200 mECU. T.A. by restr. tender. Project on appraisal. Date foreseen for financing April 88. 6th EDF.

EDF (SYS) NC 12 A4a

WALLIS AND FUTUNA

Electrification of Futuna. Resp. Auth.: na. 1 mECU. Supply of cables and pylons for L.T. and M.T. Project on appraisal. 6th EDF.

EDF WF 6001

Regional Projects

NIGER BASIN AUTHORITY

Protection and reafforestation in the " Haut Bassin Versant du fleuve Niger en Guinee ". Works, supplies and T.A. Estimated total cost 1.5 mECU. Project stage: identification. 5th EDF.

EDF REG 5112

BURKINA - NIGER

Timber development in the future reservoir of the Kompienga Dam. Resp. Auth.: Ministère de l'Environnement du Burkina. EDF 5.9 mECU. Timber trees recuperation and processing to obtain building and service timber, fuel-wood, charcoal for their commercialisation. Works, supply of equipment and T.A. Project in execution. 6th **EDF**

EDF REG 6102

ZAIRE - CONGO - GABON -SAO TOME AND PRINCIPE -**EQUATORIAL GUINEA — CAMEROON**

Fishery development in the Gulf of Guinea. 6.7 mECU. T.A. to prepare these pro-

SENEGAL - MAURITANIA - MALI -O.M.V.S.

Dam construction in the right bank of the river Senegal delta. Resp. Auth.: O.M.V.S. Estimated total cost 15 mECU. EDF 10 mECU, France 5 mECU. Works: int. tender (conditional) launched in July 87. Project on appraisal. Date foreseen for financing February 88. 5th EDF.

EDF REG 5157 A2a

PACIFIC ACP COUNTRIES

Pacific Regional Aircommunications. Stage I. Resp. Auth.: SPEC. 4.6 mECU. Buildings, runways and supply of navigational aids. Project in execution. 5th EDF. EDF REG 5717

PIACC - Pacific Islands Association of Chambers of Commerce. Stage 2. Resp. Auth.: PIACC, Suva, Fiji. 0.800 mECU. T.A. and training. Project on appraisal. Date fore- ★ place. Date financing January 88. 6th seen for financing February 88. 6th EDF. EDF REG 6021 A5e, g

Regional agriculture development programme. 6.8 mECU. Ten pilot project. T.A. works and supplies. Project on appraisal. Administration Supérieure de Wallis et Futu- * Date foreseen for financing March 88. 6th EDF

EDF REG 6704

Regional telecommunications. Resp. Auth.: SPEC. 5.550 mECU. Coastal radio stations, earth satellite stations, T.A., training. Equipments by int. tender. Works by int, tender and direct agreement. Project on appraisal. Date foreseen for financing March 88. 6th EDF.

EDF REG 6705 A2c

MEMBER COUNTRIES OF CILSS

Provisional survey of natural renewable resources in the Sahel. Resp. Auth.: CILSS Secretariat. Setting up of an observation unit to forecast crop production. Remote sensing by satellite, air survey and ground control. Project in execution. T.A.: Sodeteg - (F). 5th ÉDF. ΔRf **EDF REG 5116**

Millet, maize, sorghum and niébé project. Resp. Auth.: CILSS Secretariat. Estimated cost 2 mECU. To provide improved varieties for farmers. Local tests. Purchase of vehicles and equipment and to take charge of local test control staff. Project stage: identification. 5th EDF.

EDF REG 5116

Improvement of permanent diagnostic instruments for regional food security. Resp. Auth.: Secrétariat Exécutif Ouagadougou. EDF and Italy cofinancing. EDF 7.705 mECU, Italy 2.795 mECU. Supplies, T.A. and running costs. Project on appraisal. Date foreseen for financing February 88. 6th EDF.

EDF REG 6110 A3a

Programme to utilize photovoltaic solar energy. Resp. Auth.: CILSS. Total estimated cost 30 mECU. Supply of 1 500 units for pump, refrigeration and light. Supply by restr. tender after prequalification. Prequalification foreseen in February or March 88. Project on appraisal. 6th EDF.

EDF REG 6116 A2ai

MEMBER COUNTRIES OF U.A.P.T.

