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Report

drawn up on behalf of the Committee on Development and Cooperation

on the proposal from the Commission of the European Communities to the Council (Doc. 1-603/83 - COM(83) 354 final) for a decision on the adoption of a programme of assistance for the development of indigenous scientific and technical research capacities in the developing countries 1984 - 1987

Rapporteur: Mrs R.-C. RABBETHGE

By letter of 11 July 1983, the Council requested the European Parliament to deliver an opinion on the proposal from the Commission of the European Communities to the Council (Doc. 1-603/83) for a Council Decision on the adoption of a programme of assistance for the development of indigenous scientific and technical research capacities in the developing countries 1984 - 1987.

On 12 September 1983, the President of the European Parliament referred this proposal to the Committee on Development and Cooperation as the committee responsible and to the Committee on Energy, Research and Technology, the Committee on Budgets and the Committee on the Environment, Public Health and Consumer Protection for opinions.

At its meeting of 29 September 1983, the Committee on Development and Cooperation appointed Mrs RABBETHGE rapporteur.

The committee considered the Commission's proposal at its meeting of 19 October 1983 and unanimously adopted the motion for a resolution at its meeting of 4 November 1983.

The following took part in the vote: Mr BERSANI, chairman; Mrs FOCKE (vice-chairman); Mrs RABBETHGE (rapporteur); Mr COHEN, Mrs DURY, Mr DESCHAMPS (deputizing for Mr VERGEER), Mr FUCHS, Mr JOHNSON (deputizing for Mr de COURCY LING), Mr PEARCE, Mr VANKERKHOVEN and Mr WEDEKIND.

The report was tabled on 8 November 1983.

The opinions of the Committee on Energy, Research and Technology, and the Committee on the Environment, Public Health and Consumer Protection are attached.

The opinion of the Committee on Budgets is published separately.

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The Committee on Development and Cooperation hereby submits to the European Parliament the following amendment to the Commission's proposal and motion for a resolution together with explanatory statement:

Test proposed by Parliament

Commission test

Proposal for a Council Decision on the adoption of a programme of assistance for the development of indigenous scientific and technical research capacities in the developing countries (1984 - 1987)

Amendment No. 1

Article 3

This article to read as follows: The Commission shall carry out the programme. It shall be assisted in its task by an advisory committee, established by Commission Decision and made up largely of those experts from the Member States and the developing countries who are already on the two advisory committees for the programme of research and development in the field of science and technology for development. The committee's function shall be to keep the Commission informed of the scientific and technical needs of the developing countries and to help it establish and subsequently evaluate the guidelines and resuls of the programme.

Article 3

The Commission shall carry out the programme. It shall be assisted in its task by an advisory committee, established by Commission Decision and made up of experts from the Member States and the developing countries. The committee's function shall be to keep the Commission informed of the scientific and technical needs of the developing countries and to help it establish and subsequently evaluate the guidelines and results of the programme.

MOTION FOR A RESOLUTION

closing the procedure for consultation of the European Parliament on the proposal from the Commission of the European Communities to the Council for a Council decision on the adoption of a programme of assistance for the development of indigenous scientific and technical research capacities in the developing countries 1984 - 1987

The European Parliament,

- A. having regard to the proposals from the Commission of the European Communities to the Council (COM(83) 354 final),
- B. having been consulted by the Council (Doc. 1-603/83),
- C. having regard to the report of the Committee on Development and Cooperation and the opinions of the Committee on Energy, Research and Technology, the Committee on Budgets and the Committee on the Environment, Public Health and Consumer Protection (Doc. 1-1006/83),
- D. having regard to the result of the vote on the Commission's proposal,
- E. having regard to the European Parliament's resolution and report on the Commission's proposals for a programme of research and development in the field of science and technology for development 1982 1985 (1),
- F. having regard to the European Parliament's resolution and reports on the European Community contribution to the campaign against hunger in the world (2) and on measures following the European Parliament debate on world hunger and the communication from the Commission to the Council concerning a plan of action to combat world hunger, together with the motions for resolutions tabled on this subject (1),

