

C. S. A.

Scientific Council for Africa

**THIRTEENTH MEETING OF THE
SCIENTIFIC COUNCIL**

MUGUGA

1962

C.C.T.A.

COMMISSION DE COOPERATION TECHNIQUE EN AFRIQUE AU SUD DU SAHARA

Créée en janvier 1950, la Commission de Coopération Technique en Afrique au Sud du Sahara (CCTA) a fait l'objet d'une convention intergouvernementale signée à Londres le 18 janvier 1954. Elle se compose, à l'heure actuelle, des Gouvernements suivants : Afrique du Sud, Belgique, Cameroun, Congo (Brazzaville), Congo (Léopoldville), Côte d'Ivoire, Dahomey, Fédération de la Rhodésie et du Nyassaland, France, Gabon, Ghana, Guinée, Haute-Volta, Libéria, Madagascar, Mali, Mauritanie, Niger, Nigéria, Portugal, République Centrafricaine, Royaume-Uni, Sénégal, Sierra Leone, Somalie, Tanganyika, Tchad.

OBJECTIF

Assurer la coopération technique entre les territoires dont les Gouvernements Membres sont responsables en Afrique au Sud du Sahara.

20°

ATTRIBUTIONS

- 1) Traiter de tout sujet concernant la coopération technique entre les Gouvernements Membres et leurs territoires dans le cadre de la compétence territoriale de la CCTA.
- 2) Recommander aux Gouvernements Membres toutes mesures tendant à la mise en œuvre de cette coopération.
- 3) Convoquer les conférences techniques que les Gouvernements Membres ont décidé de tenir.
- 4) Contrôler du point de vue général et du point de vue financier l'activité des organismes placés sous son égide et présenter aux Gouvernements Membres toutes recommandations y afférentes.
- 5) Présenter des recommandations aux Gouvernements Membres en vue de la création de nouveaux organismes ou la révision des dispositions existantes pour la coopération technique, dans le cadre de la compétence territoriale de la CCTA.
- 6) Présenter des recommandations aux Gouvernements Membres en vue de formuler des demandes conjointes d'assistance technique aux Organisations internationales.
- 7) Présenter des avis sur toutes questions concernant la coopération technique que lui soumettront les Gouvernements Membres.
- 8) Administrer le Fonds Interafricain de la Recherche et la Fondation pour l'Assistance Mutuelle en Afrique au Sud du Sahara.

BUDGET

Alimenté par les contributions des Gouvernements Membres.

ORGANISATION

- 1) La CCTA se réunit au moins une fois chaque année. Ses recommandations et conclusions sont portées à la connaissance des Gouvernements Membres en vue de leur adoption à l'unanimité ainsi que de leur mise en œuvre dans les territoires intéressés.
- 2) Le Conseil Scientifique pour l'Afrique au Sud du Sahara (CSA), conseiller scientifique de la CCTA, a été créé en novembre 1950, comme suite à la Conférence Scientifique de Johannesburg (1949), en vue de favoriser l'application de la science à la solution des problèmes africains. Il est composé de personnalités éminentes, choisies de telle sorte que les principales disciplines scientifiques importantes au stade actuel du développement de l'Afrique soient représentées. En tant que membres du Conseil ces personnalités n'agissent pas sur instructions de leurs Gouvernements respectifs mais sont responsables individuellement devant le Conseil.
- 3) Des Bureaux et Comités techniques traitent chacun un aspect particulier de la coopération régionale et interterritoriale en Afrique au Sud du Sahara.
- 4) Le Secrétariat de la CCTA et du CSA comprend deux sièges : l'un à Lagos, l'autre à Nairobi. Il est dirigé par un Secrétaire Général assisté de deux Secrétaires Généraux Adjointes et, à Nairobi, d'un Secrétaire Scientifique et d'un Secrétaire Scientifique Adjoint. Le Secrétaire de la FAMA est également adjoint au Secrétaire Général.

PUBLICATIONS

Des brochures traitant de problèmes scientifiques et techniques, dont les données sont habituellement rassemblées en Afrique par le CSA, sont publiées à Londres. Toute demande d'information devra être adressée au Bureau des Publications, Watergate House, York Buildings, Londres W.C. 2.

COMMISSION FOR TECHNICAL CO-OPERATION IN AFRICA SOUTH OF THE SAHARA

Established in January 1950, the Commission for Technical Co-operation in Africa South of the Sahara (CCTA) was the subject of an Intergovernmental Agreement signed in London on 18 January 1954. It consists now of the following Governments: Belgium, Cameroon, Central-African Republic, Chad, Congo (Brazzaville), Congo (Leopoldville), Dahomey, Federation of Rhodesia and Nyasaland, France, Gabon, Ghana, Guinea, Ivory Coast, Liberia, Madagascar, Mali, Mauritania, Niger, Nigeria, Portugal, Senegal, Sierra Leone, Somalia, South Africa, Tanganyika, United Kingdom, Upper Volta.

OBJECT

To ensure technical co-operation between territories for which Member Governments are responsible in Africa South of the Sahara.

FUNCTIONS

- (1) To concern itself with all matters affecting technical co-operation between the Member Governments and their territories within the territorial scope of CCTA.
- (2) To recommend to Member Governments measures for achieving such co-operation.
- (3) To convene technical conferences as agreed by Member Governments.
- (4) To supervise, from the financial and general points of view, the work of the organisations placed under its ægis and make recommendations thereon to the Member Governments.
- (5) To make recommendations to the Member Governments for the setting up of new organisations or the revision of existing arrangements for securing technical co-operation within the territorial scope of CCTA.
- (6) To make recommendations to the Member Governments with a view to the formulation of joint requests for technical assistance from international organisations.
- (7) To advise Member Governments on any other subject in the field of technical co-operation which the Member Governments may bring to its notice.
- (8) To administer the Inter-African Research Fund and the Foundation for Mutual Assistance in Africa South of the Sahara.

FINANCE

Contributions from Member Governments.

ORGANISATION

- (1) CCTA meets at least once a year. Its recommendations and conclusions are submitted to Member Governments for unanimous approval and for implementation in the territories concerned.
- (2) The Scientific Council for Africa South of the Sahara (CSA) Scientific Adviser to CCTA, was established in November 1950 following the Johannesburg Scientific Conference (1949), to further the application of science to the solution of African problems. Its members are eminent scientists chosen in such a manner that the main scientific disciplines important at the present stage of the development of Africa shall be represented. As members of the Council they do not receive instructions from Governments but are responsible individually to the Council.
- (3) Technical Bureaux and Committees deal with specific aspects of regional and inter-territorial co-operation in Africa South of the Sahara.
- (4) The CCTA CSA Secretariat has two offices, one in Lagos and one in Nairobi. The Secretariat has at its head a Secretary-General, who is aided in his work by two Assistant Secretaries-General and, at Nairobi, by a Scientific Secretary and an Assistant Scientific Secretary. The Secretary-General is also assisted by the Secretary of FAMA.

PUBLICATIONS

Publications dealing with scientific and technical problems, the data for which are usually collected in Africa by CSA, are issued in London. Enquiries should be addressed to the Publications Bureau, Watergate House, York Buildings, London, W.C. 2.

PUBLICATION NO. 83

CSA

Scientific Council for Africa

**THIRTEENTH MEETING OF THE
SCIENTIFIC COUNCIL**

MUGUGA

1962

Published under the sponsorship of the Commission for Technical Co-operation in Africa.

CCTA

All communications should be addressed to

Secretariat CCTA/CSA

PMB 2359

P.O. Box 30234

Lagos

Nairobi

CCTA/CSA Publications Bureau

Watergate House, York Buildings, London W.C. 2

CONTENTS

	PAGE
I. REPORT OF THE SECRETARY-GENERAL	3
II. THIRTEENTH MEETING OF THE SCIENTIFIC COUNCIL : . . .	149
LIST OF PARTICIPANTS	151
RECOMMENDATIONS	153

REPORT OF THE SECRETARY-GENERAL TO THE THIRTEENTH MEETING OF THE SCIENTIFIC COUNCIL

INDEX

	PAGE
INTRODUCTION	7
PART ONE: GENERAL QUESTIONS	
1. THE COUNCIL	9
— The Council and the Commission	9
— Activities of the Council	14
2. THE COMMISSION	19
— The Commission after the Abidjan Meetings	19
— FAMA	21
— Some general activities	23
— Activities of the Commission	26
— External relations	28
3. TRAINING OF MIDDLE-GRADE PERSONNEL	33
— Middle-grade training in third countries in Africa	34
— New regional training centres	38
— Other activities relating to middle-grade training	46
PART TWO: NATURAL RESOURCES	
1. CONSERVATION OF NATURE	47
— Arusha Conference	48
— Future international action	49
2. CLIMATOLOGY, HYDROLOGY, GEOLOGY	51
— Climatology and meteorology	51
— Co-operation within a common river basin	51
— Other activities in the field of hydrology	53
— Geology and geophysics	53
3. PEDOLOGY, SOIL CONSERVATION AND UTILISATION, PHYTOGEOGRAPHY	54
— Pedology	54
— Inter-African Soils Bureau	56
— Regional committees and training courses	57
— BIS Joint Projects	58
— Phytogeography	60

	PAGE
4. PHYTOTECHNICS	61
— Savannah zone cereals	61
— Other crops	61
— Beekeeping	61
— Mechanisation of agriculture	62
5. PROTECTION OF AGRICULTURAL PRODUCTION	63
— Inter-African Phytosanitary Commission	63
— Weed control	64
— Aquatic plant pests (Joint Project 14)	66
— Stored food products	66
— Quelea	67
6. INLAND FISHERIES AND HYDROBIOLOGY	68
— Future meetings	68
— Co-ordinating committees for the major lakes	69
7. OCEANOGRAPHY AND SEA FISHERIES	70
— Inter-African co-operation	70
— Specialist meetings	72
— Tunny fishing in the tropical Atlantic Ocean	72
— Guinean Year (Joint Project 19)	74
8. ANIMAL RESOURCES	77
— Inter-African Bureau for Animal Health	77
— Specialist meeting on specialisation of veterinarians in tropical medicine	78
— Meetings and training courses on infertility of domestic animals and artificial insemination	80
— Other specialist meetings	81
— Eradication of rinderpest in the Chad/Niger area (Joint Project 15)	81
— Vaccine against bovine pleuropneumonia (Joint Project 16)	83
— Other regional projects on control of animal diseases	84

PART THREE: SOCIAL, ECONOMIC AND TECHNICAL

1. PUBLIC HEALTH	87
— BPIIT	87
— International scientific committee for trypanosomiasis research (ISCTR)	88
— Campaign against trypanosomiasis and its vectors	89
— Other meetings	91
— Mapping of vectors of diseases (Joint Project 8)	93
— Nutrition	94

	PAGE
2. SOCIAL SCIENCES	98
— Linguistics	98
— Documentation	98
— History of the peoples of Africa	100
— Migrations	101
— Urbanisation	102
— Radio-carbon dating centre	104
3. EDUCATION	104
— Psychology and education	105
— Teaching of a second European language	108
4. RURAL WELFARE	111
— Community development	112
— Génie rural	115
— Agricultural extension	116
— Rural trades	118
5. ECONOMICS AND STATISTICS	119
— Completed projects	119
— Methodology of family budget surveys (Joint Project 9)	120
— Case studies on economic development (Joint Project 12)	121
6. LABOUR	123
— ILI	124
— Meeting of specialist officers in the field of technical training	125
— Productivity	125
— Unemployed youth	127
— Specialist meeting on safety, health and hygiene at work	128
7. TECHNOLOGY	129
— Housing	129
— Specialist meeting on the construction of school buildings	132
— Symposium on hygiene and housing	133
— Roads	134
— Public works	135
— Specialist meeting on the transmission of electric power	137
— Future technological meetings	137
— Radio-isotopes	138
8. CARTOGRAPHY	138
APPENDIX I Meetings held under CCTA/CSA/FAMA auspices from June 1961 to June 1962	141
APPENDIX II Meetings to be held under CCTA/CSA/FAMA auspices in the second half of 1962, in 1963 and 1964	143
APPENDIX III List of some meetings of other organisations at which CCTA was represented, June 1961 to June 1962	145
APPENDIX IV Publications	147
APPENDIX V List of joint projects	148

INTRODUCTION

The Secretary-General is retiring on the eve of the Thirteenth Meeting of the Council, after spending five years in the service of the Council and of the Commission. He wishes to express to Members of the Council his warmest thanks for the help they have given him and for the understanding which Members of the Council have shown at all times. He would also like, for the last time, to submit his Annual Report to the Scientific Council.

"The period of rapid and sometimes dramatic change through which Africa is passing", referred to by the Council two years ago, is now coming to its close and it is possible to examine the new situation and make provision for the necessary adjustments to structures and programmes. For this reason, the Muguga meetings take on special importance.

The Commission has now come to the end of a transitional period, and although legally the texts still have to be discussed and approved, it is already possible to have a clear picture of the role which the independent African Governments intend to assign to this organ for technical co-operation, and consequently to assess the requirements of this organ from a scientific point of view.

On the other hand, action by countries and organisations outside Africa has not yet taken on definite shape. A gradual withdrawal by European countries from certain forms of participation is to be expected. The manifold and often disparate projects undertaken by the large international organisations have not yet made it possible to discern the basic principle of their future policy.

At its Thirteenth Meeting, the Council should devote considerable time to a general discussion on methods and programmes, but even more on fundamental principles. Members of the Council should, however, bear in mind the foregoing remarks, knowing that the outline of the future cannot at this stage be clearly defined, nor indeed sometimes perceived.

As is customary, the present report will begin with a first part devoted to general questions, dealing with problems concerning the Council and the Commission as a whole. A separate chapter within this first part contains a report on the all-important action taken by the Seventeenth Session at Abidjan, setting up a fund for middle-grade training. The two following parts will be technical, devoted to natural resources and economic and social problems respectively. Lastly, there are five appendices for easy reference by Members of the Council to the following subjects: meetings organised by the Council and the Commission during the past year; forthcoming meetings in the next two years; meetings at which the Commission and the Council were represented during the past year; list of publications of the Commission, and, finally, the joint projects under the aegis of CCTA/CSA.

PART ONE

GENERAL QUESTIONS

CHAPTER 1

THE COUNCIL

The Council and the Commission

A detailed account of the decisions taken during the Seventeenth Session of the Commission will be found in Chapter 2 of Part I. The Secretary-General considers that these decisions could usefully be examined in relation to the Scientific Council, which may find them of assistance. Chapter 1 will state the facts and make some suggestions.

(a) Independence of the Council

Before embarking on the subject of the Commission, it should be pointed out that, since the Johannesburg Conference in 1949, the Council has not ceased to recall that it is entirely independent of Governments. "It is closely linked with CCTA, but can work in liaison with other organisations and other countries. It is entirely independent of Governments, both as regards its members individually and the Council as a whole" (Recommendation II (a) of the Twelfth Meeting of the Council). This independence has manifested itself more markedly during the last meetings. Thus, for example, the Council now has the sole right to decide on the nomination of its Members, Associate Members and Corresponding Members. These nominations are notified to the Commission, but they are no longer, as in the past, subject to the previous consent of the Commission. Likewise, the Council undertakes scientific and technical activities on its own authority. Thus, Joint Project No. 12 (see Chapter 5, Part II) has been under the exclusive control of the Council.

The independence of the Council from the Commission is also shown with regard to external relations. The Council has direct relations with countries such as the United States and Israel. It is able and willing to develop these relations and extend them to international organisations.

The CCTA Secretariat would like to see the Council enter into close relations with OAMCE. The Scientific Secretary hopes that it will be associated with UNESCO. He has discussed this with a mission of two members sent by the Institution to Africa several months ago (one of whom was Dr. Worthington, first Secretary of the Council). The Secretary-General for his part is more sceptical, but hopes that Dr. Verdier may be proved right.

Each year since its Eleventh Meeting, the Council has stressed the importance of establishing such relations. On the one hand, these countries and organisations carry out projects in Africa and it is proper to assist them and adapt these projects to African conditions. On the other hand, the Council thereby avoids giving the wholly false impression that it is dependent of the Commission.

How far should one go in demonstrating the Council's independence of the Commission? There are two points of view.

The Scientific Secretary would like the Council to loosen its ties with the Commission step by step, so as to be certain of avoiding the risk that the political considerations which are evident behind the Commission's daily life, despite all efforts, might spread to the Council.

The Secretary-General is not of this opinion. He believes that the present relations between the Commission and the Council are satisfactory and that they give the best possible safeguards to the Council. He does not deny that on some occasions the Commission becomes involved in discussions or decisions which reflect the political tension within the African continent; he considers that every effort should be made to restrict such discussions and take from them their virulent character; but he also believes it would be tantamount to blindness were one to ignore the fundamental political relations which exist inside the continent and between Africa and other parts of the world. We do not live in a world of theory, but in a living and human environment; knowledge and techniques are but means for analysis and organisation, they are of value only if men and societies are prepared to make use of them. By a noble effort of will power and imagination, it is possible to cut oneself off from reality; but does this mean that one is performing useful work? To revert to the subject, the Secretary-General records that for more than five years in which he has worked for the Commission, the latter has not once interfered in the life of the Council, and has as far as is known to the CCTA Secretariat, in no way brought about a change in the line taken by the Council. It is true that there have from time to time been endeavours in this direction, but it must be stated, paradoxically, that these endeavours have come from the founder members of the Commission and not from the Governments which have become members since 1957. From all points of view, and without much difficulty, it has been possible for the Council freely to preserve its independence, select its Members, decide on its activities. The Secretary-General is convinced that it would be impossible at the present time to find an organisation or country willing to finance the requirements of the Council without asking for infinitely

more weighty safeguards and rights of control than the far less onerous ones agreed upon with the Commission. The Secretary-General would also like to warn Members of the Council on two points. First of all, it would be inappropriate to exchange one political risk for another. Working with the Commission in a purely African context, the Council sometimes hears the muffled echo of clamour within the precincts of the Commission, but at least this comes from within Africa. Would it be expedient in order to avoid it, to associate with organisations where the uproar is still louder and extends not only to African disputes but to world conflicts? Secondly, the Council considers rightly that the Commission has only reached maturity thanks to the opinions and recommendations of the Council; it feels that the scientific work of the Commission has been accomplished by its associate, the Scientific Council, and it is surprised that its adopted child is not more submissive to the advice of its elders. The Council should then assess the consequences, for the work of inter-African co-operation to which the Commission has subscribed, of a loosening of ties which exist between the two associates and the loss of invaluable advice coming from men of learning.

In short, the Secretary-General considers that the policy followed since the Eleventh Meeting of the Council must be strengthened each year; the Council should, therefore, seek systematically to extend the field of its relations. The Scientific Secretary would wish that this evolution might effectively lead to the loosening of the ties between CCTA and CSA, indeed, in case of unforeseen circumstances, to a severance of these links. The Secretary-General, on the other hand, feels that the agreement at present in force between the two associates is satisfactory and should be maintained. He considers that the Council should be intransigent regarding the principle of its independence and is convinced that it is possible to prevail upon the Commission to keep to its present reserved attitude. Lastly, the Secretary-General feels that should the future political evolution of Africa make such a policy impracticable, then this would spring from such a serious fundamental evolution in the continent that it would, in any case, jeopardise the whole work of the Council whatever the structures and relations with the Commission might be.

(b) Possible effects of the Abidjan decisions

The decisions taken by the Commission at Abidjan in February last, and which are of interest to the Council are as follows:

On the one hand, the Commission decided to delete in the legal texts setting out its terms, all reference to "South of the Sahara". The Commission's members felt that such a reference seemed to betray a subjective discrimination between countries which had been brought nearer to each other in the evolution of the past few years. At the same time, however, it added that such a decision of principle would have no practical effects in the near future, and it left to be discussed later the examination of the administrative and financial measures which would be taken were the

activities of the Commission in effect to be extended to the north of the Sahara. One should note this twofold observation. The decision to extend the geographical area to the north of the Sahara springs from a legal standpoint and political inspiration. Such an extension could only effectively take place if this were the wish of several Mediterranean countries, and in this case, it will be necessary to study plans for a new organisation to provide for the needs of such countries.

Should the Council follow this example? Legally, it is not bound to do so. Psychologically, in order to give expression to the desire on the part of Members of the Council to uphold the efforts of the Commission, and in order to avoid any element of doubt, the Scientific Council can also envisage deleting the expression "South of the Sahara" from its title and statutes. In this case it can, like the Commission, refrain from following up its decision in the field. It can also go further than the Commission and study ways of extending its scope effectively to the north. At Muguga, there will be supporters for these three lines of thought. The Scientific Secretary considers that if one suppresses the reference "South of the Sahara" one should draw the inference and envisage the nomination of Members capable of covering the zones and disciplines in Mediterranean Africa. The Secretary-General, for his part, willingly falls in with the second solution; he proposes that the Scientific Council for Africa should, for the time being, confine its work to the intertropical area, taking this in its wide sense and covering the semi-arid zones.

The second decision taken at Abidjan, and which is of interest to the Council, concerns several Founder Members of the Commission. It is unnecessary here to speak of Belgium, France and the United Kingdom, whose status has been changed but whose co-operation is maintained in their capacity as Founder Members, which in no way affects their technical position. In contrast, the decision taken by the independent African States to oppose the participation of South Africa and Portugal within the revised Commission is worthy of note.

The Secretary-General considers that two aspects of the problem should be distinguished. The independent African States decided to expel South Africa and Portugal. This has no effect on the Council. For many years it has been the established rule of the Scientific Council that its Members and Associate Members are chosen by virtue of their personal qualifications and not by reference to their nationality. After its Ninth Meeting at Accra in 1958, the Council chose an Associate Member from a non-member country of the Commission (Dr. Tigani el Mahi from Sudan). At its Eleventh Meeting, the Council emphasised that it could choose its Members, Associate Members and Corresponding Members outside Africa, indeed outside Europe. Whether South Africa and Portugal are Members of the Commission or not, nothing prevents the Council from choosing Portuguese or South Africans as Members or Associate Members, if they think fit. The Council should remain intransigent on this fundamental principle.

The second aspect of the question is infinitely more delicate, and it should be examined even if the independent African Governments had not decided to remove South Africa and Portugal. This aspect concerns the possible travel by Portuguese or South Africans within Africa. CCTA or no CCTA, regulations were adopted in the large majority of African countries, making such travel virtually impossible. What is more, the South African Government had, on several occasions, opposed the attendance at meetings convened by the Council, of South African experts who should however participate in them as specialists invited by the Scientific Council, without thereby committing their Government in any way, be it on the technical or the financial plane. The determination of any one of them could be so firm that it may become practically impossible to choose Members or Associate Members from certain countries. Evidently, it would always be possible to appoint Corresponding Members, but this would still leave the question of full Members. There is no need to emphasise that this matter goes far beyond the scope of the Council. It affects all international organisations and the CCTA Secretariat has been informed of the concern it gives to organisations which are dependent on the United Nations, for which the problems are far more serious since in their case it is a matter of bringing about the attendance at meetings not of experts chosen for their personal qualifications, but of representatives of Governments which are the target for general ostracism. The Secretary-General felt it important to stress the two aspects of this problem. It seems to him, in fact, that this difficulty should not be confused with the problem of the relations between the Commission and the Council, since this exists in any case.

(c) Authority of the Council

The Secretary-General wishes to come back to the problem which in his view is of prime importance. The authority of the Council is the basis for its action and influence. If this authority is great, then the foregoing problems are easy to resolve. If this authority wanes, then CCTA and the other international organisations, as well as Governments within and outside Africa, will cease to respect the Council and the ensuing difficulties will rapidly be insurmountable. The independence of the Council is, therefore, bound up with its authority.

Furthermore, it can never be over-emphasised that this authority rests on the implicit respect for the principles laid down at Johannesburg in 1949. The Council must be intransigent in enforcing its rules, even if this leads to the absence of an old friend or a person for whom the Members of the Council feel gratitude and affection. It is expedient that Members should have a competence which is undisputed and generally recognised in the discipline and region they represent. This competence should be combined with general culture so that Members can have views on the problems of development as a whole. Also, these Members should be specialists on African affairs, that is to say, that they should devote the best part of their

time to Africa. Lastly, it is essential that Members can give up considerable time each year to the work of the Council and of the Commission. The ruling adopted by the Council in respect of new nominations, which stipulates a probationary period of one year, is excellent in this respect; it has already made it possible to retire people whose names have been chosen at a meeting, and who showed during the following year that they did not conform to the criteria mentioned above. However unpleasant it may seem, the Secretary-General has to ask that the same criteria be applied at each renewal of membership and that Members who do not meet them be excluded.

The competence of Associate Members should be no less great. By way of distinction, the manner of their appointment differs. An Associate Member is appointed to be responsible for a particular discipline, and his presence is, therefore, linked with the need to keep this discipline fully covered. Associate Members are accordingly more specialised and, as a general rule, younger than the Members. Usually, they are still actively engaged on research work.

Finally, the decision taken by the Council to have "Corresponding Members" (Rec. II (c) of the Twelfth Meeting of the Council) enables the Council to extend its field of action to include scientific personalities from all continents.

Activities of the Council

(a) Composition

Six Members of the Council reach the end of their three-year term after the Thirteenth Meeting of the Council:

Professor Van den Berghe, the Vice-President,
Dr. Bates,
Professor D. Forde,
Professor Leduc,
Professor Millot,
Dr. Russell.

Following the procedure laid down by the Tenth Meeting, the three new Members chosen by the Council in 1960 were elected for one year only:

Mr. Binns,
Mgr. Gillon,
Dr. A. Ly.

Moreover, Mr. Martin has resigned from the Council in pursuance of the rules stated above, for he has now left Africa for Washington, where he is devoting himself to economic studies relating to the continent of Africa.

It will be recalled that last year the Council increased its strength from sixteen to seventeen Members, while stating that in principle it maintained the number of sixteen. If this decision is confirmed, only nine Members will have to be elected as against ten vacancies. It is also possible for the Council to increase its permanent strength to seventeen and even more, up to twenty, following a decision taken several years ago.

The case of the Associate Members is different, since they are chosen by discipline. Three Associate Members reach the end of their three-year term, in the following disciplines:

Dr. Haddow (virology),
Dr. Obermüller (geology),
Dr. Vaucel (medicine, and more especially trypanosomiasis).

The Council will have to decide whether these three disciplines should continue to be represented by Associate Members, as is the opinion of the Secretary-General. It will then have to examine the expediency of appointing representatives for other disciplines. The Secretary-General for his part, after writing the report, would suggest that hydrobiology and teaching of foreign languages are insufficiently covered within the Council.

The elections will take place on 21 September, under conditions laid down by the Council several years ago (Kampala, Tenth Meeting). Members are elected by ballot from lists with preferential vote. Only Members of the Council are entitled to vote, but not the Associate Members, even though invited to the meeting. Each Member unable to attend the Thirteenth Meeting can, if he wishes, vote either by post or by proxy given to another Member of CSA, which should be sent previously to the CCTA Secretariat. It is recalled that new Members are chosen for a term of one year only, whereas re-elections take place for a three-year period.

With regard to the Associate Members, as they represent selected disciplines in accordance with the programme of CCTA/CSA, their ballot will be for one member only. The same conditions as those mentioned above also apply for the participants and the various ways of voting by post.

(b) Fourteenth Meeting

A decision will be required as to the place and date for the Council's Fourteenth Meeting. It will be remembered that the previous meetings were held as follows: Eighth Meeting at Salisbury; Ninth Meeting at Accra; Tenth Meeting at Kampala; Eleventh Meeting at Cape Town and Twelfth Meeting at Pointe-Noire. It had been suggested on previous occasions that the Council should meet at some not too distant date in a French-speaking town in West Africa. The date for this meeting should be decided without delay at Muguga, so as to enable Members of CSA to be free during the relevant period.

(c) Meetings held by the Council in 1962

Five specialist meetings were held since Members of the Council met at Pointe-Noire. They are dealt with in detail in the body of the report. The rules adopted by the Council for the organisation of its meetings were applied, in particular with regard to their preparation and chairmanship.

It should only be recalled here that Recommendation XII of the Twelfth Meeting laid down that Members of the Council who intend to propose

specialist meetings, should, as a general rule, bring to the annual meeting precise details and a suggested agenda, as well as the names and qualifications of specialists. It was also stated that the necessary funds for inviting personalities to specialist meetings could be unevenly divided between these meetings, by allotting to some meetings a total number of more than five specialists and less than five to others.