Satellite telecommunications project. Resp. Auth.: U.A.P.T. Secretariat in Brazzaville. R.P.C. Parametric study under way by national organisations of I, UK, F and D. Project stage: identification. 5th EDF. EDF REG 5307 A₂c

INDIAN OCEAN ACP COUNTRIES

Aircraft maintenance centre for Indian Ocean countries. EDF 3.2 mECU. Strengthening of the existing centre in Ivato (Madagascar). Works, supplies and training. Project in execution. 5th EDF. **EDF REG 5508**

Inventory and study of medicinal and aromatic plants. 2.2 mECU. T.A., training and evaluation. T.A. and training already in

EDF REG 6501 A3a

Regional assistance to the handicraft. 3.5 mECU. T.A. training, supply of equip-★ment. Date financing February 88. 6th

EDF REG 6502

EAST AFRICAN COUNTRIES

Statistical training centre for Eastern Africa in Tanzania. Resp. Auth.: Secretariat of the centre. 2.0 mECU. Widening of the capacity. Construction of class-rooms, of-fices and housing. Project stage: identification. 5th EDF.

EDF REG 5311

Migrant pest control in Eastern Africa. Phase II. Resp. Auth.: Desert Locust Control Organisation for Eastern Africa (DLCO-EA). Estimated total cost 6 mECU. EDF 4 mECU, DLCO-EA 2 mECU. Research rapid survey, control and spraying of insects. Project in execution. 5th EDF. **EDF REG 5348**

BURUNDI - RWANDA - TANZANIA – UGANDA – ZAIRE – KENYA

T.A. to the Central Corridor, Estimated cost 13 mECU. Building of a rail-road terminal in Isaka, improve the traffic on the TRC and facilitate transit through the Kigoma, Kalemie and Bujumbura ports. Project on appraisal. Works: int. tender (conditional) launched in November 87. Supplies of a crane: int. tender launched in November 87. Date foreseen for financing February 88. 5th **FDF**

EDF REG 5341

Northern Corridor: Masaka-Mbarare-Kabale Road Rehabilitation. 48.5 mECU Reconstruction of 277 km of road including drainage work lime stabilised base course and double surface dressing. Supervision. Project in execution. 6th EDF. EDF REG 6304, (UG 0000)

corridor Northern transport programme, Kenya. Resp. Auth.: Ministry of Transports and Communications, Kenya. 37 mECU. Works (rehabilitation) of 105 km. ★ Supervision. Project in execution. First int. tender launched in February 88. 6th

EDF REG 6303 (KE...)

A2d

corridor (emergency gramme for T.R.C.). Resp. Auth. : Tanzania Railway Corporation. T.R.C. 13 mECU. Supply of railway equipment. Wagons, locomo-★tives, spare parts, T.A. Project in execution. 6th EDF.

EDF REG 6306 (TA 0000)

A2d

SADCC

Maseru Container Terminal. Resp. Auth.: Government of Lesotho and SADCC. 1.350 mECU. Construction of container terminal and supply of containers, handling equipment. Study required: detailed design of works. Short-list already drawn up. Project on appraisal. 5th EDF.

EDF REG 5421

MALAWI - ZAMBIA - ZIMBABWE

Regional Tsetse and Trypanosomiasis Control Programme. Resp. Auth.: Technical and financing responsibility: Zimbabwe national authorising officer. 19.150 mECU. Works by direct labour. Vehicles, veterinary products, aerial spraying and equipment by int. tender. T.A. by direct agreement. Project in execution. 5th EDF. A3a **EDF REG 5420**

KENYA - SUDAN - ZAMBIA

Field oriented research on the control of tse-tse and livestock ticks. Resp. Auth.: ICIPE (International Centre of Insect Physiology and Ecology. 2 mECU. Support to the ICIPE for the research on two parasites. Project on appraisal. 6th EDF. EDF REG 6022 A3a

KENYA - TANZANIA - UGANDA

Victoria Lake. Fishery research. Resp. Auth.: Committee composed by Directors of Nationals Research Institutes and/or by National Directors for fishery. 1.5 mECU. Supply of equipment and fishing gears, vessel, laboratory equipment, T.A. training and evaluation. Project in execution. 5th EDF. **EDF REG 5316** A3d

CARIBBEAN AND ACP COCOA PRODUCERS

Cocoa Research Unit (CRU), Phase II. Resp. Auth.: CRU in Trinidad. 2.624 mECU. Works, supply of equipment and agricultural inputs, T.A. and training. Study: I.R.C.C. (F). Project in execution. 5th EDF. АЗа **FDF RFG 5043**

CARIBBEAN ACP COUNTRIES

Regional trade development gramme. Resp. Auth.: CARICOM Secretariat. Estimated total cost 10 mECU. EDF 6.1 mECU, CARICOM 3.9 mECU. Short and long term experts, seminars, training, market promotion activities, evaluation. Project on appraisal. 5th EDF.