⁽¹⁾ Report by Mrs Rabbethge, Doc. 1-202/82, 10.5.1982, OJ No. C 182, 19.7.1982

⁽²⁾ Report by Mr Ferrero, Doc. 1-341/80, 29.8.1980, OJ No. C 265, 13.10.1980

- G. having regard to the resolution adopted by the Council on 18 November 1980 stressing the importance of developing research capacity geared in particular to food agriculture in the developing countries,
- H. having regard to the Commission's memorandum on the Community's development policy (2) and the corresponding resolution adopted by the European Parliament (3),
- I. having regard to the European Parliament's resolution on the context of the future convention to follow Lome II (4),
- J. having regard to the report on behalf of the Joint Committee adopted by the ACP-EEC Consultative Assembly on cultural cooperation between the ACP States and the EEC and its integration in the future ACP-EEC Convention (5),
- K. having regard to the report on behalf of the Joint Committee and adopted by the ACP-EEC Consultative Assembly on ACP-EEC industrial cooperation and the impact of the Lome Convention (6),
- L. having regard to the 'Vienna Programme of Action' adopted by the General Assembly of the United Nations (7),
- M. having regard to the 'Lagos Plan of Action for the economic development of Africa 1980-2000', adopted by the Conference of Heads of State and Government of the Organization of African Unity,

⁽¹⁾ Report by Mr Michel, Doc. 1-281/82 Corr., 7.6.1982, OJ No. C 182, 19.7.1982

⁽²⁾ COM(82) 640 final

⁽³⁾ Report by Mr Jackson, Doc. 1-475/83, 29.6.1983, OJ No. C 242, 12.9.1983

⁽⁴⁾ Report by Mr Irmer, Doc. 1-605/83-I

⁽⁵⁾ Report by Mr Raymond Chasle, Doc. ACP-EEC 49/83 - B, Minutes of the meeting of the ACP-EEC Consultative Assembly of 23.9.1983, CA 204

⁽⁶⁾ Report by Mr Gerard Fuchs, Doc. ACP-EEC 55/83, Minutes of the meeting of the ACP-EEC Consultative Assembly of 23.9.1983, CA 204

⁽⁷⁾ Resolution 34/218 of 23.1.1980, Doc. A - Conf. 81-16, paragraphs 65 to 67

- 1. Welcomes the Commission's proposal to help developing countries develop their own scientific and technological research capacities, especially as it has on previous occasions called on the Community to help the developing countries establish local research facilities:
- 2. Emphasizes that independent and autonomous development in the developing countries (self-reliance) is not possible unless they possess indigenous scientific and technological infrastructures either at national or at regional level;
- 3. Declares its agreement with the priorities proposed by the Commission, research policy to be implemented initially as a first phase in the agriculture/food and health sectors, since the programme may therefore be regarded as supplementing and extending the programme of research and development in the field of science and technology for development, which has already been in progress since the start of 1983; agrees here with the allocation of two-thirds of the appropriations (40 m ECU) to the agriculture/food sector and one-third (20 m ECU) to the health sector;
- 4. Considers that, although certain parts of the proposed research programme are definitely to be welcomed, the proposed programme as a whole is too general;
- 5. Believes therefore that the programme must be meticulously overhauled to ensure that the effectiveness of the programme is in proper relation to the financial and administrative costs involved and calls on the Consultative Assembly to put the programme in more concrete terms and define overall research aims as soon as possible;
- 6. Calls for priority to be given here to establishing research programmes for regions or groups of countries;
- 7. Regrets that the proposal does not indicate what areas of research are already covered by bilateral and multilateral research activities (e.g. under the auspices of the CGIAR, FAO and WHO);

- 8. Believes that the planned research programme is only practicable if it fills or supplements gaps in current research programmes, in order to avoid duplication of work and wastage of scarce financial resources; calls therefore for the thorough coordination and synchronization of the planned Community research projects with existing Community programmes, bilateral Member State projects and international research programmes;
- 9. Criticizes the lack of an overall timetable, because it may be assumed with certainty that the planned objective(s) cannot be achieved in most of the developing countries in a four-year research phase;
- 10. Regrets that, in view of the indebtedness of the developing countries, the question of the financing of subsequent costs remains open; believes this point to be particularly important, because autonomous research in the developing countries will be undermined by permanent dependence on external financial resources and the actual aim of the programme, to develop independent research in the developing countries, will hence not be achieved;
- 11. Stresses that the research measures will not fulfil their purpose unless they effectively contribute to social and economic progress for the populations of the developing countries; believes therefore that research work must be geared principally to the needs of the developing countries, taking into account their environment, social structures and differences in mentality and behaviour; calls therefore for the proposals contained in the Lagos Plan to be taken into account;
- 12. Is in favour of creating integrated agricultural research capacities,
 based on an overall research programe covering problems of agricultural
 production and the development of agricultural technologies and economic
 systems, including forestry and fishing;
- 13. Calls for the agricultural research programme to include research to improve the management of sea fishing stocks exploited by sea fishing, since under the new Law of the Sea the coastal states are themselves responsible for optimum utilization of stocks;