The Secretary-General also wishes to report to the Council that, within the austerity measures adopted by the Commission, it will in future be necessary to reduce the number of specialist meetings convened each year by the Council from four to three.

(d) External relations

The main points of this subject have been discussed above, under the heading general problems. It is not necessary to come back to them.

It will be noted that the recommendations adopted by the Council at its Eleventh and Twelfth Meetings were followed up effectively. CSA has already been informed of the mission to the United States in May 1961 by MM. Lambo, Martin, Monod and Van den Bergh, accompanied by the Secretary-General, the Scientific Secretary and the Inter-African Co-ordinator for Marine Fisheries. This mission produced excellent results, as will be recorded later in this report.

A similar mission will take place to Israel in September 1962, along the lines laid down by the Council at Pointe-Noire. Mr. Binns and another Member of CSA, to be appointed by Professor Monod, will take part, as well as the acting Secretary-General of the Secretary-General himself. The Council had decided at its Twelfth Meeting to appoint MM. Aubert and Binns to represent it at the "International Conference on the Influence of Science" at Rehovoth. Mr. Binns accepted this appointment; M. Aubert's reply is still awaited.

The next visit of this kind should be made to Germany and the Netherlands. The Secretary-General has made initial contacts and will report to the Council on the arrangements agreed upon.

Mention was made above of relations with UNESCO and Dr. Verdier will probably wish to come back to these at Muguga.

(e) CIAO

The International Conference of Western Africanists which was set up by IFAN in 1945, was subsequently recognised as a "Regional Advisory Council of CSA". Professor Monod, President of CSA, is its Permanent Secretary, and he will report to the Council on this point.

The Seventh Meeting of the Conference took place at Accra in 1959 and it was decided that the Eighth Meeting should be held in the Canary Islands in 1963. Its agenda is very comprehensive, as is usual for CIAO, and it will include problems stemming from geography (quaternary, seaboard, tertiary vulcanism); botany (island flora, littoral and halophilous groupings,

sea-weed); zoology (biogeographical division of sea fauna, mammals, entomological fauna) and social sciences (archeology and Canarian history, prehistory and protohistory of the Western Sahara, traditional economics).

(f) Scientific Secretary

The duties of the Scientific Secretary are well known to Members of the Council and there seems to be no need to state them again. It should only be remembered that he is both the Scientific Secretary of the Council and the Scientific Advisor to the Commission. These two functions are wholly compatible, so long as the present ties between the Council and the Commission are not loosened. If they were to be relaxed, then a serious problem would arise for the Commission, namely how to replace the man who will be responsible for scientific affairs within the CCTA Secretariat.

The Secretary-General is bound to admit that his confidence in the present Scientific Secretary has been so great that he has on many occasions asked the Scientific Secretary to act in his name and has in this way occasionally drawn him away from the purely scientific aspects of his work. In these cases Dr. Verdier showed great shrewdness and efficiency. It is true that such a method is not satisfactory. When the time comes for a new Scientific Secretary to be appointed, it should be laid down that he should not be called upon, as a general rule, to deal with administrative or semi-political tasks. In this respect, the Secretary-General and the Scientific Secretary consider that it might be expedient to bring the Scientific Secretary back to the central headquarters of the Secretariat in Lagos. Thus he would be sure not to be distracted from his scientific activities, since he would have at his disposal all the administrative facilities available in the central headquarters. His voice could be more easily heard, when current decisions are to be taken affecting the life of the Commission and the Council. He would enjoy greater autonomy, and could deal with the affairs of the Scientific Council along lines entirely different from those of the Commission. If the Council could agree, it would be as well if it were to adopt a recommendation on this subject at Muguga, while leaving with the Secretary-General the decision as to the time for bringing this recommendation into operation; it is, in fact, impossible for practical reasons to transfer the seat of the Scientific Secretary to Lagos before a new house has been built.

In such event it would be proper to give the Assistant Scientific Secretary complete autonomy within the CCTA Secretariat. Based on Nairobi, he would be special regional assistant to the Commission and to CSA. He would work alongside the Scientific Secretary until the latter has been transferred to Lagos.

The Council should, at Muguga, discuss a very delicate problem: the replacement of Dr. Verdier. After three and a half years in the service of the Council and the Commission, Dr. Verdier has to return to France, to resume his university career and devote himself to his family from whom he has been separated since July 1960. It would be untoward for the Secretary-

General to express in writing the feeling of esteem, gratitude and affection with which he is bound to the Scientific Secretary. The Council will be able to find words suitable to convey to Dr. Verdier their regret at the departure of their faithful collaborator.

The replacement of Dr. Verdier will form an important part of the discussions at Muguga. It is to be hoped that several names will be put forward to the Council by the Scientific Secretary. A decision should be taken at Muguga so as to enable Governments to confirm it when they meet in Lagos at the end of October, on the occasion of the Budgetary Committee.

Troubles never come singly. The new Assistant Scientific Secretary, Mr. Lahousse, assumed his duties in March of last year. He orientated himself very quickly and his contribution to the work of the Commission and of the Council was excellent during the course of several months. Unfortunately, personal reasons led him to ask for his resignation from CCTA/CSA to be accepted as from the beginning of 1963. He will be able to carry on the work over the transitional period between the retirement of Dr. Verdier and the appointment of his successor, but he will have to leave Nairobi soon after the latter arrives. Proposals for a successor to Mr. Lahousse have not yet been studied, for the exact implications of this post have to be redefined, as stated above.

Lastly, as was indicated from the very first lines of the report, the Secretary-General will be leaving the Council and the Commission after more than five years' service. His successor has been appointed by all Member Governments, on the occasion of the Seventeenth Session. His name is Dr. Touré Mamadou, the holder of a doctorate in economics at the University of Paris, after serving for some time with the European Economic Community. He brings with him wide diplomatic experience, after spending several years as Ambassador for his country in Paris, London, Brussels and Bonn. Dr. Touré was introduced to the Executive Committee at its Twenty-second Meeting at Abidjan. He will take up his duties in August 1962 and will be at the Council's Meeting at Muguga.

The role of Secretary-General will then be occupied by the Assistant Secretary-General, Mr. Richelieu Morris, and Dr. Touré will be asking him to take charge during the transitional period. The present Secretary-General has been acquainted with Dr. Touré for the past few months. He is convinced that Dr. Touré possesses all the qualities necessary to be Secretary-General of the Council and he knows that Members of CSA will be able to count on him just as they were able to rely upon his predecessors.

CHAPTER 2

THE COMMISSION

The Commission after the Abidjan Meetings

In last year's report, the Secretary-General announced changes which had taken place in the composition of the Commission, as a result of the admission of fifteen new States at the Sixteenth Session. Two other States have now followed suit: Sierra Leone and Tanganyika. Twenty-two independent African States are, therefore, grouped in this organisation and it is natural enough that after taking stock of the problems, they should have used the first annual meeting at governmental level to adopt decisions changing the face though not the spirit of the Commission. The importance attached by Governments to this Session is shown by the visit of three Heads of State who felt the desire, one after the other, to address the Commission personally, namely the President of the Republic of the Ivory Coast, Mr. Houphouët-Boigny, who attended the opening, and the Presidents of the Republics of Dahomey and Liberia, Mr. Maga and Mr. Tubman, who attended two solemn meetings of the Session.

The Seventeenth Session was held at Abidjan from 5 to 16 February. It was reinforced by the Third Meeting of the Administrative Committee, and it was in the course of this Committee that the changes asked for by the new members were examined. In fact, rather than speak of changes it should be recognised that a new CCTA was set up at Abidjan.

(a) Territorial competence

In the name of the principle of unity within the continent, dear to all Africans, it was decided to delete the expression "South of the Sahara" from the basic texts of the Commission and its organs. It was stressed, however, that the measures for applying these decisions in the field would not be examined straight away, since, as was pointed out in the report of the Secretary-General to the Administrative Committee, this would necessitate a complete change in structures. It is the intention of Governments to show clearly that there is no discrimination between African States and that for the time being the work of the Commission will continue unchanged along the principles previously laid down.

(b) Composition

The Governments of the independent African States declared that any co-operation with the Governments of South Africa and Portugal would seem impossible. The legal implications of this declaration have not yet been fully assessed, but the principle has been clearly established: South Africa and Portugal will in no wise be authorised to take part in the work of the new CCTA.

The case of Belgium, France and the United Kingdom is entirely

different. These three states are not African, and the territories for which they were, or are, responsible are independent or have been promised independence in the near future. Moreover, these three States have rendered invaluable services to the Commission and without them the value of the technical work would be greatly diminished. They have, therefore, been invited to continue their participation as of right in all the Commission's activities as "Founder Members". Their rights are unchanged on the technical plane. From the legal point of view they will cease to be full members and will thereby lose their voting rights. The recommendations of the Commission will not apply to them; all this brings about little change in their influence within the Commission, since for a long time past these States had decided not to contravene the will of the African States.

As for the territories which are still dependent, it was envisaged that if the power which holds their nominal sovereignty so desired, they could take their place within the Commission under their own name as "Associate Members".

(c) Terms for the functioning of the Commission

The new members of the Commission felt that it was proper to introduce new measures providing for the expulsion of a government which had violated the fundamental principles of the Commission, or the suppression of a government which had failed to honour the terms of the new Agreement.

Prolonged discussions took place on voting methods in the new Commission. Governments recognised that for technical meetings the rule of unanimity should be maintained, it being understood, however, that an abstention by one or several members or their refusal to accept any given conclusions would not prevent a resolution from being adopted unanimously by the other members. This rule is important, for it means that in the future as in the past, CCTA will not be able to impose a technical measure on States which oppose it. This is well within the spirit of co-operation between states and manifests the will of Governments not to accept a supra-national organisation of a technical nature. All other decisions are taken by majority vote. Some of these require a qualified majority of two-thirds, three-quarters or four-fifths (admission, suspension, and exclusion of members, appointment of senior staff, etc.).

This shows the harmonious conception of the new system. Legally, it is very different from the old one. Politically, it is entirely different from the Commission's system in 1950, so the evolution taking place in the whole continent of Africa is transferred to the level of inter-African co-operation.

However, one cannot over-emphasise the fact that the role, functions and methods of the Commission remain totally unchanged, as does the spirit of its work. Last year, a fundamental recommendation was adopted by the Sixteenth Session. It is quoted in its entirety in the report to the Twelfth Meeting of the Council. The Secretary-General would ask Members of the Council to refer to it. This recommendation was confirmed, and the

fundamental characteristics of the Commission defined in the course of the discussions at the Scientific Conference of 1949, were wholly maintained. Certain additional measures noted at the Sixteenth Session in Lagos were also confirmed, as for instance the relations with non-African countries who are able to give assistance but may not dictate action.

Consequently, let there be no misapprehensions. The dominant powers in the Commission have changed, as is logical and normal since those responsible within Africa have also changed. None the less, the work of inter-African co-operation goes on. It is not only the meetings which continue without interruption, but the whole of this progressive, intelligent, flexible, discreet, and practical work to which Members of the Council have devoted themselves for many years.

FAMA

(a) Classic activities of FAMA

Members of the Council received the Fourth Annual Report of the Foundation which dwells on the subject of the exchange of assistance by Member Governments during 1961. Members of the Council will, therefore, have noted that FAMA is pursuing its activities slowly and steadily, and that its role gains ground each year, without undergoing a sudden evolution.

Experts are loaned under the aegis of FAMA, within the framework of bilateral operations, along the same lines as hitherto. It is not necessary to refer to this subject again. The total number of experts sent out in 1961 amounted to 51. Last year, the Council had noted that several large-scale missions were planned. In Chapter 3 of Part II the Secretary-General deals at length with the mission of five experts which prepared a plan of operations in the Fouta Djallon region of Guinea.

The Twelfth Meeting adopted a Recommendation (VII) drawing the attention of Governments to the increasing difficulty in finding experts with sufficient experience of Africa or indeed of other tropical countries. The Administrative Committee and the Seventeenth Session took up this point as one of its recommendations. But all appeals have remained unanswered and it would not appear that the countries which provide technical assistance have as yet understood the full extent of this dearth of experts. This brings one to the very delicate problem of planned organisation of assistance among sponsors; the faltering declarations which can be heard in the various capitals overseas show the extent to which the doctrine of Governments who provide assistance is as yet ill-defined. Does the Council consider it appropriate that this matter should be raised at its Thirteenth Meeting?

The number of scholarships provided under the aegis of FAMA has not ceased to increase. It went from eighty-five in 1959 to 116 in 1960 and 154 in 1961. This does not include the ninety-five trainees who attended regional training courses organised under the aegis or with the assistance of FAMA, and which are discussed throughout the report.

In the present section it is opportune to mention the study tour in the field of community development and agricultural extension, which will be discussed in a section of Chapter 4 of Part III. The Commission in fact took note of this method of work as being one of the most fruitful and interesting.

Before concluding the section dealing with the classical activities of FAMA, the Council will note with great satisfaction that the contributions from Founder Members have not ceased to increase year by year. From 1961 to 1962, France brought its contribution up by 100 million to 200 million CFA francs (from £130,000 to £260,000) and the United Kingdom from £40,000 to £60,000.

Numerous countries have formed the habit of appealing to the FAMA Secretariat or of taking quick action on requests submitted through FAMA. In the first instance one should mention the United States, Israel and the Netherlands who have each taken on several undertakings of technical assistance, which fit wholly or partially into the framework of the Commission's activities. This shows considerable progress and betokens the esteem in which the Commission is held by Governments as well as the just confidence which they give to the FAMA Secretariat and in particular the person responsible for its direction, Mr. M. Ensor.

(b) Regional programmes of joint action

Last year, at Pointe-Noire, the Council studied at length the report on regional projects presented by the Secretary-General. This was a new method which had just been specified by the Commission. Since then this method has become classic and it is not necessary to recall it at this juncture since its application is shown throughout the report. Certain projects are on a very large scale, such as was inconceivable even a few years ago. The first results are more than encouraging. They prove that, as stated by the Council very early on, the intervention of the Commission in initiating, inspiring or indeed directing regional projects, bears fruit and can lead to spectacular results. The Secretary-General considers, in the light of the experience he has gained, that this is one of the most important forms of direct intervention by the Commission in the development of the continent.

Among the regional projects, priority will be given to regional training centres. The Commission discussed these at great length at Abidjan. This subject will be dealt with in detail in the second section of the following chapter.

Here again, the work of the Commission is dependent on a few men: those technicians who are competent in the particular field, as well as the Secretary of FAMA and his Assistant. The Secretary-General would like to pay tribute publicly to the latter two men for the work they have carried out, and he would like to congratulate Mr. Ensor in particular who, with

such limited means as to surprise all those who see him at work, was none the less able to continue and develop the Foundation in the conditions described above.

Some general activities of the Commission

It goes without saying that the question of middle-grade training should head the present section; as it will be dealt with in the following chapter however, it will not be examined at this point. The Secretary-General would like to confine himself to some other particular points which are not discussed in any of the technical chapters in the report.

(a) Orientation courses for experts unfamiliar with conditions in Africa

The Commission took up the conclusions of the Council; it recognised that "as a result of present developments an increasing number of experts without previous knowledge of African problems are being sent to Africa and that in many cases it would be desirable to give them the opportunity to familiarise themselves for a few weeks or even months with the problems they are to deal with before they take up their posts". It therefore approved wholeheartedly the suggestion of the Council for the organisation of orientation courses in centres specialising in African problems.

This method has not yet produced any effects.

(b) Advice to African countries on their development plans

Most African Governments do not have the necessary staff, structures and revenue to enable them to plan development under satisfactory conditions. This is particularly serious during the time spent on preliminary surveys. As recognised by the Administrative Committee in one of its resolutions "it is often the case that those responsible for the planning of newly independent countries do not have personnel in adequate numbers at their disposal,

- "to draw up a coherent well-expressed study programme ;
- "to assess the quality of private or public experts proposed to them ;
- "to analyse the complex results of these studies and surveys and assess their quality and degree of impartiality ;
- "to prepare projects for practical application ".

Consequently these countries have to resort to private or public study missions which are sent out for this purpose. The result is not entirely satisfactory. On the one hand, it is difficult to define the exact setting in which the missions are to work. On the other hand, the missions are handicapped

- by their duration which is too short, which only in exceptional circumstances covers the practical implementation of their studies ;
- by lack of knowledge of the traditional context and new political essential requirements ;

—by the direct or indirect relation of these missions to public or private interests; this may occasionally colour the studies in favour of the objectives of these interests themselves.

The first service which the Foundation might provide is to give priority to requests for the strengthening of planning services, either by accelerated training or by the supply of experts.

The African States, however, wish to go further and in this the Council should intervene in a decisive manner. The Administrative Committee recalled that it would be useful to preface, accompany and complete study missions by calling on totally independent consultants working in Africa, to whom there could be submitted:

—Preliminary drafts of studies, programmes and the composition of the teams concerned.

—The relationship between such study missions and the projects for implementation.

—Should the need arise, all requests for second opinion.

According to the needs of the particular case, this advice could take one of the following forms:

—Visit by an independent expert.

—Visit by a small group of experts (preferably of several nationalities).

—Consultation by correspondence of experts associated with CCTA/CSA.

—Submission of the problem for advice to CSA or to a small committee set up by this Council.

This is a basic problem which is difficult to discuss but to which the Council should devote much time.

As for the corresponding practical organisation, the Scientific Secretary and the Secretary of FAMA considered that a “chargé de mission” should be appointed under their joint responsibility with a view to carrying out missions over a period of several weeks or months for Governments who wish to take advantage of the arrangements laid down at Abidjan. The Administrative Committee took up this idea on its own account and it is possible that such a “chargé de mission” will be appointed in the future.

(c) Handbook on agricultural extension

In Chapter 5 of Part II, the Council will be informed of the decision taken by the CCTA/FAO Symposium on Stored Food Products, for the preparation and distribution of a handbook dealing with storage on farms and co-operatives. This handbook is intended for those in charge of agricultural extension. Each country will be responsible for translation into its dialects, so that it can be used in the rural areas.

The Secretary-General is very interested in this idea. He would like to know the opinion of the Council and be advised whether the Council considers that this is an interesting measure which might be applied to other

fields. It may be that the Council would wish to submit more precise proposals itself.

(d) Central theme of the Annual Session

For the first time this year, the Session decided to deal with a central theme. The subjects relating directly or indirectly to this theme were reclassified and discussed in a general debate. The activities already undertaken or in course of consideration by the Commission were studied and new steps proposed. Delegates and observers submitted general expositions. An overall picture was thereby achieved.

The CCTA Secretariat is behind this initiative which was favourably received by the Commission. It is intended to repeat this precedent at each annual session. Each year, the Council will be consulted on the subject which is to be laid down as the central theme of the following Session.

The theme of the Seventeenth Session was the "Training of middle-grade personnel in Africa". It will be seen from the following chapter just how successful it was. One important decision dealt with the creation of an inter-African Fund, whose guiding principles were approved. The material arrangements still have to be worked out. It is, therefore, the intention of the Secretary-General, subject to the advice of the Council, to choose as the central theme for the Eighteenth Session the Fund envisaged by the Seventeenth Session.

As for subsequent themes—and it is not too early to think of these—the Secretary-General has several ideas in mind: "Women in Africa", which would group together in a report all the activities of the Commission usually dealt with in the various chapters inasmuch as they concern women (health and nutrition, social sciences, action in a rural area, education, etc. . . .). One of these would be "The contribution of the traditional Africa to development", which would make it possible to re-examine the place of practical and traditional elements in modern structures, be these agriculture, the veterinary sciences, fisheries, health, social sciences, education, action in a rural area, economic development, labour or technology (in particular housing). Another theme would be "Research and development", a theme which would make it possible to take from each chapter those parts dealing with current or future research activities, by placing them in the framework of the development of the new States.

The Council will have many ideas on this subject.

(e) Publications

The Twelfth Meeting of the Council congratulated the Publications Service of the Commission for all it had accomplished. It stressed that these publications constitute an important aspect of the work of CCTA/CSA inasmuch as these publications are widely circulated.

Since the Twelfth Session, eighteen publications on various meetings have appeared. Three relate to inter-African conferences (Open Forests,

Hydrology, Labour), nine others to symposia or specialists meetings, and four are monographs. Three printed and nine multigraphed periodicals have also been circulated. Members of the Council will find a list of publications in Appendix IV.

The following remarks are pertinent to the subject of publications which appeared in the past year and on the evolution of the Publications Service. Some of the findings published are of very great importance, for example, the publication on the Forestry Conference which was held at Pointe-Noire in 1958 and comprises 689 pages, as well as the Hydrology Conference which took place at Nairobi in 1961 and which covers 585 pages. Specialist meetings, such as the one of ISCTR (Vom, 1960), on Hydrobiology and Major Lakes (Lusaka, 1960) and Water Treatment (Pretoria, 1960) form volumes of 300 pages. A considerable effort has been made by the new Publications Officer, Mr. J.-P. Sarrautte to make these publications better known in scientific circles. Numerous specialist periodicals have reviewed these publications. In the United States a sixty per cent increase in the sale of books has taken place. Last year, the Council wished to pay tribute to the work done by Mr. Guesde, the former Publications Officer. It will be pleased to know that the service continues to operate in favourable conditions, under the direction of Mr. J.-P. Sarrautte.

Activities of the Commission

(a) The Session

The Seventeenth Session took place at Abidjan in February 1962. The Eighteenth Session will be held in Tanganyika a year later. The form taken by the Session is now well established and discussions take place smoothly, without difficulties. The Administrative Committee has made it possible to relieve the Session of administrative problems and the most delicate questions.

Following the decision taken by the Sixteenth Session, it was agreed that the Session should assume the confidential character it used to have in the past. The public and the press are no longer admitted. This has the advantage that it limits the statements and declarations intended for the public. In order to prevent attendance from becoming too numerous, it was also decided that no observers outside the Commission should be invited, apart from the representatives of the United Nations family; it will probably be expedient to add to them observers from the recently established African organisations next year. Countries outside the Commission and non-African organisations may not send observers, whatever the extent of their contribution to the work of the Commission. The United States Government and the European Economic Community understood very well the desire on the part of the African Governments to conduct their affairs themselves and, despite their considerable help which is far greater than the annual budget of the Commission, they willingly accept their non-representation at the Annual Session.

(b) Senior staff

One important result of the changes made at Abidjan which were stated above, is that the methods of appointing senior staff have now been changed. The Council will note this with pleasure, since it has concerned itself with this subject for many years. In the new statutes it will be laid down that the Secretary-General should be appointed by Governments by a four-fifths majority. The Assistant Secretary-General, and the Special Assistants to the Secretary-General, the Secretary of FAMA and the Scientific Secretary are also appointed by the Governments, in this case by a two-thirds majority. The Directors of Bureaux are appointed by simple majority, and the rest of the staff is appointed by the Secretary-General. It can be seen that a considerable easing of the old procedures has taken place and this should be welcomed.

The Council will also note with satisfaction that the Commission decided to strengthen the CCTA Secretariat by one unit. In order to avoid possible confusion, there will be only one Deputy Secretary-General as from 1 June, but the post of Second Assistant Secretary-General has been replaced by two posts of the same grade, now known as Special Assistants to the Secretary-General.

Decisions affecting senior staff have been as follows since last year:

CCTA Secretariat: Mr. Hawkins, Second Assistant Secretary-General retired from his post on 20 January 1962 having come to the end of his contract. Mr. de Lusignan, former Assistant Director of ILI was appointed Acting Second Assistant Secretary-General as from 1 January 1962. He now performs the duties of Acting Special Assistant. Since no other candidate was proposed for this post, Mr. de Lusignan's appointment will be confirmed in the autumn by the Thirteenth Meeting of the Budgetary Committee.

The second post of Special Assistant was set up with effect from 1 July 1962. It will probably go to a Nigerian national whose name has not yet been notified.

Mr. S. Coulibaly, a national from the Ivory Coast, assumed his duties as Assistant Secretary of FAMA, as from 21 July 1961.

The position of the Secretary-General as well as that of the Scientific Secretary and his Assistant, was discussed in the chapter relating to the Council.

BIS: The contract of Dr. Fournier, the Director, was renewed for a period of three years, with effect from 28 February 1962.

Dr. Bourke took up the post of Assistant Director on 1 December 1961.

IBAH: The contract of Mr. Beaton, the Director, was renewed for a period of three years with effect from 1 November 1962.

Dr. Lobry was appointed Assistant Director (working side by side with Dr. Vandemaële who was appointed previously) for a three-year period. He will take up his post shortly.

ILI: Mr. Haighton, the Director, retired in April 1962 after seven

years service. His place has been taken by Mr. Chukwumah, a Nigerian national, who was appointed to the Bureau on 1 March.

Mr. de Lusignan was transferred to the CCTA Secretariat with effect from 1 January 1962. His place has been taken by Mr. Jullien who assumed his duties in April 1962.

Phyto-Sanitary Commission: Mr. Barat, Scientific Secretary, retired on 31 October 1961. He was immediately replaced by Mr. Caresche.

Social Sciences: BPITT was dissolved on 25 May 1962. Immediately afterwards, Dr. Demarchi assumed his duties as Inter-African Correspondent for Human Health.

Housing: The Inter-African Secretariat for Housing was dissolved on 25 May 1962.

Co-ordinators: Three new Co-ordinators were appointed by the Session: Dr. Verschuren (conservation of nature), has taken Professor Monod's place; Mgr. Gillon (radio-isotopes) and Dr. Reinecke (helminthiasis). A co-ordinator has yet to be appointed to take charge of the Panel of Correspondents for "génie rural", and possibly one other for the Panel of Correspondents for Stored Food Products.

External relations

(a) Countries and organisations in Africa

The relations between the Commission and non-member countries in Africa will obviously take on a new aspect following the decisions at Abidjan. It is too early yet to discuss this with regard to the countries lying to the north of the Sahara. South of the Sahara, only Ethiopia, the Sudan and Togo are not members of the Commission. The Deputy Secretary-General has held interesting talks with Ethiopia. As for Ghana, it still belongs to the Commission legally. Delegates participated in several technical meetings (symposia on weeds, on stored food products, on public works, etc.). Recent signs show that the interest taken by Ghana in the work of the Commission is reviving.

For the first time this year, it is necessary to report on the relations with other African organisations. Until now, the organisations mentioned heretofore did not possess permanent structures and their activities did not cover technical fields. Now, however, the Union Africaine et Malgache (UAM) has set up an African and Malagasy Organisation for Economic Co-operation (OAMCE) whose field of activities links up with that of the Commission. As the twelve countries of the UAM are members of CCTA, it is most important to establish close relations.

Last September, the Secretary-General was received by the twelve Heads of State at Tananarive. The Scientific Secretary and the Special Assistant were present at the first meeting of two of the most important committees in OAMCE. These two committees were not able as yet to formulate clearly the doctrine of the organisation. The Committee for

economic and social development wishes to contribute to the harmonisation of plans for development and investment, commercial legislation and working methods of the Chambers of Commerce. The Committee for scientific research is of greater interest to the Council. Its agenda contained a project for a foundation which would bring together the twelve countries of the UAM. This project was very ambitious and it was not possible to take immediate action on it. On the other hand, the Committee for scientific research decided to set up an African and Malagasy Organisation for Scientific and Technical Research. The Scientific Secretary will inform the Council of this project.

The CCTA Secretariat attaches great importance to the initial relations with OAMCE. It pays tribute to the dynamic character, the authority and intelligence of its Secretary-General, Mr. J. Razafimbahiny. The latter stressed to Dr. Verdier and Mr. de Lusignan his great desire to be guided by the documentation and experience of the Commission and the Council. Joint activities might be undertaken in the future. The Secretary-General considers, for instance, that OAMCE could play a part in the implementation of the project for a Fund for middle-grade training which will be discussed later in the report. No effort will be spared to arrive at close understanding.

As is already known, the twelve countries of UAM and several other African States held two meetings during the year in Lagos, in order to set up an organisation grouping together most of the African countries. A Charter was drawn up stipulating close co-operation, not only on the political but also on the medical plane and in certain aspects of economic development. The Secretary-General informed the Heads of State that if such an organisation were to come into being, the Commission would be pleased to be at its disposal. However, the collaboration could not be more complete for the time being, in view of the different composition of the Monrovia/Lagos group and of CCTA. If in accordance with the wishes expressed on all sides, in Accra, Casablanca, Cairo as well as in Monrovia, Lagos and Brazzaville, for a pan-African organisation to be formed, then it would seem that the Commission might be an interesting organ for such an organisation, of which it would very quickly become either a section or even an integral part.