EDF REG 5681

A5de

MEDITERRANEAN COUNTRIES

ALGERIA

Scientific cooperation programme with "Ministère de l'Enseignement Supérieur" (MES). Resp. Auth.: MES. EEC contribution 2.5 mECU. Supply of technical and scientific equipment, training and T.A. Project in execution. SEM AL

Export training programme and assistance to the potentially exporting enterprises. Resp. Auth.: INC (Institut National du Commerce, ONAFEX (Office National des Foires et Expositions et Centre National du Commerce Extérieure). EEC contribution 2.2 mECU. T.A. and training. Project in execution. Int. tender with pre-qualification launched in December 87. SEM AL

Technical and scientific programme with HCR " Haut Commissariat à la Recherche ». Resp. Auth.: H.C.R. EEC contribution 12.1 mECU. T.A., training and evaluation. Supply of equipment by int. tender: test micro steam power plant, pilot plant for desalination, solid waste treatment, biomass, wind energy, computers, solar and nuclear laboratory. Project in execution.

Integrated training programme on forestry. Resp. Auth.: Ministère de l'Hydraulique, de l'Environnement et des Forêts. 2.5 mECU. T.A. long-term and short-term, equipments, scholar-ships. Project on appraisal. Date foreseen for financing February 88

SEM AL

A3a

CYPRUS

Sanitation in Nicosia. Phase II. Resp. Auth.: Sewage Board of Nicosia and the Department for Water, Geology and Mining. EEC part 2.4 mECU. Increase in capacity of the treatment plant. By local tender and by int. tender. Project in execution. SEM CY A2b

EGYPT

Egyptian Renewable Energy Development Organization. EREDO. Resp. Auth.: Egyptian Government. EEC contribution 7.7 mECU. Construction and equipment for the centre. Works and supplies: int. tender with pregualification foreseen in 1st half 88. T.A.: GET/KFA (D). Int. tender dossier: Phoebus (I). SEM EGT 1002

Training Institute for Egyptian Labour Representatives. "Workers University" EEC contribution 1.970 mECU. T.A. and supply of kitchen, cafeteria and laundry equipment by int. tender. Project in execution.

SEM EGT

Sinai water resources Study - Phase ★II. EEC contribution 3 mECU. Project in execution.

SEM EGT

Agricultural storage Daqahlia. Phase II. Resp. Auth.: Principal Bank for Development and Agricultural Credit (PBDAC)). 4 mECU. Construction of 31 warehouses, repair of existing warehouses, supply of equipment. Works by acc. tender. Supervision by NOOR (Egypt). Project on appraisal. Date foreseen for financing February 88. SEM EGT

LEBANON

Lebanese University, Faculty of Medicine. Resp. Auth.: Université du Liban. 0.500 mECU. Purchase of specialized equipment for the faculty by int. tender ★ launched in January 88. Date financing October 87.

SEM LE 0000 A6b

Printing plant for school books. Resp. Auth.: Council for Development and Reconstruction and Centre de Recherches et de Développement Pédagogiques (C.R.D.P.). 28 mECU. Procurement of machinery and consumables for a printing plant. All by int. tender. Project on appraisal. Date foreseen for financing February 88. SEM LE

JORDAN

A.T. to the Royal Scientific Society-Phase II. 2 mECU. Supply of equipment, training, scholarships and seminars. Project on appraisal.

SEM JO 2006

Upgrading Primary Health Care Services in Kerak Governorate. Resp. Auth.: ★1 mECU. Project in execution.