- 14. Thinks it important that the development of indigenous scientific and technological research in the health sector should take into account the traditional medical structures in the developing countries and is therefore in favour of research tailored to given situations;
- 15. Notes that there continues to be an urgent need for fundemental research in tropical medicine; supports in particular further research into tropical diseases that slow development;
- 16. Calls for the planned research programme to pay as much attention to initial, further and advanced training in the developing countries as to the content of research and for the existing lack of suitable training or further training facilities in the developing countries to be remedied as soon as possible; attaches great importance here to the North-South and South-South exchange of research workers proposed by the Commission;
- 17. Desires that practical training be given the same weight as scientific training in the implementation of the programme;
- 18. Expressly underlines the need for special measures in the planned research programme to encourage the return of highly qualified researchers working abroad mainly for financial reasons, because the emigration of qualified scientists poses a serious problem for research in the developing countries;
- 19. Calls for detailed rules for the implementation of the programme, including a practical procedure for coordinating the promotion of research by the various aid organizations in the developing countries with the Community's programme in order to achieve the programme objectives efficiently and to meet the actual needs of the developing countries;
- 20. Calls for the Advisory Committee set up by Commission Decision to be made up largely of those experts from the Member States and the developing countries who are already on the two advisory committees for the Programme of research and development in the field of science and technology for development; the aim being to improve coordination and, above all, to ensure closer interworking of the two programmes;

- 21. In order to prevent duplication, calls for extremely precise coordination and sharing of work between the Directorates-General concerned at the Commission, since DG XII is responsible for the programme that has been in progress since 1983 and the appropriations for the new programme are earmarked under Title VII (Research) in the Community budget, whereas DG VIII is to implement the new research programme for the developing countries in cooperation with DG XII;
- 22. Calls on the Commission to submit as soon as possible an interim report on the ongoing programme in the field of science and technology for development, which could provide useful indications for the implementation of the new programme;
- 23. Instructs its President to forward to the Council and Commission, as Parliament's opinion, the Commission's proposal as voted by Parliament and the corresponding resolution.

EXPLANATORY STATEMENT

1. The aim of the Commission's proposal is to help developing countries develop their own scientific and technological research capacities. The programme covers a period of four years starting from 1 January 1984 (1984 - 1987).

In view of the variety of needs in the developing countries, the Commission proposes a programme of assistance in the following research areas: agriculture and food, health, population, environment, energy, and mineral resources. In line with the Community's current policy of according priority to the campaign against hunger and malnutrition in the world, agriculture/food and health are the sectors selected for the first phase. The other four sectors, which are outlined in brief, are to be the subject of a separate proposal.

2. In its resolution of 18 November 1980, following up the European Parliament's debate on the campaign against hunger in the world, the Council stressed the importance of developing research capacity geared particularly to food agriculture in the developing countries. On 3 December 1982, the Council adopted a programme of research and development in the field of science and technology for development (1983 - 1986) (1), concerning research by scientific institutions belonging to both the Community and the developing countries. It has already started. The projects it supports cover tropical agriculture and health in tropical areas, so the present Commission proposal may be regarded as supplementing and extending this programme.

⁽¹⁾ OJ No. L 352, 14.12.1982, p. 24

3. The memorandum on development policy submitted by the Commission to the Council on 4 October 1982 proposes, as one of the main objectives of development projects 'the development of independent capacities for scientific research and technical applications and the use of the whole range of science and technology in the service of development'. In the resolution of the Jackson report on the Commission's memorandum, Parliament also calls on the Commission, in paragraph 47, to make proposals to help developing countries develop local research and technology and to find better ways of encouraging technology transfers.

Prior to the memorandum on development policy, the Commission had already referred to the importance of scientific cooperation with the countries of the Third World in a communication to the Council on 'scientific and technical research and the European Community - proposals for the 1980s' (1). A principal objective of such a research programme was to be the development of the national and regional capacities of the developing countries in the field of scientific research.

The crucial point is made by paragraph 40 of the resolution adopted by Parliament on 17 June 1982 concerning a programme of research and development in the field of science and technology for development 1982 - 1985. It expressly states that 'the programme as a whole will be meaningful only if research institutes in the developing countries are involved in the work from the outset and if the Community at the same time supports research centres in the developing countries in their efforts to expand their own local research and development capacity'.