(b) Non-African countries and organisations

The general recommendations adopted at Lagos in February 1961 set out the policy of the Commission with regard to its external relations. The Commission is anxious to increase the facilities at the disposal of countries in Africa. It welcomes the development of co-operation with countries and organisations outside the continent which take an interest in its development, on condition, however, that this co-operation does not have any political influence over the life of the Commission and that the neutrality of the latter and its desire to avoid any outside interference are in no way endangered. This determination has prevailed throughout all contacts of the Secretariat

with non-member countries, in close consultation with Member Governments. The absence of foreign national observers at the Commission during its work in Abidjan was decided upon to emphasise the desire of the Commission to remain neutral and to avoid debates which could rapidly introduce ideological elements into the annual discussions.

It is in this spirit that the Secretary-General has maintained close links with several countries who had expressed their desire for them. The results have been particularly satisfactory with regard to the Government of the United States, to whom the Commission paid special tribute during the Abidjan meetings. The wide range of assistance provided by the Americans will be seen throughout the Report, but the Secretary-General would like to stress at this point the discretion, the courtesy and the will to co-operate which have been at the root of the relations between the United States and CCTA/CSA during the past year. This was particularly evident on the occasion of the Secretary-General's two visits to Washington and New York in October 1961 and May 1962. The services rendered to the Commission by other Governments and the offers made notably in the field of regional projects should also be noted. They relate more especially to the Governments of Israel and the Netherlands. Lastly, it is interesting to note that numerous observers from non-member countries have attended meetings of the Commission, in particular from America, Germany, Israel, Italy and the Netherlands.

Very interesting results were also recorded in the course of collaboration with certain European international organisations. The European Economic Community is making a positive contribution to Joint Project No. 15 (eradication of rinderpest) for which it is providing two-thirds of the funds. It financed the total cost of Joint Project No. 20 (map of the dangers of erosion in Africa). It has sent observers to many meetings of the Commission and close relations are maintained between the two organisations.

Results are less spectacular when it comes to OECD and the Council of Europe. However, the Secretary-General attaches great importance to these relations, for he feels that the efforts made by OECD to harmonise assistance programmes by sponsors, and those of CCTA/FAMA for beneficiaries, seem to be of a complementary nature. OECD has taken the place of OEEC. The last visit of the Secretary-General to the Château de la Muette in Paris made him feel confident about the possibilities for developing these relations. With regard to the Council of Europe, the Secretary-General was able to ascertain in the course of an exposition he made at Strasbourg in October 1961, that the manner in which third-country problems are treated comes very near to the attitude of the Commission. The fields of co-operation are as yet ill-defined and no concrete action could be undertaken, but the Secretary-General hopes that it will be possible in future to find important subjects on which the Council of Europe and CCTA can work together. It is in this hope that the Committee of Ministers of the Council of Europe agreed that its Secretariat should serve as an intermediary for the trans-

mission and study of requests made to the FAMA Secretariat whenever the need for this should be felt.

(c) The United Nations

The United Nations occupy a special place in the field of external relations. Although the Organisation in New York and its dependent agencies are outside Africa, they have to some extent identified themselves with the African continent. This is the reason why the entire United Nations family is invited to the annual session to which it appoints the only foreign observers admitted to discussions. The instructions given by the Commission are very precise: every effort must be made to strengthen the co-operation between the Commission and the United Nations. Thus it was with pleasure that the Commission welcomed at the Seventeenth Session, as it had done at the Sixteenth, the observer sent from this Organisation.

On the subject of the United Nations, the Scientific Secretary will report to the Thirteenth Meeting on the convening in 1963 by the United Nations Organisation of a large Conference on science and development at which it is undoubtedly desirable that the Commission and the Council should be represented by an observer.

(d) Economic Commission for Africa

The Economic Commission for Africa (ECA) held its fourth session at Addis Ababa in February. The Commission was represented by the Deputy Secretary-General, Mr. R. Morris. The work of the Session was characterised by the almost complete expulsion of Belgium, France, Portugal, South Africa, Spain and the United Kingdom. On the technical plane, the Session decided to set up an institute for economic development at Dakar. This news should please all those who take an interest in the development of Africa. It was proposed to set up a bank for African development, but the conclusions of the discussions were not very clear. Lastly, ECA has accepted the principle of decentralisation which was expected to lead it to open a West African regional office at Niamey in the near future. Many other technical points were discussed which will be dealt with in the body of the report.

The special mission undertaken by Mr. Morris was intended, in accordance with the spirit of co-operation which CCTA would like to see between the Executive Secretariat at Addis Ababa and the CCTA Secretariat in Lagos, to endeavour to wipe out the impression left by some differences of opinion in the past. Mr. Morris seems to have achieved this successfully and gratitude is therefore due to him. The rapprochement had also been undertaken by Mr. Martin, then a Member of the Council, in the course of his many journeys to Addis Ababa, and by Mr. Clunies-Ross, the Director of the Inter-African Community Development Centre. A danger of overlap by these two organisations exists in only three fields: community development, housing and roads. The technical chapters of this report will show how in

each of these cases the relations can be handled. There is no reason why there should not be relations between ECA and CCTA as trusting, intimate and sustained as those between CCTA and FAO or CCTA and WHO. After Mr. Morris's visit it is to be hoped that nothing will disturb relations again.

(e) FAO, WHO, BIT

There is no need to recall the very satisfactory relations between these three Specialised Agencies and the Commission. Prior consultations take place on most problems, mutual invitations are exchanged and joint action is organised. In reading this report, Members of the Council will be convinced of their extent.

The permanent liaison with FAO is assured by Dr. Fournier, Director of BIS, as regards the departments in Rome, and by the CCTA Secretariat in Lagos as regards the regional office at Accra. The Eleventh Annual Conference which was attended by Dr. Fournier made it possible to discern the general outline of the Institution's policy. Its activities are more and more concerned with field work. Priority is given to education and agricultural extension, and an effort is being made to fit the work in this field into the framework for development planning as a whole. The spheres of co-operation between FAO and CCTA are so numerous that it is not opportune to quote them here. One need only look at any given page in the report to appreciate their extent.

Relations with WHO have relaxed somewhat inasmuch as BPITT has now closed down and the Commission attributes lesser importance to medical activities. The permanent liaison is in the hands of Dr. Demarchi, Inter-African Correspondent for Human Health. There are many joint activities. In particular, the special concern on the part of WHO with problems of sanitation and education should be noted.

It falls to ILI to maintain regular contact with BIT and there are numerous exchanges between these two bureaux. Since BIT holds less meetings in Africa than the other agencies, it is rare that joint activities with CCTA take place. However, the Institute at Geneva lends its vigorous support to the activities of the Commission in the field of livestock.

(f) UNESCO

The style of relations between UNESCO and CCTA has not yet been clearly defined. Dr. Fournier maintains permanent liaison in Paris and his relations with the various divisions are good, one might even say excellent as regards the Division for the exact and natural sciences and the Counsellor for Africa. None the less, it happens all too often that quite by chance the CCTA Secretariat or one of its Bureaux is informed of some UNESCO activity which is of interest to it, or that a marked overlap between a programme by UNESCO and past or future activities of the Commission is to be found. Is this due to the fact that this vast institution is so far away,

with no permanent bureau in Africa ? Probably this is the case. During his visit to the UNESCO headquarters in Paris last May, the Secretary-General tried to improve matters. He is not sure whether he succeeded.

CHAPTER 3

TRAINING OF MIDDLE-GRADE PERSONNEL

For many years the Council has stressed the need for giving priority to the training of middle-grade personnel in Africa. For this reason the CCTA Secretariat decided to make it the central theme of the Seventeenth Session. The debates assumed very great importance. The arrangements decided upon for setting up regional training centres were adopted and the general policy which had already been previously defined was clearly stated. Moreover, a decision of prime importance was taken by the Commission at Abidjan, namely the setting up of a Fund for the training of middle-grade personnel in Africa, on the lines of the general principles which had already been outlined by the Twelfth Meeting of the Council in its Recommendation V.

The resolutions approved at Abidjan were drafted with very great care. It would, therefore, be detrimental to take them out of context and for this reason the Secretary-General will, with the permission of Members of the Council, confine himself in the present chapter to quoting the resolutions and adding to them only a few comments about their implementation.

The analysis of this problem was based on two principles which "all the Governments of Africa solemnly recognised" at Abidjan in February:

—"The training of middle-grade personnel should be given a very high priority.

—"This training should be provided in Africa itself".

These two principles were expounded at Abidjan as follows:

"The training of middle-grade and subordinate personnel is of particular importance in the early years of existence of a country that has just achieved independence and wishes to hasten its development. Shortage of personnel is indeed a particularly serious problem at the present time. Many of those who were serving in these capacities before independence, have been called to new political, administrative, trade union and other functions; many others are going on to higher education. Far from increasing in proportion with expansion provided for in development plans and in relation with the training of new higher grade personnel, the number of middle-grade personnel remains unchanged and, in some cases, is actually decreasing. The situation is rendered more critical by the fact that subordinate expatriate staff departs more

or less rapidly after independence. If measures are not taken, there is a danger of jeopardising or impeding the implementation of many programmes; specialised personnel (national or foreign) and available funds may not be used to the best advantage and this at a time when such wastage is unacceptable.

“Middle-grade personnel must be trained in Africa, where they are called upon to serve. Training will thus be better adapted to the eventual conditions of work. A grave risk will be avoided, that of seeing young people sent overseas for technical training and then returning with a different sense of values, with a new psychological outlook, unwilling to take up the functions for which they have been trained, in urban or rural environments. Experience shows that, as a general rule, sending young people overseas when they have not reached sufficient maturity, to receive elementary technical training, is an inefficient, costly and sometimes dangerous method”.

In pursuance of these principles, the Commission recommended at Abidjan

“(a) That the Governments of Africa should decide, within their respective competences, that strict measures should be taken to cease sending middle-grade personnel for training overseas and to give absolute priority to the possibility of training such personnel in Africa itself.

“(b) That the establishment, in each country, of schools, centres, institutes and other training establishments at the middle-grade level should receive all possible assistance from outside, and, as is already generally the case at present, should be the subject of continued attention on the part of the authorities. FAMA, in particular, should give special attention to all requests in this field”.

However, the Commission is well aware of the fact that it can only hope to cover certain aspects of this complex question, and as a result it devoted itself to two subjects for the rest of the day given up to the central theme: the Fund for training in third countries, and the new regional training centres.

Middle-grade training in third countries in Africa

The recommendation adopted by the Commission reads as follows:

“Some countries do not possess the necessary establishments for the training of all their middle-grade personnel, particularly in the technical fields. If there are centres, schools or institutes in countries nearby where the same language is spoken and where the necessary training can be given, it is desirable that these should open their doors to young nationals of neighbouring countries. In some cases, this may be only a temporary *ad hoc* solution; quite often, it may prove to be of lasting value. In all cases, the adoption of such a method will prove a

solution to some of the problems of training middle-grade personnel, in a spirit of fraternity and co-operation in keeping with the unanimous desire of the peoples of Africa.

“ Sending young people for training in the conditions described above entails various forms of expenditure: cost of travel and subsistence of trainees, payment to the establishments which receive them. Such exchanges are already carried out on a large scale by countries in Africa, the cost being met by those countries. This method cannot be fully developed, however, unless much greater funds are made available.

“ The Commission NOTES that numerous offers are being made to countries in Africa by countries and organisations outside the continent with the object of giving young people a training overseas at intermediate level. Recommendation (b) explains why the Commission considers this to be undesirable and to be avoided.

“(a) The Commission therefore DECIDES to appeal to all countries and organisations interested in the development of this continent to place at the disposal of a specially created Fund such amounts or facilities as they have made available in the past for the training of middle-grade personnel outside Africa, and even to make much greater contributions if they really want to assist in a positive manner the progress of Africa. The Commission CONSIDERS that few decisions could be of such value for Africa and for co-operation between its peoples. The appeal adopted at Abidjan will be communicated to all Governments and Organisations taking part in the task of assisting Africa and will be widely distributed through the Press and by any other means capable of awakening public opinion.

“(b) In principle, the Fund will serve to meet all or part of the two categories of expenditure mentioned. The objects for which the Fund may be used will be defined later by the Commission. *A priori*, the Commission would not be opposed to any of the methods that fit into this general structure, whether it be a case of long or short duration studies, of advanced training courses or of study tours. Moreover, the Commission FEELS that the Fund should provide both for students within the normal education system and for personnel already in employment, called upon to follow specialised courses.

“(c) Criteria for the appropriation of amounts made available to the Fund will also be defined at a later date by the Commission. The Commission CONSIDERS, however, that the two following principles can be put forward:

“—The training of middle-grade personnel must be organised in the light of the requirements of the labour market and any scheme for developing such training by sending trainees to third countries must be considered from this viewpoint. Nothing would be more dangerous than for the young bursary holders to find themselves without work on returning from abroad.

“—The Fund, if augmented to the extent hoped for by the Commission, will constitute a valuable means of assisting existing establishments. The programme of the Fund must, therefore, be the subject of consultation with national and regional authorities in order to ensure that their educational facilities are harmonised ”.

These are the main outlines of the project. They are in line with the recommendations put forward by the Secretary-General in the report which he submitted; however, the African Governments wanted to go further still. They pointed out at Abidjan that if the Fund came to play an important part in Africa, then it would be a flexible and effective instrument for sending young persons to certain types of establishments and institutions in any particular country. This would provide the means for rationalising if not planning the development of middle-grade training in entire areas of Africa. The Commission expressed this idea as follows:

“ The preceding paragraphs outline a bold policy, the results of which will be the rational establishment of new training centres. Such rationalisation would, of course, be based on objective criteria: proposed activities of neighbouring countries, available teaching personnel, financial and material resources, etc.

“(a) The Commission does not propose that such rationalisation should take place immediately since it would call for difficult decisions from many viewpoints; it CONSIDERS that this objective should be borne in mind.

“(b) At this stage, and with this objective view, the Commission RECOMMENDS that consideration be given to the desirability and possibility of appointing official sub-commissions among countries of a similar region concerned with the same problems of middle-grade training, for the purpose of examining together the use to be made of the Fund among countries of the same region. If, at some later date, the Fund has a council of management, these sub-commissions would have a considerable part to play, possibly by virtue of the Constitution ”.

It goes without saying that such a task presupposes a considerable amount of prior preparation, and the Commission recorded that comprehensive inventories should be compiled on the training facilities available in a given area in a particular discipline. At the same time, the Commission made it clear that this did not mean that one should start by compiling all the inventories in all regions; rather that these inventories should be prepared in a particular region and discipline in proportion to the scheduled operations of the Fund.

It is thus possible to discern the lines along which the Fund is to operate. A governing body, probably based on Lagos side by side with the CCTA Secretariat, will handle the day to day business and study the requests for scholarships and grants. It will be placed under the authority of a Council, composed of the African countries and participating countries and

organisations. This Council will define the criteria for the distribution of grants and scholarships, teachers and materials made available to the Fund. Obviously it is these criteria which represent the decisive element in the definition of the policy of the Fund. They are laid down by the Council, in accordance with the opinions and directives expressed by the Regional Committees mentioned in the Session's Recommendation. These committees will be purely African, grouping together ministerial representatives of Governments with a common language in a particular area. After studying the Latin-American precedent for this, mentioned below, the Secretary-General considers moreover that the Council for the Fund, following the advice of the Regional Committees, will be asked to prepare a list of establishments or institutions to be supported or developed; these will be given priority when requests for scholarships are submitted to the Fund. Thus, scores of establishments in Africa will be systematically strengthened.

This project is due to the initiative of the Commission. It will, therefore, be implemented within the Commission's framework. However, the Session stated clearly that the Fund would work generally for the benefit of operations proposed by other international organisations or by African countries.

"In the view of delegates, action might be initiated either by CCTA or by two or more Governments; it may also often be the outcome of decisions of other international organisations and, in particular, other regional bodies. The Commission **CONSIDERS** for instance that some of the sub-commissions mentioned in para. (b) above should be constituted within the framework of some of these regional organisations".

This definition is valuable, for it places the project in its true perspective.

The steps which have to be taken in the immediate future are obvious. "The Appeal to the Friends of Africa" which was approved by Governments was sent out to countries and organisations anxious to help Africa. Further explanations were given to all those who asked for them, either verbally or in writing. It was decided to hold an informative session in October 1962, for the benefit of countries and organisations who might contribute to the Fund. Taking into account the experience gained by OECD which has administered a similar fund for many years, supplied by the Americans, the request was made to this organisation that it should assist in the arrangements for the informative meeting. After this meeting, a detailed project will be drawn up, making clear proposals on all aspects of the Fund. This plan will then be submitted to all participants for their opinion. After possible amendment, it will be presented to the Eighteenth Session for approval, and it is to be hoped that the Fund will begin to operate in 1963.

The first reactions of which the Secretary-General has been advised since the Seventeenth Session have been good. In Africa, it was warmly received. Outside Africa, it aroused great interest. Some people are glad

because such a project would avoid dissipation of efforts for too many centres and institutions and would ensure the stabilisation of certain existing establishments and schools. Others emphasise the willingness for co-operation which has thus been manifested by the African countries. Others again recall that a similar project produced very good results in Latin America under the direction of the Organisation of American States (OAS). No less than 500 scholarships are made available each year within the framework of this project which is, however, concerned with higher-grade training. (The experience gained in Latin-America should be used to best possible advantage when finally drawing up the proposals made by the Secretariat.)

The Secretary-General is therefore confident. He hopes that the Fund will be set up in auspicious circumstances. He is convinced that this will be the most important undertaking in the life of CCTA. The views of the Council will be most useful to the Commission for subsequent action.

New regional training centres

The Council already examined at its Twelfth Meeting, suggestions put forward by the Secretary-General intended to make use of the methods and procedures adopted by the Commission so as to enable the setting up of new regional training centres (Recommendation IV).

The first steps in this direction were taken hesitantly. As a result the Seventeenth Session gave expression to the doctrine and it is useful to quote the Recommendation adopted on this subject. It is, in fact, this Recommendation which will serve as a future guide to the Secretary of FAMA, and strict instructions have been given to ensure that the different criteria and conditions stipulated by the Recommendation shall be strictly observed.

“(a) In cases where a careful consideration of the requirements and of the labour market shows that there will certainly be a continuing need in several countries for training of middle-grade staff of a particular type, and where no existing institution already provides suitable training or could be developed at national level, the Commission CONFIRMS that consideration should then be given to the establishment of regional centres. The creation in appropriate circumstances of new centres serving a group of countries or a region has already been advocated by FAMA at its Third Meeting (Recommendation X (v)) and by CSA at its Twelfth Meeting (Recommendation IV).

“(b) In deciding to set up such a centre, great care should be taken to ensure that it meets a real need and that employment can be found for those trained at it. Its capacity should be determined in the light both of the number of trained staff required by the interested countries and also of the qualified candidates likely to be forthcoming. Since training at the level concerned can rarely be effected satisfactorily through interpretation, each centre should, in principle, serve a group of countries in which a single language (English or French) is used.

“(c) The Commission REQUESTS its bureaux, panels and other specialists as well as the Secretariat to give every possible assistance during the preliminary consideration, in order that a satisfactory technical scheme may be established in full agreement with all departments, institutions and organisations concerned. The proposals should cover qualifications and number of candidates, curricula, detailed programmes for theoretical and practical work, final examinations, qualifications and number of teaching staff, technical equipment, accommodation and catering facilities, capital costs and recurrent budget, etc.

“(d) Such centres should be sited carefully so as best to serve all the countries for which they have been set up. Often this object will be achieved by placing them in the country where the greatest need exists; but regard should also be had to the desirability of situating them near the centre of the region and close to, or even within, research of other institutions concerned with similar subjects. Since such training of middle-grade staff must be of a practical nature it is evident that most centres will have to be sited in areas where the students or trainees can conveniently carry out practical work which is in itself useful.

“(e) When a centre is set up, the agreement on all aspects of the proposal should be obtained of governments sending staff there for training.

“(f) The Commission CONSIDERS that although these centres will serve a region or a number of countries, the supervision and administration of each should be entrusted to the Government in whose territory the centre is situated, the other Governments concerned being duly associated with the general control of the centre.

“(g) The Commission WELCOMES aid for the establishment of such centres and for their recurrent expenses over an initial period (say three to five years).

“(h) The Commission IS CONVINCED that before such external aid is given, it is essential that beneficiary Governments formally undertake between them to take over at the end of this initial period full responsibility for the recurrent expenditure of the centres. The sharing of this expenditure will be related to the number of pupils sent by each for training over a number of years. In all cases, however, the Commission DECLINES to accept any responsibility for financing the centre after the initial period has elapsed.”

This Recommendation needs no comment from the Secretary-General. However, the Council may wish to submit its observations on the subject.

Projects already planned by the Commission and which could be carried out very soon

Several projects which had been studied in detail arrested the attention of the Commission, which gave instructions to the Secretary of FAMA for their rapid implementation.

(a) Training centre for customs officers in French-speaking Central Africa (Joint Project No. 21)

This project is unusual in that it covers a field with which the Commission is not normally concerned. The first two functions described above, i.e. preparation of a list of requirements and programmes, were not entrusted to the Commission. The appropriate departments in the Equatorial Union made these enquiries and it was only after settling in a thoroughly competent manner the question for decision that they approached FAMA.

The aim of the centre is to train the customs officers needed by the Equatorial Union (Cameroun, Central African Republic, Chad, Congo-Brazzaville) and perhaps Gabon in one centre in Equatorial Africa probably in Bangui. Twenty students will be under training in the centre at one time, on a six to eight months course. They will be selected from among young people who have had some four years of secondary education. The five countries concerned have expressed their approval. Negotiations are in progress with the European Economic Community and the American Government with regard to offers of loans and materials necessary for the initial setting up of the centre. The French Government has agreed to provide the teaching staff by covering a substantial amount of the costs for the first five years (all costs for three years, two-thirds in the fourth and one-third in the fifth year).

(b) Wildlife conservation staff in English-speaking East Africa

The CCTA/IUCN Conference on the conservation of nature and natural resources held in Arusha in September 1961, also discussed the problems of training technical personnel at some length. As at other meetings of its kind, a distinction was made between senior staff, who must have a university education, and middle-grade personnel. The present shortage of personnel of this category was stressed, a shortage which often results in the non-implementation of decisions taken by government authorities and in specialist personnel working in vain. Between the specialists and game wardens on the one hand, and game scouts on the other, there is too great a gap. The Arusha Conference, therefore, declared itself in favour of the establishment of a regional centre designed for the English-speaking countries of East Africa.

A project has been drawn up by Mr. Kinloch, Chief Warden for Tanganyika, which provides for a centre to be opened in Mweka. Specialists consider eighty trainees should attend twelve-month courses: the standard required of entrants would be slightly lower than Ordinary level. During the course, stress would be laid upon the sense of devotion and discipline required of personnel who will be called upon to take responsibility early in their career and lead a dangerous life among poachers and wild animals. The programme will cover a wide range of technical subjects, such as motor mechanics, opening of tracks, topography, etc., and general subjects,

elementary law and biology, basic information on how to conduct protection programmes, "cropping" and the marketing of wild animals.

However, in the initial stages the need for higher-grade African staff will be so great that the centre should be used as from the beginning of 1963 for the training of assistant conservation staff. The first course, which should last for two years, should be devoted to these cadres; the course for middle-grade training, mentioned above, would begin immediately afterwards. It is anticipated that the Mweka centre will also be used for courses of short duration, intended for forestry wardens.

The Tanganyika Government favours this project most, and it is in fact willing to initiate it on its own, if need be. From the outset, the Kenya and Uganda Governments gave their approval, as well as the Bechuanaland Government. The Federation of Rhodesia and Nyasaland and Somalia also gave agreement in principle during the Session. Only the reply from the Sudan Government remains outstanding. As regards sponsors, the Secretary-General's mission to the United States in May 1962 revealed that substantial assistance could be expected, once it had been decided how many trainees should be taught in a given period and what relations would be established between the centre and the University of Tanganyika. Consultations are in progress. The Scientific Secretary will report on these to the Council, for he has prepared the entire project.

(c) Hydrological assistants in French-speaking West Africa (Joint Project No. 23)

The Inter-African Conference on hydrology, held in Nairobi in January 1961, discussed at some length the problem of training technical staff. Delegates stated that three categories of personnel are required: senior officers, hydrology assistants and hydrological operators. The training of the first group does not come within the scope of the present discussion as university education is involved. The Conference also recognised that, due to lack of junior supporting staff, hydrological work would be expensive, slow and unsatisfactory.

"Hydrological assistants" are required to assist engineers with field work and in the office. They must be able to direct the operation of hydro-metric networks under the control of a specialist who would visit the sites from time to time. "Hydrological operators" are responsible for basic measuring and simple field operations. Requirements in this sphere are extensive: approximately 300 officers of these two categories should be trained during the coming years. But projects to be carried out in the near future will, however, be limited by the restricted number of candidates possessing the general background required.

On this basis, the Inter-African Co-ordinator for Hydrology, Dr. Rodier, has prepared a project for the establishment in Cotonou of a centre designed for French-speaking countries in West Africa.

Each year, a six-month course would be provided at this centre to train over fifteen hydrological assistants who would be the holders of certificates equivalent to both Ordinary and Advanced level at the time of their admission to the centre. Another annual course lasting eight months would be organised for twenty-five to thirty hydrological operators: the standard required of these students for admission would be some four years' secondary education. The programme would include some general education and specialised training in hydrology and geology and in techniques of which some elementary knowledge is required: topography, drafting, motor mechanics, etc. An examination would be held at the end of each course and successful students would be awarded a diploma.

The centre will be established in Cotonou probably near the agricultural training centre which is at present under construction. The Government of Dahomey has given its agreement and the Head of the Hydraulics Division is studying the practical implications of the project. In the meantime, the Inter-African Co-ordinator is continuing his technical consultations. Assistance will be sought from various bodies when Governments concerned have given their final agreement.

This project was approved by the Dahomey Government when it was first discussed, as well as by the Governments of Mali and Niger. At Abidjan, the Governments of Guinea, Upper Volta, Mauritania and Senegal also committed themselves to supporting the project, it being understood that, if necessary, a second training centre for hydrologists could be set up later in the Fouta Djallon region.

Projects under study and which were communicated to the Seventeenth Session

(a) Training of hydro-geological prospection teams in the semi-arid zone (Joint Project No. 24)

One of the prime concerns of countries in the semi-arid zone is the lack of water in rural areas. Development is often jeopardised by this fact. In some instances, progress made in one particular sphere only aggravates the situation: several Governments have indicated to the Secretariat that the implementation of Joint Project No. 15, aimed at eradicating rinderpest, should be completed by new prospections for underground streams and the sinking of new wells as the water at present available is inadequate for a large cattle population.

Specialists consider that the possibilities of action by engineers specialised in hydro-geology would be considerably increased if they had at their disposal small teams made up of men with some elementary geological and goedetical training. These teams, working under the control of specialists, would carry out prospection work and then direct the sinking of wells at various points selected by hydro-geologists.

Dr. Obermüller, an Associate Member of the Council, prepared a very

thorough project which he expounded at the Seventeenth Session. This exposition by Dr. Obermüller made a great impact. The Governments of Cameroun, Chad, Dahomey, Mali, Mauretania, Niger, Senegal and Upper Volta all gave agreement in principle and the Commission requested the Secretariat to speed preparations for the plan.

Dr. Obermüller's project provides for one-year training courses, which would be divided into three months' training in theory and practical experiments at the centre, and seven to eight months' field work. The courses would be on the subject of geology, hydrogeology and above all, topography. The main feature of the field work is that this would take place in normal conditions, that is to say that the centre would ensure the usual provision of a hydrogeological service and carry out a programme to be laid down by the host Government. The corresponding remuneration would be used for defraying the costs of the centre. Two projects were drawn up, one for twelve and the other for twenty-four hydrogeologists. Moreover, a school for well-sinkers would be set up within the framework of the centre and under its supervision, for the training of twelve well-sinkers a year.