SEM JO A7b

SYRIA

ISSAT. Institut Supérieur des Sciences Appliquées et de Technologie. Resp. Auth.: State Planning Commission. Estimated total cost 70.3 mECU. EEC part : supply of teaching and training equipment for the institute and T.A.: 8.250 mECU. Project in execution.

SEM SYR 2002

Rural Water Supply Suweida Region. Resp. Auth.: Ministry of Local Administration and Ministry of Housing and Utilities. EEC 3.8 mECU. Project in execution. **SEM SYR 2001**

TUNISIA

Date-palm plantations study project in Régime Maatoug. Resp. Auth.: Banque Nationale de Dév. Agricole (B.N.D.A.). 1.9 mECU. Feasibility study, drillings and access roads. Works by direct labour. Study: Short-list done. Project in execution. A3a **SEM TUN 2001**

Management improvement in the public irrigated areas in Tunisia. Resp. Auth.: Ministère de l'Agriculture. EEC contribution 2.5 mECU. Rehabilitation of hydro-electric equipment, training and T.A. Project in execution.

SEM TUN 2006

T.A. to the Unités Coopératives de Production Agricole (U.C.P.A.). Resp. Auth.: B.N.D.A. 1.800 mECU. T.A., training and supply of equipment. Project in execution. **SEM TUN 2007**

Improvement of rural enquiries system. Resp. Auth.: Ministère de l'Agriculture. Direction de la Planification, des Statistiques et des Analyses Economiques (DPSAE). 0.400 mECU. Purchase of micro-computers by direct agreement. T.A. by the CESD with the responsability of the OSCE. Project on appraisal. Date foreseen for financing February 88

SEM TUN 3001

TURKEY

Geothermal energy in Western Anatolia. Resp. Auth.: MTA - Institut de Prosbution 8 mECU. Supply by int. tender of specialized equipment for wells, boreholes and for laboratory analyses. T.A. and training. ★ Project in execution.

SEM TU

WEST BANK AND GAZA OCCUPIED TERRITORIES

Assistance to the Palestinian population in the occupied territories. EEC contribution 2.971 mECU. Various projects, lines of credit, supply of equipment, T.A. and Ministry of Health (MOH). EEC Contribution **training. Project in execution. First int. tender for supplies launched in October 87. SEM OT A8a, b, e

A.L.A. developing countries ASIA and LATIN **AMERICA**

ASEAN

Aquaculture development and coordination programme. 6,77 mECU. Project in execution.

ALA ASN 8604

Industrial standards and quality control programme. 5 mECU. Project in execution. **ALA ASN 8609**

Marine fisheries resources assessment. Resp. Auth.: South-East Asian Fisheries Development Centre (SEAFDEC). EEC contribution 0.652 mECU. Supply of equipments and T.A. Project in execution. **ALA ASN 8618** A3d

BANGLADESH

Rangpur. Rural Development Programme. Resp. Auth.: Central Coordination Committee. (CCC). Total cost 40 mECU. EEC 25.5 mECU, NL 7 mECU, local 6 mECU. Works by acc. tender. Supplies by int. tender or direct agreement. Project in execution. ALA BD A3e

Flood control and drainage. IV. Resp. Auth.: Ministry of Irrigation, Water Development and Flood Control (MOI) and Bangladesh Water Development Board (BWDB). EEC contribution 2.080 mECU for T.A. and studies. Project in execution.

ALA BD 8702

A8a

Cyclones protection project. Phase II. A1b ★1.5 mECU. Project in execution. ALA BD 8705 A8a

Rehabilitation after floods. 6.5 mECU. Repairing of health centres, schools reconstructions, road repair, supply of "bailey bridges, trucks, ambulances four wheels drive, follow up and supervision. Supply by pection et Recherches Minérales. EEC contri- * int. tender. Date financing December 87. ala BD 8720 A3a, A8g

BHUTAN

Water supply. Resp. Auth.: Inter dep. Commission on water and sanitation. Works by direct labour, 4.5 mECU. Supplies int. tender or direct agreement. T.A.: UNICEF. Project in execution. ALA BHU

T.A. programme to the Department of Agriculture. Resp. Auth.: Ministry of Agriculture and Forests. 1.1 mECU. Two experts during 3 years. 1 rural development engineer and 1 agro-economist. Short-list already drawn up for restr. tender. Project in execution.