4. The developing countries themselves have repeatedly stated that they regard an indigenous scientific and technological research capacity as particularly important for economic and social development. This was the case with both the 'Vienna Programme of Action' adopted by the General Assembly of the United Nations and the 'Lagos Plan of Action'. In the resolution

⁽¹⁾ COM(81) 574 final; this proposal was welcomed at the meeting of the Council of Research Ministers on 9 November 1981

contained in the Plan of Action, all the developing countries of one continent - for the first time - underlined the particular importance of promoting science and technology. It is therefore especially important for the Commission to take proper account of the proposals in the Lagos Plan when implementing their planned programme.

In his last report on ACP-EEC cultural cooperation and its integration in the future ACP-EEC Convention (1), Mr Raymond Chasle discussed the topics of research, science and technology in the context of development cooperation in some detail and stated: 'Acknowledging that science and technology are important factors of development, the Community undertakes to support through the grant of adequate financial and technical resources the efforts of the ACP States towards attaining an adequate scientific and technical capacity in order to enable them to execute their scientific and technological activities'.

- 5. In view of these remarks and the European Parliament's express desire to support developing countries in developing research facilities, the Commission's proposal may be regarded as an important step in the right direction.
- 6. Because of the great variety of tasks involved and the limited financial resources available, most developing countries are unable to establish indigenous research capacities on any large scale. Currently much is being made of improving the quality of development aid, but such an improvement however require substantial increases in the funds available for planning and preparing development activities and an intensification of practical research. The aim of development aid is not just to provide assistance in various sectors but also to introduce innovations. The introduction of innovations or new methods in the context of development aid often requires research, however. As this research must take account of the sociocultural environment, it should be carried out locally. One of the main errors made in the past was the ill-considered way in which research and technical knowhow developed in the industrial countries was transferred to the developing countries.

WP0508E OR.DE.

⁽¹⁾ Doc. ACP-EEC 49/83 - B

Research work must be geared mainly to the requirements fixed by the developing countries themselves according to their own priorities, taking particular account of their environment, social structures and differences in attitude and behaviour. All research measures are pointless unless they effectively contribute to social and economic progress for the populations of the developing countries.

The principle of self reliance for developing countries, i.e. independent and autonomous development, expressly called for in Mr Irmer's recent resolution on the future convention to follow Lome II, has no chance of becoming reality unless the developing countries develop indigenous scientific and technological research capacities.

- 7. The Committee on Development and Cooperation agrees that the first phase should cover the agriculture/food and health sectors, especially since the question of adequate nutrition has dominated all debates on development policy since the direct elections to Parliament and given their improved health services provide a platform for economic and social improvements in the developing countries. ACP-EEC cooperation also accords priority to research in the areas of 'agriculture in the tropics' and 'medicine, health and nutrition in the tropics'.
- 8. Around 500 million people in the world are undernourished, with millions of people starving to death every year. Intensive research into agriculture is therefore required, being a precondition for increasing agricultural output and improving rural development. The importance of the agricultural sector is clearly illustrated by the fact that 60 to 90% of the population in many developing countries live off the land. Agricultural research is not only becoming increasingly important for securing food supplies, it is also a means of directly improving the living conditions and incomes of the rural population. An important task is the further development of the rural sector with its traditional cultures and methods of cultivation and also its considerable potential for supplying market needs.

Applied and adaptive research in all agricultural and socioeconomic areas must be carried out in the developing countries. Crop growing programmes, for example to promote cereal cultivation, are only practical in the developing countries themselves. In the field of soil science too, soil resources should be investigated locally. This would involve routine chemical, biological and physical tests to determine fertility-related soil characteristics. Research activity should focus on increased agricultural production, post-harvest technology and clean water. To achieve these aims, priority must be given to the further development of integral farming methods, protection of resources and adjustments to suit local conditions. Priority should also be given to the development of more ecologically oriented farming methods geared particularly to small farmers, since the densely populated small-farming regions are going to suffer most from future ecological destruction, yet will also have the greatest food needs.

9. In spite of considerable efforts in recent years, millions of people in the developing countries still suffer from infectious diseases, chronic parasitosis and illnesses caused by malnutrition and undernourishment.

Diseases that occur frequently are filariasis, bilharzia and malaria. 200 million of the world's population are infected by bilharzia, also known as schistosomiasis. Around 250 million people in the world are infected by varieties of filariasis. In addition, physical health is particularly badly impaired by leprosy, tuberculosis, blindness caused by onchocercosis and serious liver and bladder damage as a result of schistosomiasis.