The Niger Government has suggested that a centre should be set up in the neighbourhood of Niamey. This proposal was favourably received. From a technical point of view this is excellent.

(b) Training of middle-grade personnel for phytosanitary control

For several years past, at every meeting, the Phytosanitary Commission has been stressing the shortage of junior specialist personnel for plant protection. No useful purpose would be served in adopting legislation applicable throughout Africa, if phytosanitary inspectors are to see their endeavours rendered invalid due to lack of personnel to implement decisions.

In 1960, the fifth annual meeting of the Phytosanitary Commission asked its Scientific Secretary to submit proposals, which Mr. Barat did at the sixth meeting in Ibadan last October. This proposal concerned higher-grade personnel who have to be trained within the framework of higher-grade teaching establishments. The Secretary of FAMA has arranged that the number of scholarships for the course on the protection of tropical cultivation by IRAT at Nogent-sur-Marne, should be doubled.

At the middle-grade level it seems that for the English-speaking countries staff can be trained at Ibadan. Negotiations are in progress with the Nigerian Government. For the French-speaking countries, the Phytosanitary Commission recommended:

“that missions of experts should be formed to visit the various countries with a view to assisting Governments with the establishment of departments for the control of plant importation and organising technical training for junior personnel. Therefore, it is not really a question of a regional centre: the organisation of regional missions of this kind stems, however, from the same determination”.

The Seventeenth Session approved this proposal.

(c) Laboratory technicians in French-speaking Central Africa

On every possible occasion, doctors and veterinarians stress that the shortage of laboratory technicians compels them either to give up certain activities, or to conduct routine checks which should normally be carried out by laboratory assistants.

Two problems arise. First of all, laboratory technologists are required, personnel of reasonable general training (at baccalaureat i.e., roughly, advanced GCE level) and two or three years specialist training who are able to take on the responsibility of routine activities. This was the first problem with which the Secretariat was concerned, the English-speaking countries of East Africa having expressed a desire to collaborate in the training of personnel of this category. The Scientific Secretary carried out a tour of East Africa in order to consider the possibility and desirability of opening a centre in East Africa where students would receive similar training to the one they would be given in England. The project is interesting and it would probably have been possible to find the necessary funds. The countries concerned cannot, however, afford to detach personnel for two or three years for training and the implementation of the project has been suspended for the time being.

Another problem arises at a lower level. Laboratory technicians or laboratory assistants, able to carry out a few operations under the control of qualified personnel, must be trained. Dr. Demarchi, Inter-African Co-ordinator for Human Health, prepared a project which was considered at a meeting held in Brazzaville for information purposes last September. The centre would be set up in Bangui (as an annex to the Institut Pasteur). Twenty trainees having undergone some four years or slightly less of secondary education would attend. Within approximately six months, these trainees would become "laboratory assistants", after following practical courses on laboratory techniques in biology, parasitology and entomology. A final examination would screen out students not up to standard.

The Central-African Government gave its whole-hearted support to the project. Gabon would be willing to support it, and perhaps the Congo (Brazzaville). Cameroun, the Congo (Leopoldville) and Chad are not interested as they have their own centres. The Seventeenth Session recommended that discussions with Governments should continue before embarking on the project.

(d) Staff for the departments of "Génie rural" in French-speaking West Africa

As described in Chapter 4 of Part III, French-speaking countries employ specialised personnel called "Génie Rural" officers, in rural areas. Their qualifications are described in the report.

The principal difficulty encountered in the implementation of this policy emanates from the shortage of qualified technical personnel. It is possible within the framework of international technical assistance to find

engineers, but there is a shortage of secondary personnel. Specialists state that, in their opinion, there is too high a proportion of setbacks due to the shortage of technical assistants and technical instructors and supervisors.

The Commission recommended that a project should be put before it as soon as possible, approving the spirit of the proposal.

(e) Socio-demographic field-assistants in French-speaking Central Africa

The establishment of projects and plans of economic and social development is impeded in Africa by a shortage of African field-assistants. Personnel of this category who have both technical knowledge and some social science experience are required by research bodies and in executive departments. If middle-grade officials employed by research bodies and also in departments of agriculture, animal husbandry, génie rural, municipalities etc., had received some elementary training in social sciences, the efficiency of these bodies and departments would be greatly increased.

Dr. Paulian, Associate Member of CSA and Director of the "Institut de Recherches Scientifiques" in the Congo, has proposed that a centre should be set up for French-speaking Central and East African states (from the Cameroun to Madagascar, Ruanda-Urundi and the Congo-Leopoldville). Some twenty trainees, who have had at least four years' secondary education, would follow the course for six to eight months. The programme would include elementary studies (social sciences, especially statistics and sociology) and practical studies with three months' participation in field surveys. The centre could be set up in Brazzaville.

Several Members of the Council were consulted on this subject and were favourably disposed to Dr. Paulian's project. The Commission approved it in principle, while requesting that a distinction should be made between field-assistants who are to work within the framework of the research programme and those in administrative or government departments. The study of the project is being pursued, in order to examine the extent to which the objectives of Dr. Paulian's proposal are already covered by the training centre for statisticians recently opened in Cameroun by the Economic Commission for Africa.

(f) Trawler skippers and engineers

Special interest was shown in the possible creation of a training centre for trawler skippers and engineers. Care should be taken to avoid making this centre a copy of similar centres existing in Europe; it should, on the contrary, be carefully adapted to African conditions. Dakar might be chosen as a site for such a centre. The Commission requested the Inter-African Co-ordinator for Oceanography and Sea Fisheries to submit proposals in due course.

(g) Instructors in the mechanisation of agriculture

The recommendation of the Meeting of the Committee for the Mechanisation of Agriculture, which took place in Segou last April, lends itself to different interpretations; technicians and specialists should be invited to submit precise proposals in respect of training in this field. The Commission noted that a suggestion had been made to create mobile missions which would travel from one country to another to facilitate training. It also noted that one delegation would like to give priority to the training of tractor drivers and mechanics.

(h) French-speaking librarians and archivists

The Specialist meeting on libraries and documentation which was to take place had included in its agenda the need and possibility for setting up a regional centre to be opened at Dakar. The Council should decide, when examining Chapter 2, Part III, if this meeting is to take place and failing this, indicate ways in which the project for the setting up of a regional centre could be studied.

(i) Meteorological assistants

At its Eleventh Meeting, the Council proposed, on the suggestion of Dr. Jackson, the Inter-African Correspondent for Climatology, that endeavours should be made for the training of meteorological assistants. The World Meteorological Organisation (WMO) thanked the Council for this resolution which it noted favourably. The Head of the WMO Technical Services has since discussed this with Dr. Verdier and the Scientific Secretary awaits the proposals from this specialised agency.

(j) Hospital administrators

The Commission noted the very tentative suggestion made by a Government for the organisation of regional training for English-speaking hospital administrators.

Other activities relating to middle-grade training

In the course of this report, several problems dealing with middle-grade training and comprising other forms of activity will be examined. The Council will be asked to express its opinion as to the desirability of increasing the number of study tours similar to the one which is to take place in 1962, for twelve officials in the field of community development and agricultural extension (Chapter 4, Part III). The Council will also be advised of the steps taken to arrange training periods for young engineers on public building sites (Chapter 7, Part III). It should be noted that the Fund for the training of middle-grade personnel could be used to further such activities, although, if it is put to such use, the essential factor must on no account be forgotten, namely that the Fund will be devoted to programmes which have been described above in detail.

PART TWO

NATURAL RESOURCES

CHAPTER I

CONSERVATION OF NATURE

" The survival of our wildlife is a matter of grave concern to all of us in Africa. These wild creatures amid the wild places they inhabit are not only important as a source of wonder and inspiration but are an integral part of our natural resources and of our future livelihood and well-being.

" In accepting the trusteeship of our wildlife we solemnly declare that we will do everything in our power to make sure that our children's grandchildren will be able to enjoy this rich and precious inheritance.

" The conservation of wildlife and wild places calls for specialist knowledge, trained manpower and money and we look to other nations to co-operate in this important task—the success or failure of which not only affects the Continent of Africa but the rest of the world as well ”.

With these words, the Prime Minister of Tanganyika, then Mr. Nyerere, and two members of his Cabinet solemnly declared the resolution of their Government: their statement was considered to be so important that the Conference adopted it as the " Arusha Manifesto ”.

The appeals of the Commission and the Scientific Council have therefore been heard. For years past, they have been endeavouring to awaken public opinion both to the risks of ill-considered destruction of natural wealth and to the spiritual and economic advantage of rational exploitation of this wealth. Leaders of Africa, yesterday colonial powers, today and tomorrow the independent countries, must be convinced that the rational development of natural resources is both possible and profitable. Further, the peoples of Africa must be shown the danger which will exist if their natural heritage is not safeguarded. The economic, nutritional and financial consequences of such a policy would be disastrous: ecological balance is often so delicate that any attack on this balance could have drastic repercussions. Finally, the aesthetic, ethical, philosophical and spiritual aspects of nature, to which no one can be indifferent.

A conference was held in Bukavu in 1953 under the aegis of the Commission and the Council (Conference on the Conservation of African Fauna

and Flora). On this occasion, discussions were held on the policy to be recommended to the colonial powers within the framework of the London Convention of 1933. In 1960, the Council urged the convening of a symposium on the conservation of fauna and the economic aspects of the problem. As the General Assembly of the International Union for the Conservation of Nature had also prepared an "African special project", it was decided that the symposium should be jointly organised by the two organisations (IUCN and CCTA), and would thus constitute the second stage of the "African special project" (recommendation XIX of the Twelfth Meeting of the Council).

Arusha Conference

The entire IUCN project consisted of a first stage, a tour of East and West Africa by the Secretary General of the organisation, Mr. G. G. Watterson. This first stage was followed by the CCTA/IUCN Conference on nature and natural resources in modern African States and this will now be considered.

As mentioned above, the purpose of the Conference was to show the possibility and economic advantage of developing natural resources—especially big game. The first part of the Conference, devoted to administrative and technical problems, was of particular interest to specialists and administrators. Several interesting field excursions in the areas surrounding Arusha were organised: these excursions were both impressive and convincing. The second part of the Conference was designed for leading African personalities with some authority over policies adopted by their respective countries, who are in a position to awaken public opinion and convince Governments: the second part dealt with the value of this exploitation within the general framework of the economic development of an entire area. In this connection, delegates stressed touristic activities and the nutritional advantage, for populations generally lacking in proteins, of meat acquired in particularly economic conditions.

The Conference took place at the beginning of September 1961 and was highly successful. Approximately 140 delegates and observers attended and over twenty journalists followed the proceedings very closely. Several Ministers were present, including two members of the Government of Tanganyika, two from Dahomey, one from Ruanda-Urundi, one from the Federation of Rhodesia and Nyasaland and one from Uganda. The Governor of Tanganyika opened the Conference with a remarkable speech and, as already recorded in this report, the meeting was profoundly impressed by the unexpected speech delivered by Mr. Nyerere and his Ministers.

A number of delegates regretted the length of some of the speeches, the lack of clarity and accuracy of certain discussions. The Chairman of CSA, one of the prime movers of the Conference, and the Scientific Secretary do not share this opinion. The purpose of the Conference, which cannot be overemphasised, was to attract the attention of the whole of Africa, through

the delegates representing them, and, for this reason, it was important that these delegations should strengthen their own convictions, reaffirming their faith in the principles laid down on this occasion. At the most, it could only be regretted that the Africans participating were so few in number (only a quarter to a third of the participants).

The Chairman will report on the work and conclusions of the Conference. This latter elected to confine itself to general recommendations and made only one exception which, in the opinion of the Conference, was justified. The authorities of the Congo (Leopoldville) were congratulated on the well advised and efficient measures taken since independence to preserve their national parks and to ensure the protection of wild life, despite all the disturbances which have troubled the country during the past months. Other recommendations were devoted to the place of wild life conservation in general policies for soil utilisation and in the overall economic development of the country, its effect on the development of tourist activities, on the role of economists in the study of the development of natural resources. One recommendation, with which the Chairman of CSA is particularly pleased, requests the total and final protection of certain bounded areas, in conditions laid down by the London Convention of 1933, where typical collections can be preserved in their natural habitat: these collections are very valuable in contributing to our knowledge of natural wild life. Some recommendations dealt with the training of personnel and future projects for action: these subjects are discussed in other sections of this report.

Future international action

The "African special project" of IUCN which has already been mentioned, included a third stage which was considered at Arusha. A team of two experts has been placed at the disposal of countries, to advise them on various problems arising in connection with wild life conservation in the development of a territory. Nobody is more competent than IUCN to carry out this mission, in view of its world authority and specialist ability.

FAO is obviously not able to dissociate itself from conservation problems. Its assistance was therefore requested during the Arusha meeting. UNESCO and FAO will be especially active in the field of training, as will be seen later in this report, and it is to be hoped that the Special Fund of the United Nations will also agree to support the requests of IUCN.

The subject has aroused great interest throughout the world. Professor Monod will present a report to his colleagues, on the Conference that is to take place at Seattle, at the beginning of July 1962, to deal with National Parks. This Conference is being organised jointly by IUCN, the National Parks Services of the United States and the Natural Resources Council of America. It is convened in accordance with a recommendation adopted at Warsaw in 1960, by the Seventh General Assembly of IUCN and will discuss the scientific, economic, cultural and administrative problems arising

from the creation and maintenance of national parks, as well as such international co-operation as may be desirable in this field. The Council will be represented at that Conference by Professor Monod.

The role of CCTA/CSA will be more modest, but none the less important. Grouping the countries of Africa in international co-operation, they will assist with training programmes, especially those intended for trainees on the lower level, and should also have a part to play in the revision of the London Convention of 1933 and in the adoption of a Nature Conservation Charter for Africa. Careful distinction should be made between these two documents: the first of these is a detailed document laying down the degrees of protection required for the various animal and vegetable species, the second is a statement of principle which should serve as a preamble to legislative or administrative measures adopted by countries in application of the Convention. It is in this sphere of general co-ordination and regular co-operation that CCTA/CSA is able to play the most useful part. It is interesting to note that such an eminent and impartial authority as Sir Julian Huxley shares this view.

The Seventeenth Session recognised that "the measures adopted within the scope of the 1933 Convention were now out of date, although in essence they would still seem quite applicable". The Commission therefore recommended that the Convention should be revised in the near future. This recommendation met with the unanimous agreement of the Governments. In respect of the Charter, the Commission noted with interest the project submitted at Abidjan by the Chairman of CSA and asked the latter to prepare the final text at an early date. In accordance with the Abidjan recommendation, this document should be submitted to the competent national and international authorities, and in particular to CSA. It should then be put before the Governments of Africa for final adoption. Members of CSA have received, or will receive at Muguga, the project prepared by Professor Monod and the Thirteenth Meeting of the Council will be called upon to make appropriate comments, in order that the Charter may then be circulated as proposed.

The Council will also note with satisfaction that the Commission approved the proposal submitted by the Executive Committee of CSA and appointed Mr. J. Verschuren, former biologist of the Parc Albert, in the Congo, now on a mission in Tanganyika, as Inter-African Correspondent for Nature Conservation, to replace Professor Monod who had only accepted this post as a temporary measure. The Council will probably wish to give directives to the new Correspondent.

Training of senior staff

The Arusha Conference devoted considerable attention to the problems of the training of senior staff. Two levels were considered separately. On the one hand, it is desirable to facilitate the training of highly qualified

personnel, and this should be done at higher education level; UNESCO has signified its interest in such an undertaking. On the other hand, the training of middle-grade personnel is a matter of urgency. This is the object of Joint Project No. 22, set out in Chapter 3 of Part I (Training Centre at Mweka for English-speaking trainees from East Africa.)

CHAPTER 2

CLIMATOLOGY, HYDROLOGY, GEOLOGY

Climatology and meteorology

It is expected that the Climatological Atlas (Joint Project No. 1) is to be published in 1962. It contains maps to scales of 1/5,000,000 and 1/15,000,000 giving useful information in the fields of pluviometry, humidity, hygrometry, insolation. The Atlas will be of interest to specialists but will also form an invaluable working basis for those who are anxious to organise the planned economy of their country and who must, therefore, have accurate basic information, especially in respect of rural development. The Atlas includes fifty-six maps, thirty-five of which have already been printed. The Budgetary Committee has adopted the final financial provisions required, and nothing further should now delay the completion of the work. Once more, the Secretary-General would like to extend very warm thanks to Professor Jackson, Inter-African Scientific Correspondent for Climatology and Cartography and his staff, the Witwatersrand University and the Surveys and Maps Department of South Africa.

At its Eleventh Meeting, CSA stressed the need to train meteorological assistants. This recommendation was taken up by the World Meteorological Organisation. The subject is dealt with in Chapter 3 of Part I, under the heading of "training of middle-grade personnel".

Co-operation within a river basin

The International Conference on Hydrology (Nairobi, January 1961) recommended that, in the field of hydrology, priority should be given to the establishment of close co-operation between countries situated within a common river basin. In its Recommendation XXI, the Twelfth Meeting of the Council welcomed this trend which it considered as both interesting from a technical point of view and offering probable openings for development in the economic field. The Council stressed that joint development projects could thus be drawn up, enabling each country to make the best use of the resources provided by the river. CSA even alluded to the extensive assistance programme which could be carried out to provide for the development of whole areas situated in a common river basin.

(a) Advisory Committee for the Niger

The Advisory Committee for the Niger, created at Segou in May 1961, which includes the five countries bordering on the river Niger (Dahomey, Guinea, Mali, Niger and Nigeria), constitutes the first body established by the Commission in this field. At its first meeting, it achieved an agreement between the five riparian states, whereby their Governments are committed to consult one another each time they consider any major project or series of small projects which may affect the regime of the water beyond the boundaries of the country concerned.

A first joint operation undertaken under the aegis of the Committee is at present in progress. A hydrologist of the Italconsult firm is carrying out a survey, financed from United Nations funds, covering the whole course of the river. It is expected that this survey will be completed by the end of 1962 and the Committee will hold its second meeting at Niamey to consider the results.

Other developments can be expected and the Secretariat has been unofficially informed that at the Second Meeting of the Committee, one of the riparian countries intends proposing the systematic consideration of projects of interest to several riparian countries, whether in respect of irrigation or of navigation.

(b) Co-operation between countries bordering on Lake Chad

In the same spirit, it was decided to convene meetings of hydrologists of countries within the Chad basin. The object of this meeting is also to ensure permanent desirable co-ordination between these countries, to organise the exchange of information and consultations and to examine the possibility of proposing joint projects.

The countries concerned are the Cameroun, the Chad, the Central African Republic, the Niger and Nigeria, the Chad basin being taken in its widest sense as including the rivers Chari and Logone. The meeting will take place at the end of October 1962, at Fort-Lamy. The Inter-African Co-ordinator, Dr. Rodier, will be responsible for its preparation. The agenda will include problems of development, scientific problems and technical problems. It was intended that the meeting should take place at the same time as that of the Chad Co-ordination Committee which was attended last March by specialists on fisheries and hydrobiology. Unfortunately, the meeting of hydrologists had to be postponed and it will not be possible to bring these two groups of specialists together for joint discussions. The Secretariat hopes, however, to maintain close liaison between the two Committees, the final objective being possibly to propose a development plan grouping several riparian countries and covering a variety of forms of development: fishing, hydrology, agriculture, etc.

(c) Other river basins

At the Twelfth Meeting of the Council, the Secretary-General pointed out the need to establish close co-operation between countries bordering on

the Bafing and the Senegal. This project has been taken up in a somewhat different form by the United Nations who are now examining, with three of the countries concerned (Mali, Mauritania and Senegal), the possibility of undertaking an operation under the United Nations Special Fund, to provide for the development of part of the river basin.

Other activities in the field of hydrology

The Commission has turned its efforts towards co-operation within common river basins, as reported above. There is therefore little progress to note in respect of other activities proposed by the panel of correspondents in the field of hydrology: list of specialists on hydrology, glossary in three languages of current terms and expressions, elementary bibliography, survey of catchment areas of 1,000 km².

The West African symposium on water supplies, which took place at Monrovia in January 1962, will be the subject of a report in Chapter 7, Part III. The important question of the establishment of a training centre for French-speaking hydrologists and assistant hydrologists (JP 23) was dealt with in a relevant paragraph of Chapter 3, Part I, under the heading of "Training of middle-grade personnel".

Geology and geophysics

The report on the activities of the Commission in the field of geology will be very short, as in this field Dr. Haughton has managed his bureau with every success: it has run smoothly and to the satisfaction of all the experts. Geological abstracts concerning Africa have been published regularly every two months and abstracts of 380 publications in 1961. Dr. Haughton represented CCTA/CSA at several interesting international meetings.

Regional co-operation in this field is also proceeding very satisfactorily. The East Central Committee is to hold its third meeting in 1963 in Uganda, taking as its main theme relations between geological surveys and the development of mineral resources in tropical Africa.

The Southern Regional Committee met in Pretoria in September 1961. Ten countries were represented, as well as the African Geological Surveys Association and several private enterprises. On the agenda were the following items: study of geological systems in the Transvaal, Lomagundi and Katanga; karoo sedimentation; and pre-karoo palaeogeography. These subjects gave rise to technical discussions which the Secretary-General must confess to have had difficulty in understanding.

At the request of the African Geological Surveys Association (a long-established body which has covered Africa as a whole since 1932) part of the debates were reserved for discussion of the tectonic map for Mediterranean Africa for which a Co-ordinator was chosen, Dr. F. C. Truter. The Committee reached several conclusions regarding the presentation of this map and recommended that a metallogenetic map should be prepared to follow the tectonic map.

The Association of Geological Surveys, following upon the discussions in Pretoria, held a symposium in Paris, in November, to deal with the tectonic map of Africa. Dr. Haughton represented the Commission, as did the three regional Co-ordinators appointed by the regional committees. The latter were invited to prepare regional tectonic maps to be transmitted to a General Co-ordinator, Dr. Choubert, from Morocco, before the end of June 1962.

The Council will also note the convening of a last meeting of the Southern Committee, in Pretoria. Once more it called the attention of Governments to the necessity for further mineral exploration, research concerning underground water sources, construction of dams, aerodromes and roads, etc., by means of detailed geological surveys. To ensure that no opportunity for development in a country is neglected, it is essential to have competent personnel available at the various levels, either on a temporary basis by relying on outside technical assistance or by training local personnel at the earliest possible date. A permanent Committee was set up to study this problem and to report on it to the Commission.

Regarding training, an interesting suggestion was put forward by Dr. Obermüller, Associate Member of the Council. This suggestion is now the subject of a more detailed report on "Training of middle-grade personnel". Dr. Obermüller suggests that small teams should be formed, consisting of two officers with elementary training in geology and geodetic surveying.

CSA had intended holding a second meeting of specialists on geophysics, to consider the results of the International Geophysical Year in Africa. Basing itself on reports presented to it, the Council now considers this meeting no longer essential, the researchers and experts being already in close mutual relations.

However, the Commission keeps abreast of progress in this sphere of geophysics, since studies in this field are of importance to the understanding of the natural economic medium. Scientific Correspondents have been appointed for seismology, geomagnetism, oceanography, ionospherics, and to cover the entire geophysical field.

CHAPTER 3

PEDOLOGY, SOIL CONSERVATION AND UTILISATION, PHYTOGEOGRAPHY

Pedology

(a) Pedological Map of Africa (Joint Project No. 11)

The Council has been informed of the fact that the third draft of the map was presented at the Seventh International Congress on Soil Science, at Madison, in August 1960. Dr. d'Hoore has now prepared a fourth draft,

the last but one, with the assistance of correspondence exchanged as a result of this meeting. A meeting was organised in Paris in September 1961 to consider this draft and discuss it, in conditions similar to those prevailing at Dalaba in 1959. Professor Aubert, Member of CSA, took the Chair and Dr. d'Hoore played a prominent part. Eleven countries and three organisations were represented. After three days of technical discussion, unanimous agreement was reached on all points as to what was to appear on the map and on definitions which had previously been the subject of certain differences. This agreement deserves special emphasis: several years ago, few people believed that pedologists from opposed schools of thought would come to the same conclusions.

The fifth and last version of the map will be prepared during the coming months and the map will be published at the beginning of 1963 (the necessary funds having been granted by the Commission, in the 1962 budget, and assistance having been requested from the American authorities for the printing of the maps). The map will cover the entire continent of Africa, including North Africa, and will consist of six maps on a scale of 1/5,000,000, utilising the base maps supplied by the Inter-African Correspondent for Cartography under Joint Project No. 7. A 200-page article will be published with the six maps, describing the system of classification and definitions adhered to throughout the continent.

The remarkable nature of this project should be stressed: tribute was paid to Dr. d'Hoore whose authority and competence have aroused great admiration with pedologists throughout Africa, and whose endeavours contributed to making this project possible (Rec. XXIV of the Twelfth Meeting of the Council). In scientific circles, this project will further enhance the reputation of the Scientific Council.

(b) World soils map

The Congress at Madison, already referred to, stressed the great importance of pedological mapping and the need for standardising definitions and nomenclatures in this sphere. FAO in accordance with suggestions put forward at Madison, hopes to publish a world soils map on a scale of 1/5,000,000. The Commission has given a favourable reply to FAO's invitation. The work done by SPI will therefore be placed at the disposal of the relevant departments in Rome, it being understood that in the final publication mention will be made of the responsibility of CCTA/CSA in the compilation of the pedological map of Africa. Dr. d'Hoore, as a member of the advisory committee which is to supervise the work and advise the two Specialised Agencies, will be able to give FAO his full assistance.

A CCTA/FAO symposium may be held in Lovanium (Leopoldville) in 1963 or 1964 to enable pedologists from Africa to have discussions with pedologists from other tropical areas. This symposium would take its place in the preparation of FAO projects. Two items on the agenda would be respectively the red and yellow soils of tropical regions, and the comparison

between the pedological map of Africa and those of tropical regions elsewhere, with special reference to the map of Latin America; a point-by-point comparison will be made under this heading of the classifications adopted in tropical regions. FAO would invite a Latin American expert and one from South-East Asia to be present. The last point on the agenda would deal with the present state of pedological studies in Africa. It would be useful to know the views of the Council and, in particular, those of Professor Aubert.

(c) Inter-African Pedological Service

The SPI Council of Management met for the fifth time in Paris in September after the meeting on Joint Project No. 11. The offices of the Service, which were formerly in Yangambi, had to be transferred due to the disturbances which rendered working conditions difficult in the Stanleyville area. The imminent completion of the soils map raises the question of the future of the Service. The Council of Management is aware of the fact that there will still be many matters to be attended to after the publication of the map, matters which will require close liaison between pedological departments throughout Africa. It did not however feel able to ask Member Governments to make further financial contributions to maintain the Service after the completion of the map.

It was decided, therefore, to disband the Service on 31 December 1961. Final work on the map will be carried out by Dr. d'Hoore, as Director of Joint Project No. 11, and will be financed by the Inter-African Research Fund.

As for the other duties of SPI (cf. Rec. XXIV *(b)* of the Twelfth Meeting of the Council) they have been transferred to BIS which will maintain liaison between pedologists in Africa. Regional Committees, whose activities are to be considered, will organise periodic meetings of pedologists from the same area to give liaison a realistic nature. The Seventeenth Session is requested to take note of the decision of the Council of Management of the Service.

Inter-African Soils Bureau

Since its re-organisation, in 1959, in accordance with the principles laid down by the Council, BIS has given full satisfaction. Its Director, Dr. Fournier, has shown exceptional competence, and great dynamic qualities, together with a sense of human relations which is of particular value for the officers of the Commission. Since November 1961, he has an assistant: Dr. Bourke, an English agronomist, who has taken up his post in excellent conditions.

Dr. Fournier has been able to establish a network of excellent relations with Governments. He has carried out a further mission in 1961, during which he visited Kenya, Uganda, Tanganyika, the Congo (Leopoldville) and the Congo (Brazzaville), the Central African Republic and the Chad. On the other hand, as the Government departments in the new independent countries have become more stable, working relations have been extended between

BIS and all the countries of Africa. Never has the volume of requests received from these countries been so great. The Council will note this with satisfaction. Governments ask for advice on the use of equipment, the application of certain agricultural methods, etc. They also ask for documentation and bibliographies. The average number of requests for documents, each month, which was of the order of ninety since 1959, has risen to more than 200 during the past year. In the same way, the number of requests for complete bibliographies has risen from fifteen to twenty-seven.