ALA BHU 8513

A3a

BOLIVIA

Flood protection programme. Santa Cruz. EEC 9 mECU, NL 1 mECU. Works, supply of equipment. T.A. for NL. Project in execution.

ALA BO 8510 A8q

Rural self-development programme. CORDEPO-CORDEOR. Resp. Auth.: 20 mECU. Supply of equipment, materials, line of credit, T.A. Project in execution. ALA BO 8701

Regulation-prevention programme of the TDPS basin. Resp. Auth.: CORDEOR for urgent works. 5 mECU. T.A. by EEC expert for 2 years for works and T.A. by a multidiscipline team for TDPS study. Purchase by int. tender of 2 dredgers, equipments and specialized equipment for study. Works by direct labour. T.A. direct agreement after restr. tender. Project on appraisal. Date foreseen for financing February 88

ALA BO 8723

A3a

BURMA

Foot-and-mouth disease fight project. Resp. Auth.: Ministry of Agriculture. Animal Husbandry Dept. EEC contribution 3.45 mECU. Purchase of equipment, vaccins, vehicles, T.A. training and evaluation. Date financing December 87. **ALA BA 8718** АЗа

CHINA (PEOPLE'S REP.)

Pilot project for fruit processing in the Hunan Province. Resp. Auth.: Agricultural Research Institute of Hunan. EEC contribu- ★agement. Date financing December 87. tion 1.550 mECU. Supply of a laboratory and pilot processing plant 1.5 ton/hour capacity. T.A. and training. Project in execution.

ALA CHN 8610

Pilot project to develop irrigated sector in the Gansu Province. Resp. Auth.: Water Resources Bureau of the Gansu Province. EEC contribution 3 mECU. Supply of equipment, T.A. training, evaluation. Supplies by int. tender. Project in execution.

ALA CHN 8631

Assistance to the EEC food aid dairy development project. Resp. Auth.: Ministry of Agriculture, Animal Husbandry and Fisheries. Bureau of Animal Husbandry. EEC contribution 4.5 mECU. T.A. by restr. tender after short-list. Specialized equipments and semendoses $\pm 30\,000$ by int. tender. Eva-★luation. Date financing December 87.

ALA CHN 8711

COLOMBIA

Reconstruction Programme. Resp. Auth.: Corporation de Reconstruction de Cauca. Total cost 5.9 mECU. EEC 3.9 mECU. EEC part: supply of materials and T.A. Project in execution. **ALA CO 8403** A8a

Microprojects programme in the pacific coastal. Line of credit, T.A. and training, EEC contribution 4 mECU and supply of equipment. Project in execution.

ALA CO 8516 A3a

COSTA RICA

Productive projects programme for refugees in Costa Rica. T.A. and line of credit. 3.6 mECU. Project in execution.

ALA CR 8501

Integrated rural development of the region of OSA/GOLFITO. Total cost 21.635 mECU. EEC 9.95 mECU. Supply of equipment, infrastructural works, maintenance, lines of credit and T.A. Project in execution

ALA CR 8506

ECUADOR

Rural development in the region of the Chambo river. Resp. Auth.: Institut Equatorien des Ressources Hydrauliques (INERHI). EEC 9 mECU. T.A. and training, irrigation works, line of credit, supply of equipment. Project in execution.

ALA EC 8701

EL SALVADOR

Programme for the Development of Handicrafts in deprived areas. Resp. Auth.: Interministry Committee with the leadership of the Ministry of Culture and Communication. EEC 6 mECU. T.A., studies ★ and supply of equipment and vehicles. Date financing December 87.

ALA ES 8710

Construction of a hospital in Zacamil. Construction and equipping of a 200 beds hospital. 12 mECU. Works and supplies by int. tender. T.A. for supervision and man-**ALA ES 8712** A7a

GUATEMALA

Support to smallholder 12 mECU. Supply of equipment, line of credit and T.A. Project in execution. Int. tender for supplies launched in November 87. ALA GU 8612

Support to the rural diversification in the Pacific Region (Montellano and San *training. Date financing December 87. Carlos Malaga. EEC 5.5 mECU. Supply of equipment, infrastructural works, lines of credit. T.A. and training. Project in execution.