Medical infrastructure also remains inadequate. In the rural areas of the least-developed countries, up to 85% of the population have no access to suitable medical care facilities. Health in the developing countries cannot be significantly improved without research and training. There continues to be an urgent need for fundamental and strategic research activities in the field of tropical medicine. In spite of existing WHO programmes, there are still many gaps in fundamental research, particularly in biochemistry, genetics, immunology and pharmacy.

It should also be mentioned that illnesses such as tuberculosis, leprosy, infectious disorders of the digestive system, viral hepatitis, the health of mothers and children and nutrition are primarily problems of preventive health care and environment hygiene rather than the subjects of over-sophisticated isothermal laboratory research. What the developing countries chiefly need is clean water, proper environmental hygiene facilities, supplies of basic medicines such as antimalarials, antibiotics, vaccines etc. and - above all - people who can put the many research findings into practice.

10. As 80% of the world's population has no contact with Western medicine, and given the wide variety of medical systems in the world, the Commission should try to ensure that traditional medical structures in the developing countries are taken into account in the development of indigenous scientific and technological research facilities for health in these countries. Accordingly, the primary objective of all scientific activities should initially be the study of traditional medical systems in order to develop an approach based on existing structures. This means, for the health sector, that particular regard should be paid to the importance of health services tailored to the given situation.

With respect to the remarks in Section II B, it should be noted that diseases are not so much curbed by improving dietary habits or environmental hygiene; it is more correct to say that improving both dietary habits and environmental hygiene has a positive effect in reducing the incidence of disease. This requires coordination between the system of public health and agricultural policy.

11. The diet and health situation in the developing countries can only be improved if training is properly taken into account as an integral part of the planned research programme. Initial, further and advanced training in the developing countries therefore has to be given as much attention as the content of research itself. Accordingly, the existing lack of suitable training or further training facilities in the developing countries should be remedied as soon as possible. Of particular importance, as the Commission also notes, is the training and further training of research workers, training and refresher courses for technicians, the provision of scientific and technological information and North-South or South-South exchanges of research workers both between north and south and between south and south.

Training must be tailored above all to the target groups in the developing countries if research teams are to be set up there to carry out research geared towards real needs. This presupposes development strategies characterized by a forward-looking policy based on local requirements.

Also important are research contracts, complementary cooperation programmes, the promotion of links between institutes and sponsorship arrangements, where similar structures and tasks are involved. These could include the exchange of information, research and teaching staff and students, and mutual cooperation in selected programme areas. Particularly important is the financing of travel costs and visits abroad in the context of the proposed cooperation. Furthermore, cooperation agreements with institutes in the developing countries have the additional advantage of allowing experts from both sides to be available for a short time to provide advice without having to break off their research or teaching activities in their home countries for any great length of time.

- 12. The emigration of qualified scientists for economic reasons poses a serious problem for research in the developing countries. As a result, in a number of countries involved in multilateral or bilateral projects, researchers are now offered special financial inducements or more attractive working conditions to keep them in research. The Commission's planned research programme should provide for similar arrangements to encourage the return of highly qualified personnel carrying out research abroad for financial reasons.
- 13. Certain parts of the proposed programme are definitely to be welcomed. The proposal as a whole, however, is too generally conceived and ought to focus on specific research areas, such as those mentioned earlier. Both its content and the regions it applies to must therefore be further specified. Does the programme apply to all developing countries or is it to concentrate on one continent, e.g. Africa? Or is it to cover the poorest developing countries, which do not have the resources to develop research facilities? In any event, the research projects have to be designed for regions or particular groups of countries on account of the high costs involved.

Developing research activities in the developing countries is useful where research is planned as project-related research, closely linked to the implementation of projects. Also important is the selective promotion of interdisciplinary research and the strengthening of the public relations activities of the research institutes in the developing countries. The topics mentioned are all important, but the multiplicity of priorities fixed requires a definition of overall aims, the establishment of a hierarchy of objectives and the evaluation of concrete research subjects. The carrying out of research work must also be closely coupled with the preparation and implementation of development strategies and programmes.

14. The Commission's proposal does not explain what sectors are already covered by multilateral and bilateral research arrangements, e.g. under the auspices of the CGIAR (Consultive Group of International Agricultural Research), the FAO and the WHO. The aims of the international agricultural research institutes in the CGIAR are primarily oriented towards animal and vegetable food production and are concerned mainly with applied research and only to a very limited extent with fundamental research. As, however, fundamental research in agriculture is essential to improve the food situation, and since the developing countries do not have the financial resources to develop such research, the European Community should give priority to promoting this type of research in the developing countries.