It will be noted also that the Bureau has become known in ever widening circles, that international organisations and foreign countries apply to it to an ever increasing extent and that many experts make use of the unique documentation collected over a number of years. Two facts illustrate this statement. No less than forty-five specialists have worked in the premises of BIS during the year, as against fifteen in 1959. The Director of the Soils Institute at Allahabad (India), conducting research work on the use of a mixture of straw and cinders as a fertiliser, has asked to extend this research work to Africa, and eight centres have agreed to carry out experiments.

The Bureau is maintaining its programme of publications; 150,000 index cards have been sent out in the course of the year. The monthly analytical bulletin has been published regularly. The situation is not so good, however, in respect of *African Soils*. The number of articles contributed has decreased year by year, probably on account of the many occupations of scientists working in Africa.

The Council of Management held its Thirteenth Meeting in Paris on 7 and 8 May. It defined its instructions to BIS and endorsed the recommendations entrusting the Bureau with the former functions of SPI.

Finally, it will be noted that Dr. Fournier maintains close liaison with several organisations, among which, in its own field, EEC, FAO and UNESCO. In addition he has been entrusted with maintaining permanent liaison on behalf of the Commission with two organisations having their headquarters in or near Paris: IUCN and UNESCO.

Regional committees and training courses

CROACUS (West Africa) has resumed its activity. Dr. Fauck has been appointed Secretary, in the place of Dr. Maignien who has left Africa. The Committee held its Fourth Meeting at Samaru (Northern Nigeria) in November 1961. Discussions centred on problems of conservation and utilisation of interest to the middle belt, with particular stress on the study of soil/water relations. An excursion was organised in the Kokwa area. Discussions dealt with memoranda presented by several members of the Committee, particularly with the definition to be given of the middle belt, an area where the dry season (less than one inch of rain per month) lasts less than four to five months.

The delegates at the CROACUS meeting expressed the wish that their Governments should provide for annual meetings of the Committee in order

that the heads of technical departments concerned should have an opportunity of meeting at regular intervals to discuss problems of common interest. Considering that this form of regional co-operation fits in with its general policy, the Commission endorsed the recommendation of the Committee, and the Fifth Meeting of CROACUS will take place early in 1963. It will deal with the development of soils in mangrove areas and with alluvial soils, particularly for paddy rice cultivation. It was suggested that the meeting should take place in Sierra Leone. The Council will certainly welcome the fact that CROACUS has resumed its activities, as this had been the object of some concern during recent years.

CRACCUS (Central Africa) was, in principle, to have held its fifth meeting at the time of the CCTA/FAO symposium on the classification of soils of tropical regions if that meeting was held (in Leopoldville). The session would be mainly devoted to the study of rural development plans with a view to intensification of agriculture and conservation of the soil. Each delegation would be asked to outline the guiding principles of its country's policy, quoting examples of development schemes in hand or at the planning stage.

SARCCUS (Southern Africa) is very active. After organising a six-day study group, in 1961, on problems of agricultural extension, it held its eighth meeting at Lobatsi, in May 1962. In view of the changes in the composition of the Commission, it should be noted that SARCCUS has now become completely independent, under the direction of its Secretary-General, Dr. Ross.

Two regional training courses on soil conservation will be organised in October/November 1962, at Ouahigouya, for English-speaking and French-speaking people respectively. They are intended for middle-grade personnel (site supervisors and officers responsible for agricultural and forestry sectors). Training will, therefore, be of a practical nature. That is the reason for choosing Ouahigouya, at the centre of a region where interesting conservation schemes have been undertaken. The course will be completed by a series of visits to anti-erosion sites. The theoretical part of the courses, lasting approximately three and a half weeks, will include the mechanism and the forms of erosion and the principles of erosion prevention, the agronomic aspects of conservation problems, problems of "génie rural" and the forestry aspects of the problem.

The Director of the courses will be Dr. Fournier, Director of BIS, who has prepared this scheme, in consultation with Professor Aubert, Member of CSA.

Joint Projects undertaken within the scope of BIS

(a) Map of the dangers of soil erosion (Joint Project No. 20)

The Council has already been informed of the co-operation established between the European Economic Community (EEC) in Brussels and BIS,

to study certain aspects of the problems of reafforestation and soil conservation in tropical zones. It has also noted the project submitted by the Director of BIS, at the request of EEC, to establish a map showing the dangers of soil erosion in Africa (Joint Project No. 20).

Dr. Fournier has now completed this work, which will be presented by Professor Aubert, at Muguga. The map shows, on a scale of 1/10,000,000, in three colours and black, the variations in the proneness to erosion in Africa, that is to say the variations in the climatic aggressivity in relation to relief and nature of the soil. The map has given rise to a variety of comments in scientific circles. This original manner of considering the problem has led Dr. Fournier to publish a map which, at first sight, is highly surprising, and it is likely that for many years discussions will take place on the method applied and the results achieved. This suffices to stress the value of the project.

The Commission has expressed its satisfaction. It has endorsed an idea dear to CSA, and recommended that the basic data which must be available before any rational general planning is undertaken should be presented in a simple and standard manner, generally in the form of a map.

(b) Survey for the assessment of land under shifting cultivation and under intensive cultivation

Encouraged by this first success and in accordance with recommendation XXV of the Twelfth Meeting of the Council, Dr. Fournier is studying the possibility of proposing other joint projects, which could be financed from outside sources of assistance. This latter proposal was approved in principle by the Thirteenth Meeting of the Council of Management of BIS. It has been actively pursued and Professor Aubert will report to the Council on the matter. The suggestion is to conduct a survey on the evolution of soil in tropical regions under shifting cultivation and under intensive cultivation. The experts consider that the raising of the standard of living which is the objective of countries in course of development will often result in shifting cultivation giving way to more modern methods of cultivation. The tropical natural environment is, however, in a state of uncertain balance. The aggressivity of the climate, the proneness of the soil to erosion, the unstable character of its structure, the rapid drop in fertility, call for careful study, in order to adapt farming methods to intensive cultivation.

Dr. Fournier's proposal is to examine published documents, to submit the results of bibliographic work to a few specialists and to supplement this first survey by field work in order to prepare a synthesis report.

It would be desirable that the Thirteenth Meeting of the Council should express its views on this problem and, if it deems it advisable, should reserve one of its meetings of specialists, for instance in 1965, to the final consideration of the survey proposed by Dr. Fournier.

(c) Joint action in the Fouta-Djallon

The Council has already been informed of the action undertaken by CCTA/CSA, at the request of the Government of Guinea, in the Fouta-Djallon region. The main lines of a plan of management were drawn at a meeting organised at Mamou, in May 1960. At the request of the Guinean authorities, a five-member mission worked for one year in the region, to work out the details of the plan outlined at Mamou. The mission consisted of two pedologists, two agronomists and one hydrologist. The pedologists carried out the soil survey and their samples are at present being analysed in various laboratories. One of the agronomists conducted an overall survey which will enable him to prepare the maps which will serve as a basis for future work. The other will concentrate on cultivation methods and problems of land utilisation. The part assigned to the fifth expert was to re-establish the network of hydrological observations which is of particular value to the upper basin of the Senegal (Bafing) and for the region as a whole which provides the water supplies of western Africa. A meeting of experts is planned for the beginning of 1963, to follow up the Mamou meeting which took place twenty months earlier. The object will be to present to the Guinean Government the conclusions of the mission and concrete proposals within the scope of a management plan for the Fouta-Djallon.

The success of this mission should be noted. They were carrying out a type of operation that was new to CCTA/FAMA. Its completion was fraught with many difficulties, particularly as regards the solution of practical problems. The Secretariat will have pleasure in reporting on it to the Council at Muguga.

Phytogeography

The CSA Meeting of Specialists on Open Forests, held at Ndola in November 1959, recommended that the project suggested by the Meeting of Specialists on Phytogeography at Yangambi in 1956, concerning the publication of a phytogeographic atlas for Africa, should be implemented. The Council has had occasion to discuss this matter several times and last year, at Pointe-Noire, it recommended (Rec. XXVI) that the preparation of an atlas of types of vegetation should be actively pursued. On the basis of this decision, consultations have taken place between the Chairman of CSA, Dr. Bates, Member of the Council, Professor Lebrun, Mr. R. W. J. Keay, and the Scientific Secretary. This latter will report to the Thirteenth Meeting of the Council on the detail of the work to be planned and in particular on the need to appoint a Co-ordinator who, in approximately two years, would carry out a survey on the spot and by correspondence and, in so far as he would consider it necessary, would propose the convening of a meeting of specialists.

CHAPTER 4

PHYTOTECHNICS

Savannah zone cereals

In accordance with the recommendation of the Council, the Commission has decided to hold a meeting, every eighteen months approximately, to deal with a crop of major economic importance. The next symposium will deal with savannah zone cereals (sorghum, maize, millet) and will take place at the end of August 1962, at Dakar-Bambey. It will be organised jointly with FAO.

At the request of the latter organisation and after consultation with Dr. Bates and Dr. Russell, members of CSA, the agenda has been modified. It now includes five main items:

- Role of cereals in savannah zone agriculture.
- Improvement of yield by farming methods.
- Improvement of yield by the selection of varieties.
- Production and distribution of improved seeds.
- Co-operation in the field of research.

The first comments received in respect of this symposium are favourable. The Assistant Scientific Secretary will attend and will report to the Council.

Future symposia on individual crops

(a) Paddy rice cultivation

It was agreed that the next symposium should deal with paddy rice cultivation (Rec. XXVIII of the Twelfth Meeting of the Council). This question is of particular interest to several meetings, among which the Fifth Meeting of CROACUS which deals with the reconversion of mangrove zones into paddies. M. Angladette and M. Porthères have kindly agreed to assist the Scientific Secretary in the preparation of the symposium which will be organised jointly with FAO. The Thirteenth Meeting of the Council will be asked to examine the draft agenda prepared by Professor Porthères. The Meeting will probably take place in Madagascar at the end of 1963, or rather in 1964.

(b) Further meetings

Subsequent meetings will deal with fodder and fodder crops, then with cassava and yams, in accordance with the proposals of the Council.

Beekeeping

At the Twelfth Meeting of CSA, the Scientific Secretary was requested to submit a report to the Council on the development of beekeeping in Africa. It is thought by some experts that an important resource could thus be

developed in certain semi-arid zones planted with woodlands, as for example in the case of vast areas of East Africa.

Dr. F. G. Smith, Secretary of the Bee Research Association has conducted a survey, on the completion of which he concluded that it would be premature to recommend the establishment of an African research institute on beekeeping. Taking into account the interest shown in various parts, particularly in Madagascar, other proposals will be submitted in the near future and the Scientific Secretary will report to the Thirteenth Meeting of the Council on this matter. An operation within the scope of technical assistance is at present in progress.

Mechanisation of agriculture

It will be noted that the heading of this item (in French) has been changed. Reference is no longer made to "mécanisation de l'agriculture" but to "machinisme agricole"; this is in the spirit of the recommendations of the Council, giving priority to hand implements and animal drawn equipment rather than to power driven equipment.

The Council has been informed of the Second Meeting of the Committee which took place at Segou in April 1961. The Third Meeting will take place at Lagos in November 1962. In accordance with the recommendations of the Second Meeting, the main themes will be the following:

—Problems of applying mechanisation to the production of maize, sorghum and millet.

—The mechanisation of crop-protection against diseases and pests.

The following interesting suggestion, made by the Nigerian authorities, was immediately taken up with interest by the Commission. It was proposed that the Committee Meeting should be held to coincide with the International Fair which is to take place in Lagos at the beginning of November 1962. The attention of exhibitors will be drawn to the Committee Meeting and they will be invited to present equipment likely to be of interest to members of the Committee.

Finally, it should be noted that the Secretary of the Committee maintains contact with the members. The first issue of the Information Bulletin has been published and distributed. The Committee recalled its purpose: to provide those working in the field with practical information about developments elsewhere covering the technical, economic and social aspects of mechanisation. A bibliographical section will be included, as well as accounts by the Secretary of his tours.

Mr. Garrard plans to make regular tours of Africa. His first trip was made at the time of the meeting in Segou.

CHAPTER 5

PROTECTION OF AGRICULTURAL PRODUCTION

Inter-African Phytosanitary Commission

African Governments are now fully aware of the necessity for carefully controlling the importation and circulation of plants and other products which may be carriers of virus or diseases as yet unknown to the continent of Africa. They realise that it only requires one infected germ-carrier to enter the continent for an entire crop to be endangered, or even completely destroyed. The examples of the vine and potato in Europe and cocoa in Africa have not been forgotten. There is no doubt that the new leaders of Africa will be determined not to compromise the future of their countries with unwise measures or even through negligence.

The work of the Phytosanitary Commission is, therefore, of vital importance and it is encouraging to note that, whereas for non-scientific reasons, Ghana is prepared to withdraw from CCTA, this same Government nevertheless remains associated with the Phytosanitary Commission. We have every reason to hope that South Africa and Portugal will remain in the Phytosanitary Commission, even after their departure from CCTA.

The Scientific Secretariat is at the height of its responsibilities and participants at the Sixth Meeting at the Commission were unanimous in recognising this. They congratulated the retiring Secretary, Mr. Barat, on his work, and appointed to his post a man of experience, Mr. Caresche, who has served for many years in Indo-China and Madagascar. There is every reason to hope that Mr. Caresche will be able to continue with the work of his predecessor in maintaining good contacts in Africa during his tours there, and continuous activity with the assistance of the Commonwealth Institutes for Entomology and Mycology. He will also have to prepare the annual meetings, and the projects which are to be organised.

The Sixth Meeting of the Commission was held at Ibadan in October. Seventeen countries were present, a record attendance which justified the decision taken a year ago to hold alternate meetings in Africa. Resolutions were inspired by a greater desire for practical proposals than has been the case in previous years. Every year the Commission reviews the measures that it recommends to Governments to protect them from new viruses and diseases liable to endanger crops such as the date palm, fruit, yam, tobacco, etc. In particular, the tobacco virus, introduced by seed potatoes from countries in Europe, was mentioned.

The Scientific Secretary has prepared a memorandum on phytosanitary methods applicable in Africa, and it is in course of publication. The Commission has also recommended that CCTA should assist Governments in informing and educating travellers on the dangers of unauthorised plant importation, by means of a wide circulation of propaganda pamphlets. Proofs of these pamphlets will be submitted to the Seventh Meeting.

Quarantine stations were discussed at some length. To establish one quarantine station requires a staff of many scientists, including research workers who specialise in different fields of research applied to plant protection. It is not possible to plan for the establishment of a station in every country. Regional organisations should be set up for two purposes: to protect existing crops, and, by means of new imports, to aim at increasing the number of available resources. It would be very costly to set up such regional stations. Could a proportion of this expense be met within the framework of the procedure accepted by CCTA for joint projects? The Secretary of FAMA will study this matter during the coming year, when accurate scientific information on the subject, assembled by the Secretary of the Phytosanitary Commission, is available.

The meeting in Ibadan also recommended that Governments should supply ports with the necessary facilities for disinfecting the holds of ships and oblige masters of ships to carry out these operations. These measures are not costly and can be of infinite value in the protection of stored food products. This recommendation was endorsed by the CCTA/FAO Symposium on Stored Food Products (Freetown, February 1962), which we shall be discussing later.

Finally, and it is this last recommendation which the Secretary General is most anxious to bring to the attention of the Thirteenth Meeting of the Council, the Phytosanitary Commission made a proposal, in terms of which missions, consisting of qualified experts, would be sent to countries asking for assistance. These missions would study, with the Governments concerned, means of organising the control of plant importation and assist with the selection, recruitment and early technical training of the staff required to carry out this control. FAMA will give priority to this recommendation. It is estimated that the cost of organising these missions would amount to about £30,000 for the first three years.

One of the functions of the above missions will be to assist in the training of junior personnel responsible for plant importation. This question has been dealt with under the heading of training of middle grade personnel (Chapter 3, Part I).

The Phytosanitary Commission will hold its Seventh Session in London in October. The agenda will include, in addition to the usual items (legislation, quarantine stations), a discussion on the education of workers and the training of personnel.

Weed control

The harmful effect of weeds on the African economy should not be under-estimated. Considerably reduced yields may be caused by weeds which often turn economic crops into very uneconomic propositions. Problems of this nature are in one respect very different in Africa, where chemical products cannot be used as in other continents. A first meeting on weed control, held two years ago, was very successful, and the Council recommended at its

Eleventh Session, to convene an intergovernmental symposium. The agenda was as follows:

- General weed control (methods, legislation, cost).
- Weed control in specific crops (cereals, leguminous grain and forage crops, trees and plantations, grasslands, bush, forest nurseries, control of aquatic weeds).
- Weed control in African agriculture (chemical weedkillers, possible hazards and precautions necessary).
- Science of chemical weed control to alter agricultural practices and to utilise pasture land for cultivating purposes.

The symposium was jointly organised by CCTA and FAO last October, at Ibadan. Dr. Bates, Member of CSA, took the Chair at the meeting, and will report to the Council. Thirteen governments attended and also many private companies.

The choice of venue was particularly appropriate since the symposium was the first of its kind to be held in West Africa and only the second inter-African meeting to deal with this important subject.

Special attention was paid to problems of weed control in African agriculture in view of the known difficulties in extending the new techniques of chemical weedkillers in this direction. Many speakers emphasised the need for improved manual and mechanical methods for controlling weeds as a necessary precursor to the introduction of chemical weedkillers. The importance of careful instruction in the handling and usage of modern herbicides was also stressed. Attention was drawn to the development of low-cost spray equipment suitable for the application of herbicides in small-scale African agriculture.

The discussions on weed control in specific crops naturally turned largely on the several plantation crops which form such an important item in the overall agricultural economy of West Africa. Useful interchanges of information accompanied the discussions concerning the use of chemical weedkillers in cocoa, coffee, oil palm, rubber and other crops.

Detailed consideration was also given to the problem of weeds in food crops, including both cereal and legume crops, as was the control of bush and scrub encroachment in grazing areas.

The appearance in recent years of certain dangerous aquatic plant pests, notably of water hyacinth (*Eichhornia crassipes*) in the Congo and Nile rivers and of the aquatic fern (*Salvinia auriculata*) in Lake Kariba, was reflected in the anxiety of delegates from other African countries where large dam projects are contemplated to obtain all possible information regarding the prevention of these.

It was generally felt that, in view of the importance of weed control, further meetings of a similar nature should be convened at regular intervals at appropriate venues in Africa. It would be interesting to know the views of Dr. Bates and Dr. Russell in respect of the Third Meeting.

Aquatic plant pests (Joint Project No. 14)

The Twelfth Meeting of the Council noted the forthcoming publication of an illustrated brochure describing the most common aquatic plant pests in Africa. A list of fifty-nine plants has been compiled, divided into three classes:

- those of major importance ;
- those representing a potential danger and already known in Africa ;
- dangerous plants hitherto unknown in Africa.

The pamphlet is now ready; it has been published in English and is now being translated. It includes nineteen black-and-white plates and one of *Eichhornia crassipes* in colour. The English edition is published under the supervision of the periodical *Kirkia* which is the authority in the field, and is being widely disseminated to government departments and educational establishments.

Dr. Bates who has been responsible for the technical direction of the project will report to the Council on the subject. The Secretariat wishes to express its thanks for his help, as also to the British Museum (Natural History Section) for its substantial contribution to the preparation of Part III.

Stored food products

Year by year a considerable proportion of food crops is lost through poor storage conditions. CSA therefore arranged for a second symposium to be held on the subject, to deal with storage on the farm and small-scale storage generally. FAO agreed to organise this meeting jointly with CCTA. The symposium was held in Freetown in February 1962.

The agenda, modified at the request of FAO, was as follows:

—Present problems in the storage of food crops in rural Africa (traditional storage practices, losses, insect pests, rodents).

—Improvements of these practices (drying and handling, individual, collective and small-scale commercial storage, reduction of losses due to insects and rodents).

—Economic aspects of storage.

—Dissemination of information.

CCTA asked Dr. Caresche to represent it at the symposium, whilst FAO was represented by two experts. The recommendations covered the improvement of storage, precise suggestions were made to Governments in respect of methods of drying and protection and on the use of powdered insecticides. Attention was drawn to the danger of toxic products used for the protection of agricultural products and on the importance of control measures against rodents. The symposium recommended that statistics should be prepared on quantitative and qualitative losses, and that a standard system of weights and measures should be recognised, whereby it would be possible to pass gradually from an assessment of products by volume to an assessment by weight. Finally, it was proposed that Governments should

examine the possibility of stabilising the prices of certain agricultural products intended for the home market.

A particularly important recommendation of the symposium deals with the preparation of a handbook on the storing of food products in African conditions. As expressed in the corresponding recommendation, "such a manual should be prepared essentially for agricultural extension officers, public health officers, welfare officers, teachers, etc., but should nevertheless be of such a standard that it will be possible for these officers to use it in disseminating information amongst African farmers. The handbook should be well illustrated, and should be so prepared that relevant sections will be easily adapted for translation into local vernaculars for the use of farmers. The contents of the handbook should cover the following broad points: importance of food grains (cereals, legumes and oilseeds), factors affecting deterioration of food grains, farm storage, village and community storage, central storage, simple economic aspects of storage and an annex giving descriptions of some equipment in use in Africa such as driers, silos and handling equipment".

Dr. Hall, of the Pest Infection Laboratory, in England, was requested by FAO to prepare the handbook and CCTA/FAMA will contribute to the printing and distribution. This should be extremely wide and, in each country, the handbook will be translated into the vernacular languages. The Council will certainly wish to endorse this project which was approved, in principle, by the Seventeenth Session. This is an important undertaking. It may also constitute an interesting precedent. The Council may consider the possibility of recommending the publishing of similar popular handbooks in other fields.

Before closing this section of his report, the Secretary-General has pleasure in paying tribute to the spirit of co-operation that has marked the relations between FAO and the Commission in the preparation and conduct of the symposium.

Quelea

The Council considered, at the time, the conclusions of the Third Symposium on Quelea (CCTA/FAO) which was held at Bamako in May 1960. It noted that the methods applied in certain African countries, and in a particularly efficacious way in South Africa, had given very satisfactory results; spraying with parathion under suitable supervision seemed to provide an answer to a highly irritating problem. The experience of the last two years has confirmed this impression and it will be noted that following upon an assistance mission undertaken under the aegis of FAMA in Mali, the method is spreading in West Africa.

In these conditions, the authorities in East Africa, who had expressed the wish to hold a Fourth Symposium on Quelea, at an early date, to deal with co-operation in East Africa, have decided that there was no need to hold the symposium at present and it has been postponed *sine die*.

CHAPTER 6

INLAND FISHERIES AND HYDROBIOLOGY

Three years ago, certain observations were made by the Commission and the Council on CCTA/CSA activities in the field of inland fisheries; since then, they have resumed a normal course. In August 1960, the symposium on major lakes in Africa was held in Lusaka. In 1961, a fourth symposium took place to consider the question of rivers subject to heavy seasonal flooding, such as the Niger for example. Co-ordinating Committees were set up for the major lakes and river basins. In other words, the Commission maintains regular contact between institutes and departments interested in these matters. The ability of the Inter-African Co-ordinator, Dr. Daget, Director of the hydrobiology laboratory in Mali, has rendered this method of working successful.

Close liaison is of course maintained in this, with the Regional Bureau of FAO, on whose behalf Dr. Meschkat, a well-known expert in this discipline, is at present working.

Future meetings

The Lusaka symposium recommended that a fifth symposium should be held in 1963 to deal with fish farming. The proposed agenda was submitted in the Report to the Twelfth Meeting of the Council and there is no point in reverting to it. It will merely be noted that one Member Government has proposed the addition of an item: "the role played by fish farming in the general development of agriculture". In respect of basins subject to heavy seasonal flooding, which were the subject of the Fort Lamy meeting, the participants recommended that a further symposium should be convened to deal with them, in 1964. However, the experts consulted and the Scientific Council have considered that it would be better to give priority to the Co-ordinating Committees for the Major Lakes and the two above-mentioned symposia will be postponed until 1964 and 1965, in consequence.

Nevertheless, the Council will have to give some consideration to the desirability of holding a meeting of specialists to deal with a subject of interest to fisheries. This subject was raised during the CCTA/CSA symposium at Freetown, on the storing of food products. The participants recommended that research work should be undertaken "to determine the most efficient storage techniques in relation to local conditions". The Scientific Secretary consulted the Inter-African Co-ordinator and asked him whether he thought it was desirable to devote a meeting to the study of methods of conservation of fish, such as smoking, drying, salting, refrigerating. In view of Dr. Daget's reply, the Council could consider devoting one of its meetings of specialists to this subject, about 1964, in which case it would be desirable that it should give some directives during the Muguga meeting.

Co-ordinating committees for the major lakes

(a) Co-ordinating committee for Lake Chad

The countries bordering on Lake Chad (Cameroon, Niger, Nigeria and Chad) were invited to appoint specialists to attend a meeting which took place at Fort-Lamy in March 1962. Dr. Daget was in the Chair and Dr. Meschkat, of FAO, took part in the discussions.

The agenda included the general problems relating to co-operation between the above four countries, in this field, as well as the technical, social and economic problems.

The first recommendation of the Committee confirms the establishment of this co-ordinating organisation and sets out its functions, exactly on the lines of those proposed at Lusaka:

“The co-ordination of all research activities being carried out on the lakes in order:

- to ensure rational utilisation of the means and resources available;

- to avoid any unnecessary duplication of effort;

- to standardise the methods of work so that all results obtained are easily comparable.

“The development of long-term research projects dealing with physical, biological, social and other aspects of fishing problems in the lake.

“To make recommendations for the co-ordination of administrative measures on fishing and fisheries within the region of Lake Chad.”

The Committee recommended that its meetings should take place every other year, approximately, which would mean that it would hold its second meeting in 1964. It also stressed that it would be extremely valuable that hydrologists and specialists in fisheries should be able to discuss their common problems together and it expressed regret at the fact that they had not been able to do so on this occasion (Chapter 2 of Part II of this report makes reference to this).

Another recommendation is worthy of note, which deals with the co-ordination of studies connected with the development of fisheries. In the case of Lake Chad, very satisfactory progress has already been made. Three of the countries: Cameroon, Niger and Chad have entrusted a single organisation (the Technical Centre for Tropical Forestry) with the task of conducting their studies on their own soil and in their own waters. It will, therefore, suffice to co-ordinate the work of these organisations with that carried on in Nigeria and the Inter-African Co-ordinator may be relied upon to ensure that it is done.

Two technical recommendations were adopted, dealing with the replacement of papyrus “kadei” by more modern craft, with a less poetic name, with methods of processing and conservation of fish, with nets and appliances, with the migrations of fish and with the regional study of markets.

Before leaving this subject, the Secretary-General would welcome the

views of the Council in respect of the last recommendation adopted by the meeting of the Chad Co-ordinating Committee. The idea has already been referred to in the chapter on hydrology but it is desirable here to quote in full the recommendation adopted at Fort-Lamy.

“ At the opening of the meeting the Secretary-General stated that African Governments attached particular importance to the drawing up of regional plans for the development of wide areas, based solely on the resources of those areas and disregarding political and administrative divisions. The Secretary-General felt that the Chad basin might lend itself to the drawing up of such plans and also that Governments concerned, in particular the Governments of Chad and Niger, would like this possibility to be carefully considered. The necessary external aid would then be sought, both from international organisations and from national bodies.

“ The Committee NOTES with interest the Secretary-General's statement and also NOTES that the present meeting will be followed by other meetings of experts in other fields belonging to the same countries. The first to meet will be the hydrologists and probably agricultural specialists. The Committee SUGGESTS that fisheries and hydrobiology specialists be invited to these meetings ”.

The comments of CSA will be all the more significant since, as has been reported, the meeting of hydrologists for the Chad basin will take place at the end of October 1962, also at Fort-Lamy.

(b) Other co-ordinating committees

As far as the other co-ordinating committees are concerned, as provided for within the scope of the Lusaka recommendation, no progress has been possible by reason of the difficult situation in the Congo, a country which borders on all the major lakes of Central Africa. This is all the more regrettable since, as already noted, a year ago, an interesting project had been proposed, i.e.: joint use of the research vessel “ President Paul Ermens ” at present tied up at Usumbura, for the benefit of the countries bordering on Lake Tanganyika.