ALA GU 8707 A3a

HONDURAS

Rehabilitation and Maintenance Feeder Roads in Coffee Producing Areas. Resp. Auth.: Instituto Hondureno de Café (IHCAFE). EEC 2.750 mECU. Supply of T.A. and work construction equipment. Project in execution. Int. tender for supplies launched in December 87.

ALA HO 8524

Water supply, health in the rural sector. Resp. Auth.: Consejo Directivo de Saneamiento (CODISA), and Ministerio de Salud Publica. EEC contribution 14.5 mECU. Supply of equipment, materials, vehicles, T.A. and training. Project in execution. A8bc ALA HO 8620

INDIA

Development of Water Control Systems for diversification of crops in Maharashtra. Resp. Auth.: Irrigation Department of the Government of Maharashtra. EEC contribution 15 mECU. Works, supplies, T.A. and training. Project in execution.

A3a **ALA IN 8418**

Co-operative rural storage, Bihar. 21.19 mECU. Project in execution.

ALA IN 8607

Stock-farming development in Tamil-Nadu. Resp. Auth.: Animal Husbandry Dept. of the Government of Tamil Nadu. EEC contribution 6.1 mECU. Works and supplies, T.A. and evaluation. Supplies by int. tender. Project in execution.

ALA IN 8704 A3a

Coconut development, Kerala. Resp. Auth.: Kerala Kera Karshaka Cooperative Federation (Kerafed). EEC 45 mECU. Supply of equipments, oil plants, T.A. and evalua-★ tion. Date financing December 87.

ALA IN 8709

INDONESIA

Bali Irrigation Sector Project. Resp. Auth.: Ministry of Public Works. DG for EEC Resources Development. Water \pm 37 mECU. 12 mECU. ADB Local \pm 55 mECU. Rehabilitation and expansion of 50 village-level irrigation schemes, establishment of a water-management training centre, and establishment of climatological stations. T.A. Works: acc. tender. Project in execution.

ALA IND 8114

Seed production and marketing, EEC ★contribution 9.7 mECU. Date financing December 87.

ALA IND 8621 A3a

Evaluation of the pelagic fishery in the Java Sea. Resp. Auth.: Agricultural Agency for Research and Development (AARD) and RIF. Cofinancing with France. EEC contribution 2.20 mECU, France 1.20 mECU, local 0.45 mECU. Supply of equipment, T.A. and

ALA IND 8717

Rural electrification project (hydroelectric micro-power stations). Resp. Auth.: Ministry of Energy and Mines. Electricity and new energy Dept. EEC contribution 18.9 mECU. Works, supply of turbines, generators, adjusters of 10 KW, 25 KW and 100 KW, vehicles and other equipment, T.A. and training. Date financing December 87.

ALA IND 8719 A2a

LAOS

Rural micro-projects programme in the Luang Prabang Province. Resp. Auth.: Administrative Committee of the Luang Prabang Province. EEC contribution 6 mECU. Infrastructure work, supply of equipment, vehicles, Bailey bridges, T.A. and training. Project in execution.

ALA LA 2623 A3a

NEPAL

Nepal Administrative Staff College. NASC. Resp. Auth.: NASC Secretariat. Estimated total cost 6.5 mECU. EEC 5 mECU, U.K. 1.5 mECU. Renovation and construction works, supply of equipment and training. Project in execution.

ALA NEP 8407

Soil and water conservation in Bagmati Watershed. Special hunger programme. 5.5 mECU. T.A.: I.D.C. (D). Project in execu-

958-NEP 8401 A3a

Arjun Kuhola Irrigation Project. 1.536 mECU. Project in execution.

ALA NEP 8521 A3e

Rural Development in Gulmi. Resp. Auth.: Ministry of Panchayat and Local Development (MPLD). EEC 2.710 mECU. Works, supplies and T.A. Date financing December 87.

ALA NEP 8706 A3a

NICARAGUA

Rural integrated development in San Dionisio and La Meseta. Estimated cost 8.5 mECU for the EEC contribution. Supply of equipment, vehicles, T.A. and training. Project on appraisal. **ALA NI 8614** A3a

Crop production development in the La Meseta region. EEC contribution 5.6 mECU. Works, supplies, T.A. and training. *Date financing December 87.