To avoid duplication of work and to distribute work more effectively, the Commission should specify where gaps are to be found in existing research programmes and which of these should be filled by the European Community. International coordination of research projects does not function satisfactorily. For example, in the medicine sector there is no central body to coordinate the research plans of the tropical institutes in the various European countries. Research projects and experiments are carried out in numerous places, but with hardly any coordination. The research programme is therefore not practicable unless the Community's research projects are synchronized with other organizations. Ongoing cooperation projects and existing research networks and institutes have to be brought

in to create a concentrated and concerted approach. Where research results are already available and simply need to be disseminated, new research efforts are unnecessary. What is therefore required is precise coordination with and demarcation from existing Community programmes, bilateral measures by the Member States and international programmes.

15. The financial impact of the first phase of the programme, including staffing, administrative and operating costs, is calculated by the Commission at 60 m ECU, which is to come from the Community budget. The planned research programme for the developing countries will hence require 20 m ECU more than the programme of research and development in the field of science and technology for development 1982 - 1985, which provides for research in both the industrial nations and the developing countries. The proposed commitment and payment appropriations are broken down in a timetable covering the period 1984 - 1987. This can only be regarded as a guide, however, as the individual details will depend on requirements determined in the developing countries themselves.

The Commission proposes to allocate two-thirds of the appropriations (40 m ECU) to the agriculture/food sector and one-third (20 m ECU) to the health sector. This split is also regarded as no more than indicative at this stage. The Committee on Development and Cooperation agrees with to the earmarking of the major part of the total for the agriculture/food sector, because Parliament has for years been calling for special measures in this sector. If research is concentrated on selected areas and projects with a multiplier effect, a lot can be achieved with the proposed resources. The accuracy of the estimated staff and administrative costs is a question for the Committee on Budgets.

16. The Committee on Development and Cooperation is extremely interested in the way the programme is to be implemented, since at the end of the day the implementation arrangements determine the value of the programme. Highly detailed rules are required for implementation in order to achieve the programme objectives efficiently and, above all, to meet the actual needs of the developing countries.

Article 3 of the proposal for a Council decision states: 'The Commission shall carry out the programme. It shall be assisted in its task by an advisory committee, established by Commission Decision and made up of experts from the Member States and the developing countries'.

The Committee on Development and Cooperation calls for the Advisory

Committee set up by Commission Decision to be made up largely of those experts from the Member States and the developing countries who are already on the two advisory committees for the Programme of research and development in the field of science and technology for development. This would avoid duplication of work, distribute work more effectively, improve coordination and, above all, ensure closer interworking of the two programmes.

The committee thinks it entirely logical that experts from both the Member States and the developing countries should participate in the implementation of the programme.

It would like an evaluation of the programme as soon as the first concrete results are available. As the 40 m ECU research programme in the field of science and technology for development came into effect at the start of 1983, a first interim report should be submitted as soon as possible to provide initial indications as to the progress of this project, which could be useful for the new research programme.

Furthermore, steps should be taken to ensure that officials from both DG XII and DG VIII are involved in concluding contracts and implementing the programme. Overlapping between these two Commission DGs should be avoided at all costs. In addition both DGs must examine whether existing Community facilities can be used to implement the research programme.

In view of the specific nature of the programme, both DGs should draw up precise rules for the transfer of research results acquired under this research programme to the developing countries, in particular those that are not only in urgent need of them but able to use them as well.

OPINION

(Rule 101 of the Rules of Procedure)
of the Committee on Energy, Research and Technology

Draftman: Mr J.H. VANDEMEULEBROUCKE

At its meeting of 30 September 1983, the Committee on Energy, Research and Technology appointed Mr VANDEMEULEBROUCKE draftsman of an opinion for the Committee on Development and Cooperation.

The committee considered the draft opinion at its meeting of 2 November 1983 and adopted it by 10 votes to 2 with 3 abstentions.

The following took part in the vote: Mrs Walz, chairman; Mr Seligman, vice-chairman; Mr Beazley (deputizing for Sir Peter Vanneck), Mr Karl Fuchs, Mr Linkohr, Mrs Lizin, Mr Normanton, Mr Petronio, Mr Purvis, Mr Sassano, Mr Sälzer, Mrs Viehoff (deputizing for Mr Schmid) and Mrs Veronesi.

The opinion was forwarded on 4 November 1983.

1. Proposals for promoting research and setting up the relevant instruments for the purpose usually come within this committee's sphere of competence. It is, however, the <u>developing countries</u>' indigenous research capacities (and, partly, the establishment thereof) which are under consideration, so an assessment of the proposed programme must be based on a thorough knowledge of the circumstances and requirements of such countries. The committee is therefore able to confine its opinion to aspects of the proposal relating to research policy and energy.