CHAPTER 7

OCEANOGRAPHY AND SEA FISHERIES

Inter-African co-operation

Until as recently as 1960, the activities of CCTA/CSA in this field were very limited. In two years, the situation has changed considerably. The Council noted this with satisfaction at Pointe-Noire, last year, and the Commission has also welcomed the work undertaken under the direction of

the Inter-African Co-ordinator, Dr. Postel, under the guidance of the Chairman of CSA, Professor Monod.

FAO, for its part, has set up an African Commission for fisheries and entrusted a highly qualified officer of its Regional Office at Accra, Dr. Meschkat, with the task of supervising its work. Dr. Postel maintains contact with FAO. He went to Rome in September 1961 and maintains regular correspondence with the FAO specialised division. He is also in constant relation with UNESCO in Paris, in respect of oceanography.

The Member Governments of CCTA, satisfied with the promising beginnings of the panel, now wish to go further. They made this clear at the Seventeenth Session at Abidjan. On the basis of the proposal put forward by the Senegal delegation, the Inter-African Co-ordinator and the Chairman of CSA are requested to propose a plan of action which will be examined by the Commission and in respect of which the views of the Council will be very valuable.

The first suggestion is to develop the liaison bulletin that Dr. Postel has started distributing:

"This bulletin should include a number of sections classified in logical order. For instance, one section would deal with thunnidae. The information contained in the bulletin should deal with work accomplished in Africa. Editing committees should contribute to this section of the bulletin, under the direction of the local correspondents. As far as possible, this journal should also contain information on fisheries in other parts of the world, for instance American and Japanese fisheries in the case of tuna fish.

"A second project of the panel of correspondents should be the progressive standardisation of methods, statistics and reports relating to marine biology and sea fisheries. Consideration of questionnaires that fishing vessels in certain countries are required to complete at regular intervals shows the need for such standardisation and every effort should be made to achieve it in Africa.

"Finally, the delegation of Senegal considers that the resolutions of the meeting of specialists held at Monrovia in December 1960 on the co-ordination of research in the field of oceanography and marine biology are of value, as are the recommendations of the symposium on tunny fish which took place in Dakar. If such recommendations are implemented, regular co-operation will be established among research workers. Thus, in a few years, a regular overall research programme could be drawn up".

It should be stressed, moreover, that the field of oceanography and sea fisheries is one of those in respect of which the FAMA Secretariat receives the largest number of requests. Experts have been sent to Gabon, Guinea and Liberia. In Guinea, Mr. Moal will carry out short missions at regular intervals during the coming years to enable the Conakry Government to

organise its work in the best possible conditions. A regular training programme for fishing skippers and engineers will also be prepared, thanks to the assistance provided under the aegis of FAMA.

Specialist Meetings

The Council recommended and the Commission decided that meetings should periodically be devoted to fisheries of major economic importance. Thus a symposium on thunnidae was held in Dakar in December 1960. For the future, CSA has envisaged two meetings one to deal with marine invertebrates, the other with lagoon fisheries (Rec. XXXII). These are two new subjects and few specialists are truly versed in them. It is therefore hoped that the initiative of CSA will incite research workers to do some work in these fields, thus giving their full value to the meetings that will take place between 1963 and 1965.

Professor Monod and Dr. Postel consider that the first of these meetings should be organised during the second quarter of 1964. It would, therefore, be desirable that, at Muguga, the Council should decide on the form it should take, in order that it may be carefully prepared. An agenda was proposed, as an appendix to the recommendations of the Twelfth Meeting of the Council; it included the various types of marine invertebrates (crayfish, prawns, crabs, molluscs, echinodermata). A more thorough examination of the question has led Professor Monod and Dr. Postel to propose that the agenda should be limited to crustaceans only:

—general considerations—the part played by crustaceans in the human diet;

—brachyopoda and sundry crustaceans;

—Atlantic prawns;

—Indian Ocean and Red Sea prawns;

—crayfish.

The five specialists invited by CSA should be chosen in such a way that they can prepare and present reports on these five points. Professor Monod and Dr. Postel being invited, there would remain the choice of three other experts, whose names will probably be proposed by Professor Monod. If one of these were to be a resident of the place where the meeting would be held, an additional invitation could be made.

It had been planned to hold the meeting at Mombasa, Zanzibar or Dar es Salaam. In view of the forthcoming closing down of the "East African Fisheries Research Organisation", it would seem that preference should be given to the capital of Tanganyika. The Council will be called upon to take decisions on the following points: the agenda, the names of five or six specialists to be invited, the date and the venue.

Tunny Fishing in the Tropical Atlantic Ocean

A year ago, the Council noted with some concern (Resolution No. XXXIII) the anxiety expressed by the specialists convened in Dakar in 1960

on the occasion of the symposium on thunnidae. Indiscriminate fishing of thunnidae in the tropical waters of the Atlantic, off the coast of Africa, is such that the day is perhaps not far off when symptoms of exhaustion will appear in this area, as has been the case in other oceans. The Commission, in turn, was struck by the views of these specialists and by the Recommendation of the Council. At Abidjan, in February, it declared that indications recently received did not seem to be such as to dispel anxiety. In its resolution on the subject it went on to say:

“ Although it is still impossible to conclude, on an unquestionable scientific basis, that there is already an actual danger of overfishing, the risks are serious enough for the coastal countries of Africa to be unanimous in their desire to see energetic measures adopted in the near future ”.

Last year, the Commission requested that a conference of plenipotentiaries should be convened, where all countries concerned in tunny fishing in the tropical Atlantic Ocean would be represented, and not only the coastal countries of Africa but also non-African countries conducting fishing operations in these waters. This conference would be able to determine whether a commission should be created to deal with tunny fishing in tropical Atlantic waters, whose competence and powers would be similar to those of the Tunny Commission for the Pacific Ocean. A number of delegates consider that there is a need for such a commission to adopt appropriate rulings for tunny fishing and, by acquiring better knowledge of these species and of their living conditions in these waters, to organise fishing on a more economic basis. A decision in this respect should be taken by the plenipotentiaries.

This problem goes far beyond the scope of CCTA. The Commission has, therefore, requested the Secretary-General to refer the matter to the United Nations, and in particular to FAO. The action of the Secretariat and of the Inter-African Co-ordinator should be continued, however, until the Conference of plenipotentiaries has met and until its conclusions have been implemented, with such financial assistance as may be appropriate, in particular, from certain countries outside Africa.

Since December 1961, the Secretariat and the Co-ordinator have not been inactive, however. They have transmitted officially the Dakar recommendation to the United Nations and to FAO. The latter found it difficult to define the scope of any action that may be taken. It felt that the problems of the Tropical Atlantic should be handled as a whole, that is to say that the Thunnidae Commission should cover American as well as African waters. It therefore hesitated to make definite proposals.

A world conference on thunnidae will take place at La Jolla, in California, in July 1962. Dr. Postel will represent CCTA/CSA. The Commission has instructed him to present the position of the African countries on the west coast and to insist on the discussion being not put off any longer. At

Muguga, Professor Monod and the Secretary-General will be in a position to inform the Council of any action proposed as a result of the conference. At this stage, the firm attitude of the African countries in this respect is worthy of note.

The Dakar symposium also asked that the technical and scientific view of specialists working on the coast of Africa should be presented at the La Jolla conference. Professor Monod has been invited by the Commission to co-ordinate the preparation of the report that Dr. Postel will submit to the world conference.

Guinean Year (Joint Project No. 19)

It was at the Tenth Meeting of the Council that Professor Monod put forward the idea of a vast campaign to explore the Gulf of Guinea. The Council will recall the principles that form the basis of the project. Little is known about the Gulf of Guinea. Its deeper waters have never been systematically prospected. And yet they must contain considerable wealth, judging from the results obtained without any kind of research in the area. This wealth is therefore exploited in a non-rational way, wasted even. In a continent such as Africa, desperately seeking new resources, is it not a paradox that sea fisheries should not have been developed in a more methodical manner? It is possible to catch larger quantities of fish, with a double object: to increase local consumption of the common species and to export the finer ones. The object of Joint Project No. 19 is thus of a scientific nature, but even more of an economic nature inasmuch as the results of the Guinean Year will almost immediately bring about the implementation of national and regional plans, entailing a considerable development of fisheries.

During the last eighteen months, the project has taken on its final form and been the subject of a number of works. Dr. Postel has been responsible for its preparation, with a competence and devotion to duty admired by all. Professor Monod has spared neither his work nor his abilities to help him. A meeting was held in Lagos in August 1961—this was reported upon at the Twelfth Meeting of the Council—to complete the preparation of the project. Contacts have been made with the Government of the United States, particularly during the visit made to Washington by Professor Monod, Dr. Postel, the Secretary-General and the Scientific Secretary, in May 1961, as well as on the occasion of the Lagos meeting and of various other conversations in Paris and Washington. Extensive correspondence has been exchanged between the Secretariat of FAMA and the Inter-African Co-ordinator, on the one hand, and the countries and organisations concerned, on the other.

At the time of writing this report, the project stands as follows:

(a) Oceanographic campaigns

Two oceanographic campaigns will be undertaken to establish the data in respect of both physical and biological oceanography, of the open sea areas beyond the continental shelf. Physical oceanographic work will be

carried out by four vessels, which will work for two periods both lasting one month. The campaign on biological oceanography will be conducted by two vessels for two periods of sixty days each. The oceanographic campaign will include the observations of fifteen transects set at intervals over a limited area. It will be conducted by American vessels in accordance with a programme to be drawn up in agreement with the personnel responsible for the Guinean Year; the project will be very carefully prepared from every aspect, taking into account all work already carried out in this field. The main points of the programme were determined at the meeting held in Lagos. Finally, the oceanographic campaign will be directly co-ordinated with the other operations included in the programme in conditions which have yet to be determined. The details of these campaigns will be examined at a meeting convened in Washington by the American Government on 23 July 1962. The Commission will be represented by Professor Monod and, if he is appointed in time, by Dr. Le Mare.

(b) Trawling campaign

The trawling campaign will cover the continental shelf with the following aims in view: to assess the quantitative and qualitative composition of exploitable stocks, to study their seasonal variations and compare relative productivity in different fishing areas, to locate the areas which seem the most favourable for commercial trawling, and assess the limits of exploitation. The campaign will be conducted by two trawlers fitted with special equipment. Marine biologists and oceanographic physicists will work from these trawlers, which will each conduct two campaigns lasting four months, separated by an interval of two months. The vessels will work along equidistant transects taking hauls in varying depths, including a haul in very deep waters (about 500 metres) whenever possible. Thanks to the generosity of the American Government who have been kind enough to promise some 700,000 dollars, the trawlers will be chartered in Europe as European equipment seems to be better suited to the particular conditions of Africa than American equipment.

Preparations will include the training of specialist personnel with no experience in tropical waters: they will attend a short course at one of the existing stations in Africa (Abidjan, Lagos or Pointe-Noire). Close liaison with local campaigns will be ensured.

(c) Local campaigns

Three vessels belonging to the national institutes will contribute to the Guinean Year, continuing, as far as the coast, the transects followed by the vessels of the oceanographic campaign, thus completing the hydrological and topographical work of the trawlers. The three institutes situated in West Africa will also participate in the project, assembling biological collections from the surrounding areas and along the coast line of the islands; they will also assist with the training of personnel. In addition, the United Nations

Special Fund has informed the Secretariat of FAMA that they were undertaking activities in Ghana to develop sea fisheries in that country. They have expressed willingness to combine such activity with the work undertaken within the scope of the Guinean Year.

(d) Analysis of results

Results obtained during the oceanographic campaign will be analysed in the United States. Material collected during the trawling campaign and local campaigns will be analysed in the three institutes situated on the coast of Africa. All the information will be published in English and in French and circulated to the Governments concerned.

In addition, the Seventeenth Session considered that a regional effort of this magnitude was of exemplary value and worthy of being brought to the notice of the public at large. It was decided that a film should be made on this occasion.

(e) Training of research workers

Students and young research workers interested in oceanography and marine biology in tropical waters will be offered facilities on these vessels, especially on board the six vessels working for the oceanographic campaign. As far as possible, a training programme on a lower level will also be organised.

(f) Co-ordination and direction

The overall co-ordination of the project represents an essential element of its success. It will be maintained by a Scientific Committee and a Director. The Scientific Committee will be composed of five representatives from the countries most closely concerned and FAO or UNESCO. The Chairman of CSA will preside over the Committee which will meet once or twice a year to give general directives. The Director will be based on Lagos, from where he will maintain the general co-ordination of all the campaigns and will personally direct the trawling campaign. An administrative unit will be set up under the control of the Director to deal with matters related to the project, e.g. external assistance.

(g) Progress achieved

The theoretical programme described above has been approved. The American authorities have made great progress in the preparation of their part of the project (in this respect, it should be stressed that this part would have been carried out in any case and that it is thanks to the initiative of CCTA/CSA that it has been brought into the scope of the Guinean Year). The American Government has officially made its intentions known to UNESCO and the oceanographic committee set up by this organisation. A meeting took place in Washington in June, as recalled above.

On the African side, careful preparation has already been undertaken. The Inter-African Co-ordinator has collected numerous elements in respect of equipment and gear. Oceanographic institutes or centres have started their

preparations. All the Governments concerned have signified their agreement. Cameroon, Congo, the Ivory Coast and Nigeria have done so in detail, Dahomey, Gambia, Guinea, Liberia and Senegal, in less detail, on the occasion of the Fourth Meeting of FAMA.

Some time has unfortunately been lost owing to the delay in appointing the Director. At the time of writing this report, it would seem that a man of great authority, Dr. Le Mare, will be entrusted with the preparation, within the framework of a preliminary six months mission. The Director of the Guinean Year will probably be Dr. Le Mare or, should he not accept, one of the other experts included in a list already drawn up. As to assistance from outside Africa, offers have been made to the Secretariat of FAMA. The French Government has decided to reinforce the staff of the French-speaking centres and institutes on the west coast of Africa, in order to facilitate their participation in the project; this will enable these centres to provide directors for the trawling voyages. Several non-member Governments have offered the services of specialists to join the trawlers, among which Federal Germany, Denmark, Israel, Italy, Norway. FAO and UNESCO have stated that they would be prepared to provide also a few experts; UNESCO has shown particular interest and it would seem that one of its officers may be appointed to the Scientific Committee of the Guinean Year. This latter will meet in the autumn of 1962 to take stock of the preparation and give the necessary directives. Professor Monod will report to the Council on the subject.

CHAPTER 8

ANIMAL RESOURCES

Inter-African Bureau for Animal Health

The Council of Management of the Bureau held its Tenth Meeting in Livingstone in July. Administrative matters were considered and Mr. McKinnon was elected Chairman. Immediately prior to this, the Inter-African Advisory Committee for Animal Health held its Seventh Meeting. The two bodies discussed the work of the Bureau and recorded their satisfaction with the activities of Mr. Beaton and his colleagues. The quarterly *Inter-African Bulletin of Epizootic Diseases*, and other regular publications issued, are together greatly valued in veterinary circles. The Director and Assistant Director are in direct touch with the local veterinary services and, during the past year, have visited the Cameroons, Central African Republic, Chad, Federation of Rhodesia and Nyasaland, Guinea, Madagascar, Ruanda-Urundi, Somalia and other countries in East Africa. The Bureau also maintains liaison with other international organisations concerned with veterinary questions, especially with OIE (International Office of Epizootics)

and FAO in the technical field, and with EEC for the joint projects to be discussed later in this report.

At its meeting in Livingstone, the Committee adopted a series of technical resolutions. One recommendation will enable veterinary departments in the future to submit to the Muguga laboratory (EAVRO) strains of rinderpest viruses for analysis, diagnosis and advice on treatment. With regard to EAVRO, the Council will also note the work on diseases of wild game, infectious diseases which constitute a threat for domestic stock. The Committee also drew the attention of Governments to the gravity of the rabies situation which seems to spread rapidly throughout entire areas of Africa, and also to the danger threatening the Congo (Leopoldville) with the spreading of rinderpest and rabies.

Another recommendation of the Committee should be noted. The Committee is concerned about the simultaneous establishment of so many veterinary research laboratories in Africa. A dispersal of effort is feared and this would be particularly regrettable in view of the acute shortage of trained personnel available throughout the world.

The Eleventh Meeting of the Council of Management will take place at Dalaba on 17 August, and the Eighth Meeting of the Inter-African Committee will be held at the same place from 13 to 16 August. These meetings have been fixed in such a manner as to enable the members of the Council of Management and other delegates to attend the meeting of experts dealing with campaigns against trypanosomiasis, which will take place immediately after. (Chapter 1, Part III). The agenda of the Inter-African Committee will include, *inter alia*, the distribution of information on the incidence of animal diseases and the implementation of the recommendations of previous meetings. Subjects will be proposed for training courses to be held in the future.

The above short summary and the remainder of this Chapter do not call for comment. They stress the fact that the Bureau is continuing to give satisfaction. Two Assistant Directors now participate in the work: Dr. Vandemaele and Dr. Lobry. The latter will be taking up his post during the summer of 1962. Mr. Binns, Member of the Council, will probably wish to add some comments. He presented a detailed report, which made a great impression, at the Seventeenth Session, where he sat on the Executive Committee of CSA.

Specialist Meeting on the specialisation of veterinary officers and zootechnicians in the tropical field

As decided by the Twelfth Meeting of the Council, a Specialist Meeting was held at Muguga, from 1 to 6 March 1962, to examine the problems arising in respect of the tropical specialisation of veterinary officers and zootechnicians. Mr. Binns, Member of CSA, was in the Chair. He will, therefore, be able to report to his colleagues with accuracy. Seven specialists were also invited by the Council: three of them came from Europe

(Edinburgh, Maisons-Alfort, Lisbon) and four from Africa (Abidjan, Kaduna, Kampala, Muguga). The meeting was attended by nineteen participants, among whom were two observers from FAO and Federal Germany.

The agenda prepared by Mr. Binns, in consultation with Dr. Du Toit, provided for a methodical examination of the problems arising in the tropical specialisation of veterinary officers. Is such a specialisation necessary? Without any hesitation, the specialists replied in the affirmative. They were even concerned that the question should have been raised. After examining existing institutes and the conditions in which they work, the meeting went on to make constructive proposals.

It then appeared clearly that the situation was different in respect of French- or Portuguese-speaking veterinary officers, on the one hand, and English-speaking officers, on the other. While a high degree of specialisation is achieved in Lisbon and at Maisons-Alfort in respect of tropical problems, at post-graduate level, for students who have just obtained the normal degree, such specialisation is only given at Edinburgh after several years of experience. The problems are thus different. The participants came to the conclusion that it would be desirable to provide post-graduate training for English-speaking countries. This training could be given in England or Africa, on the lines of the courses given at the University of Edinburgh. Accelerated training could also be recommended, to be given at Kabete, in a faculty of veterinary science, working within the university set-up.

The meeting also stressed the fact that the personnel of educational establishments should, from time to time, have the opportunity of following an advanced course which would enable them to be informed of up-to-date problems and methods. It stressed the need to provide advanced training for future research workers. Finally, it recommended the establishment of an institute or a centre, for English-speaking countries, where research work could be carried out and higher teaching given in the field of veterinary medicine and tropical zootechnics. Such a centre would be similar to that existing at Maisons-Alfort for French-speaking countries.

These recommendations were preceded by a general recommendation stressing that eventually training should be given in Africa itself and that research work should be done in this Continent. It will take some years, however, to reach this stage and that is why the meeting insisted on the measures immediately required. It was in this spirit that, in a last recommendation, it requested the Secretariat of FAMA to publicise widely the requirements in technical and financial assistance of existing institutes in Europe and Africa.

Finally, it was recommended that CCTA/FAMA should prepare a list of veterinary officers who might be employed in Africa in the near future. The work done to facilitate the recruiting of veterinary officers, within the scope of Joint Project No. 15 (first campaign against rinderpest) will help in the drawing up of such a list.

Mr. Binns will give his view on the subject. That of the Secretary-General is that the Muguga meeting was good and useful. Discussions were of a direct nature, resolutions were concrete, the meeting came up to the expectations of the Council as expressed in its Recommendation XXXV of the Twelfth Meeting.

Meeting and symposium on the infertility of domestic animals and on artificial insemination

The Meeting and Symposium took place at Muguga, from 19 to 28 February. They were supplemented by a practical course lasting several days. The preparation of these activities had been ensured by IBAH, in consultation with Mr. Binns and with the assistance of EAVRO and the Kenya veterinary services, to whom the Secretariat wishes to express its thanks. These meetings were attended by twenty-three participants, from fourteen different countries, and two observers. Thanks to the financial assistance given by several organisations, Belgian and French in particular, three well-known European specialists contributed to the conduct of the course and of the meeting; they came from the Veterinary School of Ghent, from that of Maisons-Alfort, and from the Laigle Artificial Insemination Centre, respectively. The other specialists who contributed to the success of the course came from neighbouring countries: Entebbe, Salisbury, Mpwapwa, Muguga and Kabete. These are highly satisfactory results which the Council will no doubt wish to place on record.

The course was given in English and French; it included theoretical lessons and practical discussions, as well as visits to the artificial insemination centre of Kabete and the training centre of Athi River, as well as an additional practical course. As far as the meeting was concerned, it adopted several technical recommendations. These draw attention to the various aspects of infertility in domestic animals and invite governments to conduct systematic investigations on the nature and consequences of such infertility. Nevertheless, they warn the sponsors of projects for the establishment of artificial insemination centres against certain risks that have not always been assessed at their right importance. CCTA/FAMA has been invited to prepare a list of experts or specialists able to give useful advice to Governments wishing to create new centres or to extend existing activities in this field. IBAH was requested to follow up these recommendations. Comments from Mr. Binns and Dr. Du Toit will be highly useful, particularly in so far as they come from countries where artificial insemination has already produced good results. The Council will perhaps wish to give its attention, for a moment, to two ideas:

—Should the procedure recommended by the meeting, to prepare a list of experts able to advise Governments, be systematically extended to other disciplines?

—In view of the success of the training course and of the meeting, should other subjects be recommended that might usefully be the object of

a combined training course and specialised discussion meeting, each of which would benefit by the attendance of participants in the other, as has just been the case at Muguga and as had already been the case in respect of helminthiasis, two years previously, at Nairobi ?

Other specialist meetings

A symposium on poultry diseases was held during the Livingstone meetings, in July 1961. It was highly technical and it will suffice to note that the participants recorded their conviction that the production of healthy poultry considerably increases traditional resources in animal proteins; early diagnosis of disease and compulsory declaration of such disease should make this production possible. Newcastle disease was discussed in particular, in view of the high losses that it causes. Finally, it was recommended that measures should be taken to check the state of health of animals when they are exported (health certificates). A third training course will probably be held to deal with this subject (following upon those held at Kaduna and at Bingerville, in 1960 and 1961). It will be organised for the countries of East and Central Africa and the theme will be the production of poultry.

Mr. Beaton has taken part and will take part in several meetings of international organisations, in particular those convened by the International Epizootic Disease Organisation (OIE). It will be noted that an interesting conference of Directors of Commonwealth Veterinary Services will take place in September, in London, and that it will cover all veterinary and zootechnical subjects.

Last year, the Council was informed that the Inter-African Committee for Animal Health wished to establish a panel of correspondents for foot and mouth disease, which would meet at regular intervals. This formula has been abandoned in view of the excessive expenditure it would entail and the Bureau was requested to ensure co-ordination, itself. This is an important responsibility, for it is known that foot and mouth disease has spread rapidly in Southern Africa, representing a great danger to cattle throughout entire areas of the continent. It will, therefore, be noted with satisfaction that emergency measures have been planned, particularly on the occasion of a meeting convened at the Pirbright Virus Institute, which was attended by the Director.

The panel of correspondents for helminthiasis, which was discussed a year ago, has now been set up. Dr. R. K. Reinecke was appointed Co-ordinator, at the Seventeenth Session.

Joint campaign against rinderpest in the Niger/Chad region (Joint Project No. 15)

At its Twelfth Meeting, the Council welcomed the project to conduct a regional campaign against rinderpest (Recommendation XXXVI). In view of the migrations of cattle and of the particular features of this disease, it could only be hoped to achieve eradication if treatment was applied over

a very wide area and repeated several times, in order to ensure that all the animals of a herd assessed at some eight million head, in the area selected, were treated.

On this basis, IBAH prepared a project for a campaign. A meeting of the four veterinary services concerned was convened at Kano (May 1961) and adopted the details of the project. The Secretariat then contacted the organisations likely to provide financial or technical assistance. Negotiations were successful and at the end of 1961 agreements were reached with the two organisations that will provide the funds: the European Economic Community, in Brussels (two-thirds) and the International Agency for Development (AID) (one-third). Taking into account the effort to be made by the countries themselves, assessed at 1,200,000 dollars per annum, that is to say about 3,600,000 dollars for the three years, the total expenditure for the project, i.e. 6,400,000 dollars is thus covered.

The campaign will be spread over the three years, the whole of the herd being vaccinated each year in accordance with common methods adopted at Kano. Each campaign will take place during the dry season, the first one to start in October 1962 and the last to end in May 1965.

It was necessary to entrust a competent person with the task of conducting the whole of the operation which will be the responsibility of the four veterinary services of Cameroon, Niger, Northern Nigeria and Chad, as well as of the two laboratories of Farcha and Vom. A Co-ordinator has been appointed, Dr. Lépissier, former Director of the Chad veterinary services. He is responsible, under the authority of the Secretary-General and the Secretary of FAMA, for the co-ordination and control of operations within the scope of the programme. He deals directly with AID and takes part in the negotiations between Cameroon, Niger and Chad on the one hand, and ECE on the other. Dr. Lépissier took up his functions in December 1961. He went to Brussels and Washington and has already visited the four countries covered by the campaign. Considerable progress has been made in the preparation. The first report by Dr. Lépissier shows that the campaign will start on the proposed date. Appeals have been sent out for offers of equipment and supplies, motor vehicles, equipment for the conservation of vaccines, etc. The Secretary-General feared that difficulties might be encountered in the recruitment of the specialised veterinary officers required for the three campaigns, for no less than fifteen posts had to be filled. We now have pleasure in informing the Council that this problem will be solved. Some thirty candidates have been proposed, among which several German and Italian veterinary officers. FAO has indicated that in case of need it would endeavour to find competent personnel; this offer will be held in reserve for future campaigns.

Joint Project No. 15 is of fundamental interest for the four countries. Three of them have only limited resources. The exploitation of export crops is dependent on the world market. On the contrary, cattle breeding can be developed within the framework of African internal trade, that is to say in

satisfactory conditions, both from the economic and the general point of view. The support of Governments is thus assured and all leads to hope that the campaign will be a success, the most important one with which the Council and the Commission have been associated, in the field of practical achievements.

In Chapter 3 of this part of the report, we have already commented on the observation made by several Governments of the Sahel region, in respect of the need to supplement Joint Project No. 15 by large-scale action to develop pastureland and improve water supplies over whole areas of the Sahel zone.

Moreover, the Government of Nigeria has made known its intention to undertake a study of pasture-land economy, in conjunction with the campaign against rinderpest, in order to draw greater benefit from the increase in livestock that one may expect in the near future.

Research work for the production of a vaccine against bovine pleuropneumonia (Joint Project No. 16)

In other areas, and sometimes in the same areas as rinderpest, bovine pleuropneumonia causes heavy losses among the cattle. As opposed to rinderpest, control measures are not yet fully developed. Research work has been in progress for a number of years, in Africa and in the Pacific Islands. Results have been disappointing. The last meetings dealing with this question, within the CCTA area and in Melbourne, recommended that new paths be explored and that a concerted effort be undertaken. It is in this spirit that the Inter-African Committee for Animal Health presented Joint Project No. 16, which the Council noted at its Twelfth Meeting (Recommendation XXXVII). The details of the project have been worked out by Mr. Binns, Member of CSA and Director of EAVRO, and by the Director of IBAH. They were finally approved at the seventh meeting of the Inter-African Committee at Livingstone, in July 1961. The programme will be spread over three years. It will include three stages, two in the laboratory (research work, production of vaccine) and two in the field (epizootiological and control work). The whole of the research work will be conducted by a single team working full time. It will include experienced research workers and others who may not have studied bovine pleuropneumonia. Moreover, the work proposed within the scope of Joint Project No. 16 will also include the research work carried out in other parts of Africa. By concentrating means of action and introducing new ideas, as a result of this organisation, it should be possible to achieve progress and, it is hoped, to discover a satisfactory vaccine.