ALA NI 8630 A3a

PACTO ANDINO MEMBER COUNTRIES

Regional programme for technical cooperation: food strategy. Resp. Auth.: JUNAC. EEC contribution 7 mECU for European T.A. and supply of data-computerised equipment by int. tender. Project in execution.

ALA JUN 8406 B1a

Regional programme for technical cooperation: industry and sub-regional exchanges. Resp. Auth.: JUNAC. EEC Contribution 7 mECU. T.A. and supply of equipment. Project in execution.

ALA JUN 8503 A4a

PAKISTAN

Talli irrigation project. Dam construction and infrastructure. Supply of equipment and T.A. EEC contribution 7.8 mECU. Project in execution.

ALA PK 8615 A3a, A9a

Buner development project. EEC contribution 10.6 mECU. Works, supplies and ★T.A. Supplies by int. tender. Date financing December 87.

ALA PK 8715 A3a

Primary education in rural areas. Cofinancing with CIDA and IDA. EEC contribution 15 mECU for works, T.A. and scholar★ ships. Date financing December 87.

ALA PK 8716 A6a

PANAMA — COSTA RICA — NICARAGUA — HONDURAS — EL SALVADOR — GUATEMALA

Regional programme of technical cooperation for food security. Resp. Auth.: CADESCA (Comité de accion para el desarrollo economico y social de centroamerica - Panama). Total cost 9.07 mECU. EEC

4.82 mECU, France 0.350 mECU, local 3.9 mECU. T.A. training and supply of equipment. Project in execution.

ALA REG 8505 A3a

Regional programme for child survival in Central America. EEC 16.5 mECU, Italy 16 mECU. Supply of T.A., training, equipment, medical equipment and medicines. Project in execution.

ALA REG 8520 A7a

Regional programme to strenghten cooperatives. Cofinancing with Spain. EEC contribution 22 mECU. Spain 2.5 mECU, local 15.5 mECU. Supply of T.A., lines of cre-

ALA REG 8714 A5f

EL SALVADOR — GUATEMALA — HONDURAS — NICARAGUA

Regional programme to eliminate rabies in Central America. Resp. Auth.: Pan-American Health Organisation (PAHO). EEC contribution 2.9 mECU. Supply of equipment and materials and T.A. Project in execution

ALA REG 8625 A8c

PERU

Lake Titicaca. Reconstruction-prevention programme. Resp. Auth.: Corporacion de Desarrollo de Puno (CORPUNO). EEC contribution 5 mECU. Studies, works and supplies. Project in execution.

ALA PE 8603 A3a

PHILIPPINES

Integrated development project of the Aurora region. Resp. Auth.: NACIAD. Total estimated cost 12.6 mECU. EEC 10.8 mECU. Irrigation works, feeder roads, reafforestation, supply of equipment and T.A. Project in execution.

ALA PHI 8525 A3a

Cordillera development programme.
Resp. Auth.: Ministry of Agriculture and Food (MAF). EEC part 18.5 mECU. Rural micro-projects in the Northern Luzon. Irriga-

tion, roads, bridges, water supplies, rural credit. Supply of equipment, T.A. and train-Project in execution.

ALA PHI 8616

A3a

SRI LANKA

Integrated rural development of the Mahaweli right bank region. System B. EEC contribution 25 mECU. Works and supplies. Prequalification for works foreseen in the 1st quarter 88. Project in execution. ALA CE 8703

THAILAND

Rural credit and rubber planting. Resp. Auth.: Ministry of Agriculture and Cooperatives. 35 mECU. Supply of lines of credit, T.A., training, rural inputs, equipment. Project in execution.

ALA TH 8509 A3a

Huai-Mong. Phase II. 5.6 mECU. Works and supplies. Project in execution.

ALA TH 8613

A3a

Mae Kok water resource study. Resp. Auth.: Electricity Generating Authority of Thailand. EGAT and Royal Irrigation Dept. (RID). EEC contribution 2.8 mECU, local 0.45 mECU. T.A. and training, supply of equipment. *Date financing December 87*. ALA TH 8708 A3a, A9a

YEMEN - ARAB REPUBLIC

Rehabilitation and maintenance of Al Mahwit road network. Supply of equipment and materials by int. tender. T.A. and training. EEC contribution 7.5 mECU. Project in execution.