Research policy aspects

- 2. It is encouraging that the adoption of this very necessary programme will be a step in an area where, so to speak, one is striking at the root of the evil. No matter what stage a country has reached, development is inconceivable without <u>research</u>, and inconceivable and unnecessarily slow without <u>scientific</u> and <u>technological research</u>.
- 3. It is gratifying to see that the stipulated programme is to be drawn up on the basis of the developing countries' own needs and circumstances to a greater degree than has hitherto been the case. This gives rise to the hope that only relevant and <u>practicable</u> techniques will be developed (and time-consuming and expensive 'adaptations' of existing research techniques avoided).
- 4. It must be pointed out, on the other hand, that many existing techniques can be used in the developing countries, making it possible to by-pass certain 'stages in development'. Steps must therefore be taken to ensure that the field studies also included in the programme are carried out in such a way that work duplication, which is a familiar phenomenon in, for example, the Community, is not repeated in this case.
- 5. Experts must therefore be appointed to the <u>advisory committee</u> referred to in the proposal for a decision of such a kind as to ensure that this double objective, (i) development and (ii) the use of existing research, is catered for. The experts appointed from the European side (possibly also from the developing countries' side) will probably already be sitting on other advisory committees operating in related areas of activity carried on by the Community and/or regional/international organizations. Some thought must consequently be given to the question whether a number of tasks could not be taken on at the same time. This, apart from the savings produced, will also ensure the necessary exchange of information.

Energy-related aspects

- 6. The committee notes that the first tranche of finance will be directed mainly at the agricultural and health sectors, while energy will have priority in the next.
- 7. If this type of 'share-out' or prioritization is based on field studies and has been judged to be the most expedient, it must be taken into consideration.

 Nevertheless, the committee feels that the share-out fails to take advantage of a clear-cut possibility and opportunity of developing research capacities in the agricultural and research fields simultaneously.
- 8. It is correct to say that a form of technology must be developed which will enable the developing countries, as far as possible, to become self-supporting, but resources could be made available if the countries could, at the same time,
 - (a) reduce their energy imports, which are a very heavy burden on the balance of payments, and
 - (b) attain a higher level of economic development through indigenous production and employment.
- 9. Growing crops for biomass production for energy purposes (this would benefit both agriculture and forestry) would serve both the above objectives and at the same time
 - (c) conserve forest areas.
- 10. As an illustration of this , if the present rate of timber consumption continues, there will be no forests in the continent of Africa within 50 years or less.

 The only way to maintain the present forest stock is to quintuple the annual rate of planting. (Tropical Africa now possesses only 35% of its original forest area.)

An indication of the situation from the employment point of view is the fact that in East Africa it is not uncommon to travel up to 100 km to collect wood. In Tanzania a family will spend between 200 and 250 man-days per annum collecting wood. What is more, in agricultural areas 90% of all firewood is used for cooking purposes (utilizing only 10% of the energy content) and heating.

Palz, Cartier edd. 'Energy from Biomass', Commission of the European Communities, 1980

- 11. The consequences of forest clearance are disastrous. There is consequently all the more reason to grow biomass products, which have the added advantage for developing countries that for climatic reasons they can often be grown in abundance, and in areas of the country where they would not greatly alter the socio-economic and cultural environment.
- 12. Certain types of plants or energy crops grow best, and most profitably, in countries with hot climates. Foremost among these are a number of oleaginous plants (including sunflowers, groundnuts, maize, soya beans and olives).

Vegetable oil can be substituted for or mixed with diesel oil. It can be extracted by simple pressure and used directly in motors (technical problems can be overcome). The energy content of vegetable oil is only 10% less than that of conventional diesel oil, and it is only 4% less efficient as a fuel. Several of its by-products can be used as protein-rich animal fodder.

Applying Community research

- 13. The Community already possesses a store of technological knowledge in the biomass area sufficiently large for parts of it to be put into practice. Where projects are still at the demonstration or pilot stage, a number of them could profitably be handed over to the developing countries, and could thus also serve as training courses for the developing countries' own experts. The committee is convinced that this would not only be moving along 'the direct path' to development, but it would also be concentrating efforts in an area which, in view of the circumstances and needs of the developing countries, would be likely to benefit to an exceptional degree 1.
- 14. The committee would conclude by urging that as much use as possible be made of the research and knowledge the Community possesses in biomolecular fields, i.e. the use of genetics. It urges close coordination between the two programmes.