After fairly long discussions, it was decided to place the centre of effort at Muguga. The offers made by the East African Common Services Organisation (EASCO) and the Government of Kenya, ensure excellent working conditions in the laboratories of EAVRO and in the field. On the other hand, the work carried out at Hann, in the Senegal, will be co-ordinated with that

recently undertaken at Muguga and included in the general pattern of Joint Project No. 16. It was decided to entrust a Committee with the supervision of the project as a whole and particularly with the effective direction of the work at Muguga. Mr. Binns has been appointed Chairman of this Committee; he is, in fact, Director of the Project and will be able to describe it at length to his colleagues.

Offers of participation have been made by five Member Governments and by the American authorities. The total budget is of the order of 400,000 dollars. An agreement is on the point of being reached between the Secretariat of FAMA and AID. It covers the greater part of the expenditure. The main difficulty, in the immediate future, will be of a different order. Specialists will have to be found, having unquestionable authority and experience, to take part in the project for a period of two or three years. The Director of the Project is endeavouring to find them and we may hope that he will be lucky. But one should not underestimate the difficulty which is apt to hold up the implementation of a scheme which has been well prepared from other angles.

Of course, the project should lead to control campaigns and eventually be the subject of measures similar to those planned for rinderpest. The matter will be raised in due course.

Other regional projects on the control of animal diseases

The interest raised by the project for joint action against rinderpest was placed on record by the Fourth Meeting of FAMA in the following terms:

“Many delegates, especially from countries of the Sahelian zone whose economies are greatly dependent on their cattle industries, expressed the hope that campaigns could be undertaken for the eradication of rinderpest from their own countries and their immediate neighbours”.

A Meeting was convened at Bamako on 9 August 1962 to examine the desirability of launching a second project for regional joint action against rinderpest. Taking into account the technical elements of the problem and the shortage of competent personnel, it is the intention of IBAH and the Secretariat to propose that efforts should not be dispersed. It will be proposed that the second campaign should, as the first, cover a limited area and not be launched before the results of the first are better known. An overlap between the two campaigns is nevertheless desirable in order to avoid contagion from the area not covered. In these conditions, the second campaign should cover the area west of that dealt with within the scope of Joint Project No. 15, i.e. the remainder of the Niger, Northern Nigeria, Mali, Upper Volta and perhaps North Dahomey, North Togo and North Ghana. Operations should start in October 1964 and last until the spring of 1967. The Bamako meeting is not premature, however, for preparations take time. Experience has shown that the seventeen months available

between the Kano preparatory meeting and the beginning of the first campaign of Joint Project No. 15 proved to be a short period and that there would be advantage in allowing a period of two years for future campaigns.

In view of the insistent requests from Governments and of offers of co-operation from outside, we may envisage this second campaign with optimism, all the more so since, as already reported, the number of available veterinary officers for such projects is greater than we had dared hope. The forecast made last year by Dr. Du Toit seems to be coming true and " it may be hoped that Africa will one day be freed of this scourge " (Recommendation XXXVI of the Twelfth Meeting of the Council).

(Projects relating to control measures against trypanosomiasis will be studied in the chapter dealing with trypanosomiasis (Part II, Chapter 1).)

PART THREE

SOCIAL, ECONOMIC AND TECHNICAL

CHAPTER I

PUBLIC HEALTH

TRYPANOSOMIASIS

Between the Twelfth Meeting of the Council and the Seventeenth Session, little progress has been accomplished in respect of BPITT. The two Co-Directors, Dr. Demarchi of the Institut Pasteur in Brazzaville, and Dr. Stijns of the Institut de Médecine Tropicale in Leopoldville, have made every endeavour to save the Bureau from extinction; lacking a permanent Director, however, it has been unable to undertake any major activity. Dr. Demarchi represented CCTA at several medical meetings, but the Commission was unrepresented at many others. It contributed to the organisation of a meeting reviewed in another chapter of this Report (Specialist Meeting on Ankylostomiasis), but has otherwise been relatively inactive.

Last year, at Pointe-Noire, the Council examined this problem with great attention. It adopted a recommendation (No. XXXVIII), drafted with great care by Dr. Vaucel, Associate Member of the Council. This recommendation proposed a detailed plan of action which met with the general wish of the Commission as expressed at the Sixteenth Session. These proposals were examined at length by a working group convened at Leopoldville some weeks later, where a more detailed programme was adopted, very similar to that suggested by the Council.

If the proposals of the meeting held in Leopoldville had been adopted, the new BPITT would have concentrated mainly on human trypanosomiasis and fundamental aspects of research on all trypanosomiasis and their vectors. This would have meant entrusting the Bureau with the Secretariat of the International Scientific Council on Trypanosomiasis Research and undertaking the periodical publication of a bibliographical and epidemiological Bulletin on Trypanosomiasis. The panels of correspondents on specific diseases would be disbanded. On the other hand, the Bureau would at all times have been at the disposal of the Commission and its various bodies to advise them on any activity concerned directly or indirectly with human health and to submit recommendations for the training of personnel in the medical field.

However, the position was examined in a very different light at Abidjan. Changes in the membership of the Commission have obliged the new

Members to make cuts in the budget and BPITT, whose functioning had been so much criticised in the past, was first to be axed. It was decided to close down the Bureau as from 25 May 1962 and to set up a much lighter organisation which we shall refer to hereafter. Before doing so, the Commission paid a tribute to the devotion to duty and competence of the successive co-directors and in particular to the two creators of the Bureau, Dr. Neujean and Dr. Seccaldi, as well as to the two co-directors at present responsible for it, Dr. Demarchi and Dr. Stijns. Dr. Demarchi deserves the especial gratitude of the Commission in having often accepted to represent CCTA at meetings on topics connected with the medical field and also for having saved the Bureau from coming to a complete standstill in 1960 on the departure of the permanent senior staff of the Bureau. The staff of the Bureau, and in particular Mme. Quero who continued to run it in difficult conditions, received special thanks from the Commission. Finally, the Government of the Congo was thanked for the hospitality extended to the Bureau, in the buildings of the Tropical Medicine Institute in Leopoldville.

Following upon the decisions of the Commission, the Bureau and the panels of correspondents were dissolved. On the other hand, Dr. Demarchi, Director of the Pasteur Institute in Brazzaville, and former Co-Director of BPITT, was appointed " Inter-African Correspondent for Human Health ". His functions include, as far as possible, those that the Council proposed:

- to ensure the operation of the permanent secretariat of the International Scientific Committee for Trypanosomiasis Research;
- to maintain close relations with WHO ;
- to advise the CCTA Secretariat in all activities connected with the field of human health.

Budgetary arrangements have been made to provide the new Inter-African Correspondent with the necessary funds for the secretariat and for his travels. It is not impossible that Dr. Demarchi may attempt to publish a specialised bulletin on trypanosomiasis, as recommended last year. Dr. Demarchi has been kind enough to accept this responsibility in spite of his present commitments. He is convinced that this work is useful and would not turn down the offer that was made to him with great insistence by all the Member Governments. The Council will certainly wish to express its gratitude to him. It will also usefully present observations on the new arrangements and suggestions to be conveyed to the Inter-African Correspondent.

International Scientific Committee for Trypanosomiasis Research (ISCTR)

ISCTR has played an eminent part for many years. In fact it existed before the Commission. This scientific organisation consists of scientists specialised in trypanosomiasis. Every other year, they meet under the chairmanship of one of the members and examine recent developments in

the field of research. Their work forms the subject matter of publications that are highly valued. This Committee must therefore be maintained at all cost. WHO has decided to establish a group of experts to deal with problems of technical assistance, but the Commission felt that this did not duplicate the work of ISCTR and, at Abidjan, it recommended that nothing should interfere with the activities of the Committee.

The Ninth Meeting of the Committee will take place at Dalaba, from 21 to 25 August. The agenda has been prepared by Dr. Vaucel, President of ISCTR, Associate Member of CSA. It includes human trypanosomiasis (residual trypanosomiasis, *inter alia*), animal trypanosomiasis (chemotherapy, game, trypanosomiasis reservoirs, etc.), entomological aspects (*inter alia* the recent progress of tsetse flies) and finally, trypanosomiasis immunology.

As usual, the meeting is being prepared with great care. The most highly qualified members of ICCGE and WAIRR in West Africa, and of EATRO in East Africa, have been invited to prepare introductory reports, as has also been Dr. Machado, Associate Member of the Council. The documents thus assembled will be published later.

The Inter-African Correspondent for Human Health, responsible for the secretariat of ISCTR, will attend the meeting.

Control measures against trypanosomiasis and its vectors

For the last three years, at each of its meetings, the Council has had to examine the possibility of devoting some regional programmes of joint action to control measures against trypanosomiasis and its vectors. At its Twelfth Meeting, in accordance with the advice given by Dr. Vaucel, it adopted a recommendation that we cannot do better than quote *in extenso*:

"The Council CONSIDERS, however, that it would be regrettable to lose the benefit of the considerable offers made by the American authorities to contribute to the eradication of trypanosomiasis in certain regions. Nevertheless, the Council STRESSES the need for realism. The eradication of trypanosomiasis throughout the continent is absolutely impossible at present whether it be by control measures against the disease or against the vectors. The means available to man are not sufficiently effective. The elimination of the tsetse fly in areas of low population density would be purely temporary. An over-ambitious project would invite failure and jeopardise in a few years the possibility of smaller-scale but more fruitful action by giving those who are generously offering financial assistance the impression that their effort cannot succeed.

"It must rest with the specialists to select limited areas where intensive action may achieve the eradication of vector glossinae. These specialists, as rightly indicated by Dr. van den Berghe, should include research workers engaged on trypanosomiasis and its vectors, game wardens, foresters, agronomists and demographers. The best method

of devising a plan of action covering one or two areas would be to convene, in Africa in 1962, a group of experts nominated by Governments who should include those whose names have been proposed by Dr. van den Berghe in his memorandum. In order to ensure for these experts the best scientific advice, the meeting should take place during the week preceding the next meeting of ISCTR. The United States Government should, of course, be invited to appoint a representative to attend this group meeting". (Rec. XXXIX).

This recommendation clearly sums up the position that should be taken. Offers of outside help must be gratefully accepted and use must be made of them in order to progress in the campaign against trypanosomiasis, but caution is required in view of existing uncertainties. These are the considerations that guided the Commission in its conclusions at the last session. A Working Group will meet from 18 to 20 August at Dalaba, just before the Ninth Meeting of ISCTR and immediately after the Annual Meeting of the Committee for Animal Health. The agenda is of a very concrete nature. It provides for consideration of experience acquired in certain regions, for instance in Northern Nigeria, the Cameroon, the Central African Republic and Ruanda-Burundi. Consideration will be given to possible action against trypanosomiasis in the Kissi region (between Guinea, Liberia and Sierra Leone), control measures against vectors in the Cameroon, Chad, South-East Africa, and possibly Central Africa, on the border of Tanganyika. The American authorities have confirmed their interest and stated that they would send several research workers to take part in the discussions of the group. It would seem that part of the American funds available could be used within the scope of a first experimental campaign, the conclusions of which, if convincing, would then be applied on a large scale in entire regions of Africa.

The Secretary-General hopes that he will be in a position to report to the Thirteenth Meeting of the Council on the conclusions of the Dalaba meeting. The comments of the Members, *inter alia* the advice of Dr. van den Berghe, will be of value for the future.

The Eighth Meeting of ISCTR defined two regions where joint action could first be undertaken: the area situated north and north-east of the South African frontier with Southern Rhodesia and Mozambique, and a region including the Caprivi belt, and including Bechuanaland, South-East Africa, Angola and Northern Rhodesia.

It was decided to apply a Joint Project (No. 17) to the first area. A meeting of experts was convened at Lourenço Marques, in November 1960, to decide on the work that should receive priority: map of vegetation, complete aerial cover, spraying on pilot sectors, research on pupal cases. Thanks to the efforts of the South African Government, it has been possible to undertake these activities. They were discussed in July 1961, during the first meeting of the permanent Committee which took place on the occasion of the annual veterinary meetings at Livingstone. The work and the exchange

of information will be pursued. Nevertheless, serious financial difficulties have arisen as no definite offer of assistance has so far been made by countries outside the region.

Other meetings

In the field of public health, CCTA only acts in liaison and complete agreement with WHO. The Regional Bureau of WHO covers the entire medical field in the geographical area in which CCTA activities are concentrated. It is usually when meetings, seminars or courses cover ground outside this field that CCTA action is of value: human health is covered mainly by WHO and the more technical sphere by CCTA. On several occasions, the Commission has approved this method of action and expressed its appreciation of the friendly spirit of co-operation which has always prevailed during dealings with WHO.

(a) Specialist Meeting on Ankylostomiasis (CSA/WHO)

In 1958, BPITT proposed that a meeting should be held to take stock of available knowledge of ankylostomiasis and study the problems of prophylaxis. The Bureau, indeed, took the view that the disease constitutes an important aspect of human pathology in certain areas of Africa where practically the whole population is affected.

WHO agreed to participate in this meeting which was held in Brazzaville from 22 to 29 August 1961. Five specialists were invited by CSA, one of whom, Professor Fraga de Azevedo, Member of the Council, will report to his colleagues. Dr. Vaucel, Associate Member, took the Chair.

WHO invited three experts. One of the two, Dr. Hsieh, had carried out a preliminary survey in Africa. In addition to these, nine experts, two officers from WHO, two from CCTA and several representatives of Governments, attended the meeting, making a total of twenty in all.

The agenda included the following items:

- Incidence and gravity of the infection.
- Ecological factors determining geographical distribution.
- Pathogenesis.
- Treatment.
- Prophylaxis.

The meeting recorded that a quarter of the world population is affected by hookworm, particularly in warm humid areas where the proportion reaches one hundred per cent. No accurate data are available and so it would be desirable for surveys to be carried out in various parts of the continent in order that comparable results may be obtained. They would certainly bring to light any correlation existing between the mode of life and the extent of this infection.

Modern medicine is very effective but serves little purpose in areas where the infected persons are immediately reinfected due to exposure and

to unsatisfactory sanitary conditions. Recent research seems to indicate, however, that in certain conditions as yet little known, man builds up an immunity to attacks of this nature, although generally it can be stated that prophylaxis depends on the measure of importance accorded to sanitary precautions: health education is, therefore, very important.

The meeting came up to the expectations of participants. No new information on ankylostomiasis came to light, but it is important to compare the experiences of specialists and to establish the extent of present knowledge on the subject. The meeting in Brazzaville achieved this object.

(b) Inter-African Conference on Malaria (WHO/CCTA)

Malaria is one of the primary concerns of WHO; the extent of the Specialised Agency's responsibilities in eradication work increases year by year. At a recent meeting of the WHO Executive Board it was proposed that the entire cost of the Malaria Eradication Programme should be gradually incorporated into the regular budget. This would result in expenditure of the order of \$2,000,000 in two years. The figure represents the cost of pursuing and extending current projects so as to avoid any one of them being interrupted and jeopardising the work in a whole region.

That is why WHO has decided to convene a large-scale conference on malaria, in which it has agreed to associate CCTA; this conference will take place from 3 to 13 July, at Yaoundé. The agenda, which has been amended several times in the light of recent work, will start with a detailed statement on the present situation as regards malaria in Africa. An attempt will then be made to find new angles of approach to the problem of eradication: public health, pre-eradication, training of technical and auxiliary personnel. Necessary conditions to ensure a reasonable chance of success in eradication programmes will then be discussed. The greater part of the meeting will be devoted to technical aspects: entomology, parasitology, epidemiology, chemotherapy, conduct of operations, insecticides. The conclusion will be reached after a discussion on necessary co-operation in this field.

(c) Other meetings

Projects dealing with the CCTA/CIE/FAO/WHO/UNICEF seminar on health and nutritional education will be dealt with in Chapter 7 of this part of our Report.

Further plans are being worked out for 1964 and the subsequent years; they relate for example, to pediatrics, nursing, water supplies, bilharziasis, leprosy, virus diseases and venereal diseases.

(d) Training courses

At its Twelfth Meeting, CSA proposed that two new training courses should be planned for the future. They will take place in 1963 and 1964. The first will deal with laboratory methods of diagnosis of virus diseases and

will be intended for technicians or laboratory assistants. It could be held at the Entebbe Virus Institute. The agenda would include the following items:

- Virus classification.
- Methods of diagnosis.
- Principles of eradication.

The FAMA Secretariat will prepare these courses in liaison with the WHO Regional Office and under the direction of Dr. Fraga de Azevedo, Member of the Council, Dr. Haddow, Director of the Entebbe Institute, and Dr. Vaucel, Associate Member, as well as Dr. Demarchi, Inter-African Correspondent for human health.

The second course will deal with bilharziasis. It will be open to medical officers, veterinary officers, and biologists. Salisbury was recommended as a venue. A draft agenda was proposed by Dr. Fraga de Azevedo who will consult with the WHO Regional Office on the subject and will report to the Thirteenth Meeting of the Council. It will include:

- General considerations.
- Parasites.
- Vectors.
- Human and animal bilharziasis.
- Epidemiology, epizootology.
- Control.

(e) Training of laboratory assistants

The Twelfth Meeting of the Council noted with satisfaction the possibility of establishing a regional centre for the training of laboratory assistants (Rec. XLII). Although the Governments concerned accepted the principle, the project has remained dormant on account of the reticence of the technical services. The project relating to laboratory assistants in East Africa has been abandoned because the departments concerned could not make the personnel available for the required two years.

Mapping of vectors of diseases (Joint Project No. 8)

It will be recalled that the object of Joint Project No. 8 has as its object the preparation of a series of maps showing the distribution of diseases and their vectors in Africa. A total of forty-eight maps will be published, on a scale of 1/5,000,000 and 1/15,000,000.

Last year, the Council expressed its wish to receive a detailed report from Dr. van den Berghe, Member of the Council and Director of the project. He replied that he would report to the Thirteenth Meeting of the Council. His information will be more precise after his visit to Lwiro.

The Director of the project has been able to prepare a map of movements of population, one of river basins, and a third on the number of consecutive dry months. He invited Professor Kalek, a Sudanese expert on bilharziasis, to prepare the maps relating to schistosomes and molluscs. These are nearly completed. The Commission is somewhat concerned about the delay in

carrying out this project and, as it is anxious to cut down on expenditure, has decided to cancel the appropriations originally proposed for Joint Project No. 8. The discussions of the Council at Muguga will, therefore, be important, inasmuch as they will be the starting point of any steps taken to obtain the necessary assistance from other sources.

Nutrition

(a) Inter-African Conference

The activities of the Commission in the field of nutrition were marked last year by the Fourth Inter-African Conference on Food and Nutrition, which took place at Douala from 4 to 13 September. This Conference was organised jointly by CCTA, FAO and WHO and was devoted to national policies in the field of food and nutrition.

The First Conference held in Dschang revealed the lack of specialist personnel in nutrition. This deficiency made it difficult to obtain a satisfactory assessment of food and nutritional conditions. In accordance with one recommendation of this meeting, FAO/WHO organised a first training course for nutritionists in Marseille in 1952. The first team of specialists was sent out on a field mission and began its research when the Second Conference was held in Fajara in Gambia. Its work and the work of the Third Conference which was also organised by CCTA in Luanda (Angola) dealt especially with aetiology, diagnosis, identification of disease, treatment and causes of malnutrition. The resulting comparisons and stock taking of views made it possible to obtain a clearer picture of the problem of nutrition. It is, in fact, from medical discoveries that this modern science has arisen; its role in the national economy is rapidly becoming more firmly established as the solution of the nutritional problem rests with Agriculture, Economy and Education, and not with Health alone. It seems logical, therefore, that this Fourth Conference should be attended by doctors, agronomists, economists, biochemists, teachers, administrative authorities, so that the problem could be considered at a national level; discussions are thus not limited to experts of one particular discipline. Such an assembly represents an element of risk; if it is successful it would mark progress which could never subsequently be questioned.

The agenda of the Conference was prepared with the above factors in mind at a preliminary meeting held in Brazzaville in July 1960. It was divided into four sections:

—Available information: food consumption levels, food requirements, nutritional adequacy of average diets.

—Food consumption targets: long-term objectives, short-term objectives.

—General policies: factors involved, agricultural planning, food policy.

—Organisation: specialist services, co-ordination of activities, liaison between nutrition scientists and government departments.

The Conference was prepared with especial care, FAO dealing with the technical aspects of the meeting in Rome and in consultation with the FAO Nutrition Regional Representative for Africa, Dr. Ganzin, who played an extremely important part during the preparatory period before the Conference and also at the meeting.

The Conference was held in Douala in September. There were several reasons for this venue. First of all, it should be remembered that the First African Conference on Nutrition was held at Dschang in the Camerouns in 1949. At this meeting, the trend of nutritional activities was established, and there is no doubt that this Conference was the instigator of the awakening of national conscience to the importance of these problems. Furthermore, for the last ten years, the nutritional division established in Yaoundé (IRCAM) has enabled the Cameroun to overcome any difficulty which has arisen during the course of a vast survey programme which is being carried out in order to obtain an accurate idea of the value of diet and the nutritional conditions of its population. It is in the Camerouns also that new foods of high biological value prepared from industrial by-products, were tried with success. The organisers could, therefore, when preparing this Conference, expect an important participation from the Camerouns.

Discussions were animated, as the opinions held were derived from two different conceptions which on some occasions were of a very opposite nature. The first, the nutritionists' opinion, was based on food requirements and the deplorable state of health of populations; the second, held by economists and agronomists, was based on economic realities. In the light of the discussions, both views aiming at a common objective which would be reached by different methods, complemented each other admirably. Indeed, both approaches are based on methods of a humanitarian nature.

Educationists are responsible for educating the consumer and the producer on the means of reaching the defined objectives in order to improve food consumption. They are also responsible for the education of the rising generations in respect of the basic principles of economic development.

The Conference proved how imperfect and incomplete is our knowledge of the situation, but this does not prevent us from defining nutritional targets in detail, with the reservation nevertheless, of advising governments to undertake new multi-purpose surveys, demographic, agricultural, nutritional and socio-economic surveys as methods for achieving this end are now known. This Conference has been able to study the problem as a whole, the debates have therefore been at the highest level, which has undoubtedly encouraged many countries to participate.

The reports and recommendations of the meeting will be published by FAO in the name of the three organisations. It was suggested at the Conference held in Douala that a fifth conference should be held. Proposals will eventually be submitted to the Council.

(b) National organisations and international co-operation in the field of nutrition

One subject discussed by the Conference in Douala was the question of structures to be recommended to Governments so that satisfactory co-ordination of nutritional activities may be established at national level. The Conference was aware of the necessity for setting up national bodies in every country of Africa within the limit of the facilities and specialist staff available. Such bodies or nutrition centres would serve Governments as advisers on this subject. However, in addition to their research and co-ordination activities, and their training activities, they should try to reach the mass of the population to the greatest possible extent. Their role would thus not merely be confined to training, but would include information and extension work. All groups of the population and schools in particular, are to be kept informed of the food and nutritional policy, using all available audio-visual media.

The Conference also discussed at great length the problem of co-operation to be established at inter-African level. Before quoting the conclusions of the meeting, it should be remembered, however, that the Commission has had a panel of correspondents in this field for several years. This simple method was very satisfactory when Member Governments were few and when nutrition afforded less attention. Dr. Latsky has always met with every success in his duties as Inter-African Secretary. However, at its Ninth Meeting which was held at the Conference in Douala, and of its own volition, the panel recognised that a new working method would have to be evolved, i.e. a body which would associate very closely with FAO and WHO in the development of co-operation in this field.

The Conference adopted the suggestions of the CCTA panel almost unchanged, as follows: "the Conference HOPES that a joint FAO/WHO/CCTA Committee on food and nutrition will be set up to:

- (a) provide liaison at an Inter-African level in the field of food and nutrition,

- (b) promote, co-ordinate and standardise activities in the field of nutrition,

- (c) circulate all information on this subject,

- (d) facilitate the training of staff,

- (e) facilitate more especially surveys and research work in the food and nutritional field,

- (f) advise the CCTA Secretariat and the Directors of the Technical Bureaux on all matters connected to a greater or lesser degree with the field of nutrition;

" PROPOSES to this end that the FAO Regional Office for Africa should be made responsible for providing the Secretariat of this Committee in liaison with the WHO Regional Office and REQUESTS FAO, in the light of the

present needs of African countries, to study the establishment and the statutes of such a Committee and make proposals to the Member Governments of FAO/WHO/CCTA for its establishment."

The Secretariat of the Committee would be taken over by the FAO regional office for Africa, in liaison with the WHO regional office. A constitution has been prepared by the FAO regional office; following upon the approval of the establishment of such a Committee, by the FAO Conference, this constitution was communicated to the Secretariat who requested FAO to make some amendments. It will be distributed as soon as the final draft has been completed.

Before it is dissolved, the Inter-African Secretariat for nutrition will arrange for the publication of its work, i.e. monograph on national activities in the field of nutrition. Governments were requested in Douala to supply the necessary information to the Inter-African Secretariat through the CCTA's Secretariat in Lagos.

(c) Training

A high level training course for officers of the health departments and other specialists in nutrition was organised jointly by FAO, WHO, UNICEF and FAMA. It was divided in two parts. The first was held at the Dakar University, from 9 November to 22 December 1961 and was of a theoretical nature; the second, from 1 to 15 January 1962, consisted of practical work and visits to nutrition centres in the Senegal. Thirty-five participants were accepted; they were medical officers, experts in hygiene, pharmacists, biochemists, agronomists and veterinary officers.

One or two courses in French for middle-grade personnel will be held to supplement, at this level, the higher education courses referred to above.

(d) Nutrition and health education

It was indicated in the Report to the Twelfth Meeting that the Commission, the Centre International de l'Enfance, WHO, FAO and UNICEF, would co-ordinate their efforts to organise a seminar dealing with problems of education in the field of health and nutrition. This seminar will take place at Pointe-Noire from 5 to 12 June. The discussion will be conducted by discussion leaders or rapporteurs appointed beforehand, the Rapporteur General being Professor J. Senecal. The four main themes of discussion will be:

- Education of mothers in the matter of feeding the child.
- Education in the matter of home hygiene.
- Education in the matter of nutrition and health at school.
- Practical experiments by the introduction of new foods into family and community feeding.

Finally the seminar will study the means of organising and financing nutritional and health education, as well as integrating such education into development plans. Dr. Demarchi, Inter-African Correspondent for Human Health, will represent the Commission.

CHAPTER 2

SOCIAL SCIENCES

The activities of the Commission in the field of Social Sciences have gone through a bad phase during the last two years. Since the departure of Professor J. P. Lebeuf, the post of Secretary for Social Sciences has remained vacant. On a proposal of the Council, Mademoiselle Solange Faladé was appointed to this post as from 1 August 1960. In view of her state of health, she delayed taking up the post; she then decided that she could only visit Africa exceptionally and the Commission had to abandon the idea of appointing her. Mrs. Bevan accepted to fill the post temporarily. Now that there is no question of appointing Dr. Faladé, a permanent solution has been adopted: Mlle Bergeret, a member of the staff of the Secretariat, has taken over the Secretariat for Social Sciences.

In spite of these difficulties and thanks to the competence of the scientists responsible for the work and to the devotion to duty of Mrs. Bevan and Mlle Bergeret, we are able to report some activity in this chapter.

Linguistics

Each year, the Secretariat notes with satisfaction that the African Governments attach great importance to the problems of linguistics, considering that their study provides for a better knowledge of African civilisations. The Commission has an Inter-African Committee for Linguistics, presided over by Dr. Guthrie. This Committee consists of eight members and a foreign professor closely follows its activities (the Council will be interested to know that he is a professor of the University of Kyoto).

In accordance with the recommendations of the First Meeting of the Committee (Tervuren, 1959), the Second Meeting will provide an opportunity for the study of problems of multilingualism:

- Linguistic changes in Africa.
- Creole and pidgin.
- Factors affecting the adoption of official languages.
- Part played by world-wide languages.

Before and after the symposium, the Committee will deal with current affairs and will examine the fields in which it should pursue its activities. The Meetings will take place in Brazzaville from 16 to 23 July. Some forty participants have announced their intention to attend.

Documentation

(a) Archives

The Report on official archives in Africa south of the Sahara has been published and circulated.