ALA YAR 8611 A2d

YEMEN — PEOPLE'S DEMOCRATIC REPUBLIC

Rural development of Al Mahwir. Estimated cost 6.5 mECU. Project on appraisal. Date foreseen for financing decision 1st half 88.

ALA YDR A3a

INTERNATIONAL CALLS FOR TENDER

All international calls for tender (int. tenders) referred to in this Operational Summary are notified in due time in the Official Journal (O.J.) of the European Communities' «S» supplement. This information is also available by computer link via the "TED" data base.

Subscriptions to the O.J. «S» supplement should be addressed to the «Office for Official Publications of the European Communities», L-2985 Luxembourg, Tel.: 49 00 81, or contact Mr A. Boldrin (see box page II).

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15, Kuleli Sokak Gazi Osman Paça, Ankara Tél. 27 61 45/27 61 46 Télex 42819 ATBE TR International Food Policy Research Institute — Research report 56 — Tshikala B. Tshibaka: The effect of trade and exchange rate policies on agriculture in Zaïre — Nov. 1986 — Washington DC, USA.

Since independence, trade and exchange rate policies have been an important economic tool used by policymakers. In his book, Tshikala B. Tshikaba assesses the effects of trade and exchange rate policies on the structure of incentives and their implications for agriculture.

Trade and exchange rate policies affect the relative prices of goods and thus shift the structure of incentives among the sectors. To measure the effect on prices, Tshibaka uses a general equilibrium model incorporating exportables, importables, and home goods (non traded items). Taking into account rates of domestic and world inflation, he computes implicit rates of taxation or subsidy to assess whether prices paid to farmers who produce tradable goods have been kept below or above world prices through trade policy. He concludes that in Zaïre the domestic price of non-traded goods, such as basic foods and housing, would rise 0.52% more than the price of exportable goods as the result of a 1% increase in the domestic price of importables relative to exportables.

Therefore, at least half of the burden of protecting importables fell on exports during 1971-82; thus, the burden imposed on export activities was much heavier than intended by policy-makers.

The study indicates that exports with high supply elasticities, such as industrial products, are unable to compete effectively in the world markets. This result is important for the design of overall economic policy. Import-substitution industrialisation would jeopardise not only the promotion of agricultural and mineral exports. Within industry, resources would move away from export activities to import-competing ones. In agriculture, resources would shift out of agricultural exports toward importcompeting and home goods production, both agricultural and industries. Resources used in mining, which in Zaïre is almost exclusively for export, would tend to move into industrial import-competing and home goods production.

These resource movements would reduce export activity in the economy and the country would be unable to earn enough foreign exchange to maintain, improve, and expand overall economic activity. Growth of the farm sector and the economy as a whole would decelerate.

Clearly, restriction trade and exchange rate policies do not help improve the country's food self-sufficiency. The study indicates that policymakers should strive for a uniform, across-the-board treatment for all tradables if the production of these commodities as well as that of non-tradables is to be enhanced.

The policy lesson indicated by these developments is that the real exchange rate is one of the critical variables that needs to be monitored by policymakers through fiscal, monetary, income, and other economic policies. The aim should be to maintain the real exchange rate at a level that has yielded encouraging performance of the farm sector and the economy in the past.

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Siyanga MALUMO — Introduction to Marketing in Africa — Macmillan Publishers — 1986 — 312 pages.

Introduction to Marketing in Africa is the first comprehensive book on marketing written from the African point of view, in the African context, with a wealth of examples covering the whole continent. The text is clearly written and makes interesting as well as informative reading, providing a bridge between marketing as practised in the West and the realities of marketing in Africa.

The book begins with a survey of the African economy and then goes on to cover the history of business in the continent, the African market, the role of marketing, marketing constraints, marketing strategy, product and production, price and pricing, advertising and sales promotion, distribution and the international aspects of marketing.

The book is particularly suitable for students of Business Studies at polytechnics and universities. It will be valuable for Institute of Marketing and London Chamber of Commerce and Industry Marketing Diploma students, and for students of agricultural economics, farm management and industrial engineering, as well as for practising managers concerned with marketing, import/export and financial investment.

Outside the continent it is essential reading for anyone concerned with comparative business studies or international marketing, and for international businessmen selling or buying within Africa. \odot

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