Conclusion

15. On the above grounds, the committee responsible is requested to state in its motion for a resolution that, in carrying out the programme:

¹ See in general the SELIGMAN report on the use of biomass, Doc. 1-460/82

- steps should be taken to ensure that this programme is as closely coordinated as possible - also at the administrative level - with other relevant programmes in which the experience gleaned can contribute to widening the research capacities of the developing countries;
- consideration should already be given at the stage of implementing the aid programme for the <u>agricultural sector</u> to the possibility of providing for projects geared at the same time to finding partial solutions to the developing countries' energy problem.

OPINION

of the Committee on the Environment, Public Health and Consumer Protection

Draftsman: Mr R. RYAN

On 22 September 1983, the Committee on the Environment, Public Health and Consumer Protection appointed Mr RYAN draftsman.

On 2 November 1983 the Committee examined the draft opinion and adopted its conclusions unanimously.

The following took part in the vote: Mr Collins, chairman; Mr Ryan, vice-chairman and draftsman; Mrs Weber, vice-chairman, Mr Alber, Mr Bombard, Mrs Dury (deputizing for Mrs Pantazi), Mr Ghergo, Mrs van Hemeldonck, Mrs Krouwel-Vlam, Mrs Lentz-Cornette, Mr Muntingh, Mr Protopapadakis (deputizing for Mr Del Duca), Mr Provan (deputizing for Mr Forth), Mrs Schleicher, Mrs Scrivener, Mrs Seibel-Emmerling, Dr Sherlock, Mrs Spaak, Mrs Squarcialupi and Sir Peter Vanneck (deputizing for Miss Hooper).

The opinion was forwarded on 3 November 1983.

- 1. The objective of the proposal is to step up or, in some cases, establish indigenous research capacities in the developing countries. The proposed programme is complementary to a programme already adopted by Council which aimed at enabling scientific institutions in the Member States or in the developing countries to carry out research in the interests of the developing countries.
- 2. There are two phases to the programme: Phase 1 covers two areas:
- (a) agriculture, fisheries and food
- (b) health.

Phase 2 covers four areas:

- (a) population
- (b) environment
- (c) energy
- (d) underground resources.
- 3. The Commission has paid particular attention to the need to take account of the cultural identity of the countries concerned and to the dangers involved in attempting to find "European solutions" to problems existing in a very difficult social and economic context. This point cannot be emphasised too strongly. Problems such as the deterioration of the environment through inappropriate farming methods are often complicated by factors which either do not exist or exist on a limited scale in Europe.
- 4. It is proposed under phase 1 of the programme to study traditional pasturage methods with a view to improving stock farming methods. Over-grazing has proved in the developing countries to be one of the major factors in the destruction of marginal land, resulting in desert creep.

Desert creep has repercussions on the economic and social front (less land available for exploitation, less food to feed populations constantly threatened by famine) quite apart from the more obvious environmental considerations.

- The proposals relating to the development of forestry resources involve the drawing up of an inventory of species, some of which may have been ignored or underestimated, and selecting suitable ones which may provide more products for man's use. These are measures which in this Committee's opinion, should be introduced gradually and coupled with training or education programmes in order to ensure that the measures are fully accepted and understood by the population.
- 6. Research aimed at the development of fish production is also being envisaged. This is a welcome step although progress may well prove to be slow due to barriers of traditional customs, dietary habits, etc. As already pointed out in the previous paragraph, such measures should be complemented by education schemes.
- 7. Processing, storage and preservation of foodstuffs will also be examined under the present programme. Here, it must be stressed that particular attention should be paid to food quality and suitability.
- 8. In the research to be carried out in the public health sector the Commission has recognised that links exist between sociology and economics and allied sciences such as agriculture, veterinary science and ecology. The underlining principle is again that solutions must be tailor-made to suit the actual situation prevailing in the country concerned. The introduction

of highly sophisticated medical technology may not be indicated in countries lacking the most basic back-up services. The objective here must be to improve the existing health services as a first step.

CONCLUSIONS

- 9. One of the most serious problems facing third world governments at the present time is the provision of food for their rapidly expanding populations. The committee, therefore, welcomes the research aimed at preserving and developing existing and traditional food supplies as well as that intended to provide alternatives.
- 10. The committee underlines the importance of adapting measures to local and traditional conditions and of introducing where necessary complementary education and training schemes.
- 11. The committee also welcomes the Commission's multi-disciplinary approach to research in the public health sector but believes that this should be extended to other areas as well.
- 12. The committee recommends that in addition to highly sophisticated medical technology, the existing services and traditional health care services should be extended.