The panel has eleven members including its very active Co-ordinator, Dr. Baxter, head of the official archives department of the Federation of Rhodesia and Nyasaland.

At the initiative of Dr. Baxter, a Meeting of the Panel has been convened at Salisbury in August 1963. On that occasion, the panel of correspondents for the history of the peoples of Africa could also meet.

The agenda will include the following points:

—Archives and history (discriminating between the various periods).

—Archives and history (discriminating between the possible angles of approach, historical, economic, traditional, political and technical).

—Methodology (classification, etc.).

A proposal concerning archives was made at the Seventeenth Session. The delegate from Tanganyika proposed to place at the disposal of other countries the archives of German origin that have been kept in his country.

(b) Meeting of specialists on libraries and documentation

The Council decided to devote one of its meetings of specialists to libraries and documentation. The agenda included the following items:

—Restatement of existing resources.

—Establishment of new documentation centres.

—Training of librarians.

Under this second heading, the meeting was to consider the advisability of establishing in each country a centre which was informed of all local bibliographical resources. These centres would be in direct contact with each other and would have photocopying and microfilming facilities for documents. Departments, institutes or research workers anxious to obtain documents, would approach the national centre concerned which, if unable to meet the request from within the country, would contact centres in other countries.

The third item on the agenda covers a subject which is discussed under the heading "Training of middle-grade personnel". The meeting was to consider setting up in the French-speaking countries of West Africa a regional centre, at Dakar, where French-speaking librarians and archivists from West Africa would be trained (training requirements in the English-speaking countries have already been met; centres are already established in Accra and Ibadan).

The meeting aroused great interest in the specialist circles and this interest was stressed by a resolution of the Seventeenth Session.

It seems to have been ill-fated, however. It was to have taken place in July 1960, at Bukavu. It was postponed once, until the end of the year, owing to the events that accompanied the independence of Congo; several months later, the situation had not improved and it was decided to postpone the meeting once again; a third postponement became necessary owing to unexpected difficulties that arose at the last moment in the organisation of the meeting at the University of Ibadan, in March 1962. The Council will have to decide whether it wishes to reserve one of its 1963 meetings of specialists for this problem.

History of the peoples of Africa

Until March this year, the Commission had, in this field, two panels of correspondents, one for history, the Co-ordinator of which was Dr. Silva Rego, and one for ethnohistory, the Co-ordinator of which was Dr. Vansina. Nothing need be said about the first as it never had any activity. The second one, however, thanks to its Co-ordinator, has maintained constant activity in excellent conditions.

On the occasion of a seminar held by the International African Institute, the panel met at Dakar, on 20 December last, under the Chairmanship of Dr. Vansina. Six members were present, as well as the Chairman of CSA and Dr. Forde, Member of the Council, who may report to their colleagues.

The meeting proposed that the two panels for history and ethnohistory should be merged into one, that would deal with "the history of peoples". This decision was ratified by the Governments and put into force. The new panel consists of fourteen members and most of the countries of Africa are represented.

A difficult problem arises: the appointment of the Co-ordinator. The name of Dr. Vansina immediately comes to mind, but he is now established in the United States and, in these circumstances, has found it necessary to resign from his inter-African activities. This is to be regretted but it is understandable. The Council must, therefore, take a decision in respect of the direction of the new panel. The views of Professor Monod, Dr. Forde and Dr. Ly will be particularly valuable and the Secretariat hopes that they will have proposals to make.

To return to the Dakar meeting, it gave consideration to the problem of the training of research workers, among which young African research workers having received a training in social sciences in a university outside Africa. A recommendation was adopted in order to develop, in African universities having specialists working in this field, a system for the supplementary training for students who wish to undertake research work in ethnohistory. In accordance with this recommendation, an appeal has been made to a number of English-speaking and French-speaking universities. The Universities of Dakar, Khartoum, Addis Ababa and Fourah Bay have notified their agreement in principle. The new Co-ordinator, when appointed, will have to make contact with these establishments to put the project into concrete form. The University of Ghana has refused to participate.

The meeting also requested the Co-ordinator to undertake two tasks. On the one hand, Dr. Vansina has been invited to prepare a handbook on methods for the collection of oral traditions. He will carry out this work before finally leaving the Commission and his work will be published in the course of the year. On the other hand, the Co-ordinator has been requested to submit an annual report on research work. A very interesting document was distributed at the end of April, covering work done in seventeen countries,

fifteen of which are African. The Secretariat would like to quote part of it, summing up the work accomplished as described by Dr. Vansina:

“ There is a need for textbooks for schools in nearly all the African States and many specific programmes are aiming at the production of such books. More and more Africans become active in the field and the interest taken by the general public in this area of research is increasing very rapidly. Research itself goes actually through a phase of rapid and healthy growth, especially in West Africa, our store of knowledge accumulates more and more rapidly, and new and more refined techniques of research are tested in the field.

“ But there remain areas of study on which research could be focused by preference. Some of these are: the role of the Mande in West African History; the history of the pagan peoples of Nigeria and Northern Cameroons; the problem of cultural contact between the Nile valley and the Chad area and the detailed history of the States east of Lake Chad; the early history of the interior regions of Tanganyika; the history of Lunda migrations in Central Africa, and especially in Central and Eastern Angola. These are but a few of the main gaps in our knowledge ”.

The Secretariat would not like to close this section without inviting the Council to express its appreciation for the work accomplished by Dr. Vansina with great competence and devotion to duty.

Migrations

In its Recommendation XLV, the Twelfth Meeting of the Council highly commended the survey conducted by Dr. Rouch on migrations in West Africa (Joint Project No. 3).

The Secretary-General will not revert to this project, the final publication of which will be achieved at the beginning of 1963, after an analysis of the work as a whole. We should like to note, however, that Governments now have a better understanding of the essential aspect of migrations in the development of Africa. It is only now that the part played by migrations is appreciated in non-specialised circles. Many improvements could still be introduced, not with the object of altering the course of migrations, the pattern of which has been established for many years, but rather to give better protection to migrants and obtain more satisfactory results. This represents a task of considerable magnitude for the countries of origin and for the countries of destination. Both should benefit from it.

This subject held the attention of the Seventeenth Session. It was particularly interesting, moreover, to submit to African Governments, in the same year, the conclusions of three very different groups convened at the symposium on migrations (Niamey, February 1961), at the Sixth Inter-African Labour Conference (Abidjan, April 1961) and at the meeting of specialists on urbanisation (Abidjan, August 1961), for these conclusions

were practically identical and to a large extent complementary. The Commission has endorsed them and reaffirmed the need:

(i) to prepare inter-African agreements on migration which define the rights of migrant workers and ensure that the protection to which they are entitled is properly effected;

(ii) to study in association with WHO, a system for protecting the health of migrants before, during and after migrations, especially in the tracing and control of tuberculosis;

(iii) to undertake systematic surveys in the countries of origin of migrants.

It will be noted that the other recommendations of the Niamey symposium will be followed up. Dr. Rouch has obtained the necessary funds to continue his research work in the countries of origin. The Commission will publish a code of ethnic groups in West Africa, and official list of villages and a bibliography of important publications on migrations (prepared by ILI).

Urbanisation

Urbanisation, i.e. series of phenomena which lead to and accompany the rapid growth of towns, is of capital importance in Africa today. Everywhere, big towns are developing rapidly and the number of problems caused by this development are phenomenal. The Commission invited the Secretariat to convene a meeting on this subject, as the Housing Conference held in Nairobi in 1959 was unable to consider the problem of urbanisation very closely. In view of the projects of UNESCO and ECA, who intended to organise a symposium on the social aspects of this problem, and taking into account also the excellent scientific meeting held under the aegis of Dr. Forde's International African Institute, some time ago, on the same theme, it seemed preferable to give the CCTA/CSA meeting a different character. The Council decided to lay stress on the close co-operation between disciplines that is required in the study of urbanisation, rather than to the social aspects of the problem.

If these problems are to be solved, broad surveys must be undertaken before the technicians come to tackle the technical problems. The engineer's work must be preceded by that of the sociologist, the economist, the demographer and the statistician, and the views of these experts should always be borne in mind by those responsible for designing urban development and drawing up town-planning schemes. With few exceptions, this is far from being the case in Africa.

The specialists meeting was held in Abidjan in August under the chairmanship of Mr. Martin, a Member of the Council. Six other specialists were invited by the Council, forty representatives were appointed by Governments, ILO, EEC, WHO, etc. Several documents were circulated

before the meeting: the agenda was modelled on that of an earlier conference in Latin America by UNESCO, and was divided into two sections:

—Definition of the problem of urbanisation; demographic aspects; economic and social aspects.

—Plan of action : economic development ; national development planning; social policy ; priorities.

The Secretariat considers that the meeting was successful and would like to draw attention to one or two characteristics of this particular meeting. The Africans present played an increasingly important part in the debates. The items included in the agenda were considered more and more intricately and from a more realistic point of view. Every endeavour was made to examine problems of urbanisation and development from entirely new angles even at the risk of shocking supporters of the more classical system of analysis. Some of the conclusions reached are perhaps paradoxical, but the general trend of ideas revealed at the meeting in Abidjan should, however, leave a lasting impression on many minds: it could induce experts to reconsider their opinions on many subjects which they had previously considered to be completely discovered. The Secretariat is grateful to those specialists who led the discussions and to several experts sent by Governments who made every endeavour to consider problems in a new light.

The most important recommendations dealt with the overall planning of development. Participants stated that no housing is satisfactory if the town has not been reasonably planned to take into account economic resources, social needs and natural conditions. On the other hand, there can be no good urbanisation plans if they do not fit into larger programmes now called " area development projects ". And, finally, how can the redevelopment of a region be planned if the development of the country has not been considered and planned. These discussions are far removed from those held in Nairobi on the design of stoves and the quality of roofing materials. It is, however, within the framework of planned economic development that the problem of urbanisation must be considered. Independence has given Governments an opportunity to conceive and draw up development plans. It was interesting to see in Abidjan both administrators and specialists launch a common appeal to Governments of Africa urging them to adopt a very positive attitude when considering planning programmes.

Many general and technical recommendations reflect the imaginative spirit which moved the meeting. Participants felt that classical formulas of low-cost housing did not seem to meet the requirements of Africa, and that in many instances it was probably better to give greater scope to individual initiative in construction, reserving credits which are always inadequate, for collective developments and preparation of sites for construction.

Participants recorded that the influence of youth movements, women's associations, even political movements, was often beneficial to the establishment of the urban community. These movements should be associated with

urban development, to avoid the risk of embarking upon technical undertakings which do not correspond to human reality.

Many more recommendations could be quoted. On a more technical level, one could for example, refer to the conclusions reached on sociological studies, statistical surveys, on the establishment of development plans, etc. Members of the Council are asked to refer to Publication No. 75 for further information on this subject.

Participants at the Abidjan meeting were particularly interested by the reports submitted, relating to proposals to use television and audio-visual means for the mass education in urban and rural environments.

The Seventeenth Session recognised the importance of the problem and adopted the following recommendation:

“ It considers that experience acquired in certain countries should be better known and SUGGESTS that achievements in the field of television in Nigeria and in the Federation of Rhodesia and Nyasaland should be communicated to other countries by way of documentary notes which the Secretariat could circulate.

“ The Commission hopes that close co-operation will be established between specialists and departments concerned with the use of audio-visual methods. It does not consider, however, that this comes within its direct scope and requests the Secretariat to facilitate as far as possible the holding of a symposium on television by another organisation ”.

UNESCO has been approached.

Radio-carbon dating centre

Radio-carbon dating centres exist in Southern Africa (Pretoria, Salisbury) and in Central Africa (Lovanium) but the West African region is dependent on equipment installed in Europe. This paralyses progress in a variety of fields: archeology, prehistory, geology, pedology. Professor Monod proposed that a centre be installed at Dakar to meet the requirements of Western Africa. The Council recommended this project to the attention of various organisations and countries outside Africa, prepared to provide assistance (Rec. XLVII, Twelfth Meeting.)

CHAPTER 3

EDUCATION

“ Education, schools and specialised training constitute the major preoccupation of the new Governments of Africa and there is every reason for satisfaction at this. The development of the continent will depend on the extent and the quality of the work done ”.

The Scientific Council introduced this subject with these words at its

Twelfth Meeting (Recommendation XLVIII) and at the same time recognised the merits of the ambitious scheme drawn up in Addis Ababa in May 1961 at the major conference on education convened by UNESCO.

When it is a question of an undertaking on this scale, agreed upon by all African Governments, their overseas friends as well as UNESCO, then no facility, however modest, should be neglected and the Secretary-General would like to continue to quote Recommendation XLVIII of the Council:

“The effort made, in the first instance by the countries of Africa with the support of countries outside that continent, as also by international bodies, is so extensive that the Council does not consider it appropriate to intervene in the general field of education and ADVISES the Commission to abstain from doing so. The latter’s activity should be confined to carefully circumscribed subjects, as has been the case in the past, such as particular forms of education (the teaching of a second European language, technical education, etc.), or training problems connected with the normal technical activities of the Commission (training centres in various fields—veterinary, statistical, agricultural, etc., the specialisation of experts in tropical matters, regional training centres and so on)”.

The Commission endorsed the recommendation of the Council, at its Seventeenth Session. Following upon this decision, the Commission postponed *sine die* the Third Inter-African Conference which was to be devoted to the education of women.

If CCTA/CSA no longer deals with the traditional problems of schools and universities, education nevertheless remains to the forefront of its concerns. A previous chapter has dealt with this subject and, as it was a new one, it appears in the general part of this report (Chapter 3, Part I). It deals with the establishment of new permanent regional centres for the technical and scientific aspects of education, in cases where it would be unreasonable to establish such centres at national level. It also deals with the very important decision taken at Abidjan to create a Fund to facilitate the sending of young Africans to neighbouring countries, when they cannot find the required technical facilities in their country to achieve their training in the middle-grades. On the other hand, a number of short training courses have been or are being organised. Reference has been made to them throughout this report.

Finally, the Council is concerned with certain particular aspects with which we shall now deal.

Psychology and education

(a) Psychotechnical selection tests

The Council approved Joint Project No. 18. Its basic idea is to design a battery of standard psychotechnical tests suitable for use in the vocational selection of children at the end of their primary education. The aspects of

this question were discussed at a meeting held at Brazzaville in 1960. Seven types of tests are required: language, arithmetic and abstract reasoning, and non-oral tests on general intelligence, mechanical understanding, spatial relation, and interest. The four last ones cannot easily be transposed from industrialised countries to countries in the process of development and they should, therefore, be completely designed for African conditions. On several occasions Governments have expressed their interest in this undertaking, either individually, in specific communications, or by way of requests for technical assistance, or else collectively during the Sixteenth and Seventeenth Sessions. The latter, in particular, adopted a perfectly clear recommendation on the subject.

Since the last Brazzaville meeting, however, new elements have come into play. They are of two kinds. The inventor and animator of the project, Dr. Biesheuvel, is no longer available; he was unable to attend the last meetings on the subject; he will be leaving the specialised institute of which he is now the Director and will, therefore, not be able to call on the necessary assistance or make use of the laboratories. On the other hand, the American Government has undertaken systematic research work. The American Institute for Research (AIR) has sent strong teams to Africa, first among which should be mentioned that directed by Dr. Schwarz, in Nigeria. Part of this field that the Brazzaville meeting recommended should be prospected has thus been reconnoitred and it would be a pity not to take advantage of the work accomplished.

The meeting of experts proposed by the Governments met in Lagos on 27 February last and had a very different character from that expected. In its first stage, delegates and observers re-examined the project and the work accomplished since the Brazzaville meeting. In a second stage, they adopted recommendations that may serve as a basis for the continuance of Joint Project No. 18.

The essential part of the new project is that the work accomplished by AIR should be used to the best advantage, confirmed and completed. The second idea is the establishment of a permanent organisation, capable of developing the use of these tests and ensuring that they are wisely and seriously applied.

The most important recommendation deals with the appointment of a permanent Committee for co-ordination. Its functions, as recommended by participants at the Lagos meeting are as follows:

- To serve as a documentation centre on the development of means for selection within the scope of Joint Project No. 18.

- To pool acquired knowledge.

- To organise such research work as may still be necessary within the scope of Joint Project No. 18.

- To prepare programmes for regional co-operation.

- To facilitate the training of local personnel.

- Generally to advise Governments on the use of tests.

To these functions the American specialists would now like to add one more: to ensure an effective check on the application of the tests by defining the qualifications required of the expert who is to be responsible in each country, perhaps even by establishing and regularly revising the list of these experts for Africa, it being understood that batteries of tests would only be entrusted to such recognised experts.

Once the principle of this Committee is accepted, it becomes apparent how the project may be implemented. On the one hand, tests already established by AIR will be made available to all countries and confirmed or adapted when necessary in countries where there are no American teams at work. On the other hand, research work will be completed, either by extending present AIR programmes to certain additional tests, or by calling on certain African institutes for tests with which AIR is not dealing. This pooling of effort may prove useful, particularly from the administrative and financial point of view. Nevertheless, in the scientific field, whatever may be the qualifications of the American research workers—and all the participants at the meeting paid tribute to them—one can understand that specialists who have been working in Africa for many years will want to check the tests, confirm them and if need be adapt and complete them in order to make sure that they are entirely suitable for the requirements and conditions of the continent. The services of men such as Professor Taylor of the University of Ibadan, Dr. Vant of the Ministry of Labour in Kenya, or Dr. Rogers of the University of Rhodesia, and the advice of men with such experience as Dr. Lambo, Member of CSA, Dr. Biesheuvel, Associate Member of CSA, the experts appointed by the Government of Tunisia, or Dr. Pidoux, at present on a mission in Bamako, should be of the greatest value. One can even say that they are essential, without detracting from the value of the work expected from the Americans.

In these conditions, the first decision to be taken relates to the permanent co-ordinating Committee. Before placing the matter before the Commission, the Secretary-General would ask the Council to give it careful consideration, taking into account the advice it will receive from Dr. Lambo at Muguga (he presided with great authority over the Lagos meeting). The Committee might include the above mentioned specialists. Dr. Biesheuvel has resigned from his present functions as Inter-African Correspondent and this is a serious loss for CCTA/CSA. It is hoped that he will continue as a member of the Committee, but another animator will have to be found to preside over the work of the Committee. It could be Professor Taylor. The Council will have to consider the problem of the representation of French-speaking countries. The Lagos meeting was dominated by English-speaking experts and this resulted in an undesirable lack of balance.

Should a few non-specialists be included in the Committee? Such is the view of the Americans who would like to see it include representatives of the departments of national education. Should delegates be invited from countries or institutes outside Africa, with great experience in the matter?

These are other questions calling for the attention of the Thirteenth Meeting of the Council. It will be noted, however, that all these questions are raised on the assumption that the Committee will not have a governmental character. Could it then be placed directly under the sponsorship of CSA ?

(b) Meeting of specialists on acculturation

The attention of the Council has just been drawn to the eminent part played by Dr. Lambo at the Lagos Meeting and in the preparation of Joint Project No. 18. There is nothing surprising in this, for the development of education must be accompanied by extensive studies on psychological data. Dr. Lambo presses this point on every occasion; he did so during his visit to the United States in May 1961; he will certainly do so again at Muguga. Such is the setting in which should be considered the meeting of specialists which took place in August 1959 at Tananarive, on the basic psychology of the African child, under the Chairmanship of Professor Millot, Member of CSA, and the scientific direction of Dr. Biesheuvel, Inter-African Correspondent. This is also the time to recall the decision of the Council to devote one of its 1963 meetings of specialists to general problems of acculturation. Professor Millot suggested that Dr. Lambo, who took part in the Tananarive meeting, should preside over the 1963 meeting. He has therefore been asked to present detailed proposals, at Muguga, in respect of the specialists to be invited, the date and venue of the meeting on acculturation. As regards the agenda, Dr. Lambo proposes that it should include the following items:

- Definition and criteria of acculturation.
- Trends in the development of African communities.
- Influences that have brought about acculturation.
- Consequences of acculturation, in the family and in the community.
- Medical and social aspects of acculturation.
- Special problems : urbanisation, industrialisation, demographic mobility.
- Comparative studies of certain particular cases, in Cuba, Brazil and Nigeria, for instance.

Teaching of a second European language

For several years, the Commission has constantly maintained that the teaching of a second European language in Africa was a problem which called for an urgent solution if closer relations and more extensive contacts are to be made possible between English-speaking countries and French-speaking countries. The recommendations adopted at the various sessions show all the aspects of the problem: teaching of children and of adults, spreading the second language among a large part of the population and the spreading of the language, as a matter of priority, among a political, trade union and specialised elite, traditional methods of teaching and accelerated methods, with priority for audio-visual methods.

It is in these conditions that CSA devoted one of its specialists meetings

to the problem. It took place at Yaoundé, on 15 November 1961, with the participation of five specialists invited by CSA, who took the Chair in turn. The agenda included the following items:

—General statement, existing facilities.

—Teaching of adults, particular attention being given to accelerated training centres, teaching in schools, methods and teachers.

—Co-operation between neighbouring countries.

The meeting aroused great interest. The Governments had appointed languages professors and other representatives of educational circles; three American observers and one observer from UNESCO came to Africa on this occasion. The conclusions covered the whole of the subject. The object to be achieved was first recalled: the second European language is a means of communication between African States, but it is also an international language which, in association with the first European language enables Africa to maintain contact with the whole world. Methods of teaching were then considered. The specialists stressed the need to have an extensive knowledge of African linguistics, in order to adapt the teaching methods to the various regions. Textbooks should thus be prepared specially for African students, with extensive quotations from African authors. Teachers should be trained in the specific conditions of Africa, without their knowledge of the language they are called upon to teach being diminished for all that. Finally, it would be risky to start teaching the second European language before the students possess a sufficient knowledge of the first.

The use of audio-visual means was discussed at length. It was unanimously approved. Rapid teaching centres were the subject of lively discussion. The French are the main supporters of this method and the experience acquired by the Saint-Cloud Institute is convincing. The meeting did not consider, however, that such advanced methods should be applied in all cases. There are three degrees and the one best suited should be chosen. In extreme cases, a complete audio-visual equipment should be used, including a linguistic laboratory. In most cases, the teaching should be of the traditional type, with audio-visual assistance. Lectures given in accordance with traditional methods should not be discontinued for all that. Discussion on the centres was highly profitable. At the request of the Secretariat, it provided the possibility of preparing a questionnaire listing the points to be examined before opening a centre; this questionnaire is proving of the greatest value for the FAMA Secretariat.

Finally, it should be noted that the meeting gave special consideration to the particular problem of Cameroon, the only African State that has adopted both English and French as official languages.

Activities are not limited to this meeting of specialists. The Secretary of FAMA has received a number of requests from Governments. Scholarships have been granted to students or to other persons to follow accelerated courses in Europe (three CCTA officers have already received such scholarships), professors have been provided, under the aegis of

FAMA, for various centres and universities. Two linguistic laboratories have been equipped at Lagos and Ibadan. Two other centres have been organised with audio-visual assistance, at Abidjan and Buea. Seven requests are under consideration, most of which will be granted.

The balance sheet is thus satisfactory. It should be considered in a critical manner, however, for the first experiment revealed the weak point of the various systems. One cannot do better than quote, in this connection, the recommendation adopted by the Commission, at Abidjan, which sums up in very complete manner the present position of the directives received by the Secretariat and of the doctrine it intends to follow.

“(a) As far as the teaching of languages in schools is concerned, the intervention of the Commission can only be exceptional. The method for the employment of experienced teachers from neighbouring countries is interesting . . . and the Commission HOPES that it will be given careful consideration: the interest in principle thus expressed cannot, however, be turned to any specific project as yet due to the general shortage of teachers and professors in Africa.

“On the other hand, the Commission CONSIDERS that the Secretariat would be contributing very usefully if it were to assist in the organisation of short duration courses during the vacations for teachers and professors of languages in neighbouring countries.

“(b) The Commission NOTES with great satisfaction the action undertaken by FAMA to facilitate the rapid teaching of a second language to certain adults with important responsibilities. It CONGRATULATES the Secretary of FAMA and THANKS the British and French Governments. The Secretariat of FAMA should therefore pursue its efforts to ensure, in the capital of a country expressing a wish in this connection, the establishment of audio-visual centres belonging to national governments and used by them in the best conditions. In this respect, the Commission urges Governments to give serious consideration to the need to allow sufficient time to the persons attending such courses, for the instruction to be fully assimilated. Governments applying for such centres should undertake to impose strict working hours for the persons following the courses.

“Audio-visual centres established in the capital of a country constitute an interesting method. Teaching given in this manner can only be of full value, if the students work full time and if they spend the corresponding period in a country where the language they are learning is currently spoken. For that reason, the Commission APPROVES the arrangements made by the Secretariat of FAMA to send African students to audio-visual centres in France and in England. The Commission SUGGESTS that audio-visual centres might be provided for the rapid teaching of French in the English-speaking countries of Africa, and for the teaching of English in the French-speaking countries of the continent.

Such centres would obviously not be intended for nationals but for Africans from countries speaking the other language. The idea is to transfer to Africa the activities existing in Europe and prescribed above. The Commission REQUESTS the Secretary of FAMA to give the greatest attention to the possibility of carrying out such a project ”.

There are no specialists in the teaching of languages among the members of the Council. It is desirable, however, that it should examine this problem at length and that is why the Secretary-General has gone into details. At this stage, it is one of the important activities of the Commission, particularly of FAMA. All leads to believe that it will develop further. Care should be taken not to engage on a path with no issue.

In so far as he may be allowed to do so, the Secretary-General suggests that the Council should consider some day the possibility of appointing an Associate Member to cover this very special discipline.

CHAPTER 4

RURAL WELFARE

For several years, the Secretariat has had standing instructions from the Commission to give some consideration to problems of rural action. The new Governments of Africa attach primary importance to this action which they see as a means of associating the rural masses with the general development of the country.

This was reaffirmed in a particularly clear manner at the Abidjan Session, last February. It will, therefore, not come as a surprise that this has now become one of the fields where the activities of the Commission have developed most rapidly. Between November 1961 and the summer of 1962, no less than three symposia, one study tour and one agricultural extension centre have been devoted to subjects dealt with in this chapter.

A major difficulty in this field results from the vastly different organisation, indeed different philosophy of action, prevailing in English and French-speaking countries. The former speak of “community development” and consider as such all activities which require the participation of the masses. The latter hardly know of this type of action or have known of it for a very short time. They consider as “*génie rural*” all technical activities which further the development of rural communities. It is, therefore, under this dual heading that CCTA activities will be discussed, before turning to two more well defined subjects which concern every country in Africa: agricultural extension and rural trades.

Community development

(a) Permanent activities

The Council was informed at its Twelfth Meeting of the agreement reached with the Education Community Development Clearing House in London, for articles and communications formerly reserved for members of the Commonwealth to be circulated throughout Africa. Mr. Clunies-Ross, Director of the Inter-African Community Development Clearing House, now established in London, has shown great competence, energy and enthusiasm: he has not only published and circulated the bulletin, but also toured the whole of West Africa in May and June 1961 and undertook a similar tour of East Africa at the end of that year and at the beginning of 1962. Comments received from Governments are an indication of the successful contacts made by the Director of the Clearing House. The Secretariat wishes to thank Mr. Clunies-Ross and to congratulate him. Not only does he accomplish his task with the qualities we have referred to, but he gives valuable advice in all the fields which are closely or distantly related to community development. He has thus become a valuable animator of the work of the Commission and the Council.

ECA has a well equipped division dealing with community development. Close relations have been established between the Director of the Inter-African centre and the chief of the Addis Ababa division, who is none other than Dr. Dulphy who, as will be recalled, played an important part as Inter-African Correspondent for Rural Welfare, for several years.

Mr. Clunies-Ross visited Addis Ababa in October. He had conversations with his colleagues of ECA and expressed the wish of the Commission and more particularly the panel of correspondents, to work in close liaison with the Addis Ababa services in the future. The atmosphere of the meeting was pleasant and there is reason to hope that co-operation will finally be established in good conditions. It should be noted, however, with some concern, that there is a risk of overlap: it is the intention of ECA to establish a documentation centre whose functions and structure will be practically identical with those of the Inter-African Centre. A study tour was organised in Asia in 1962; a specialised discussion was held in Western Africa under the aegis of ECA at the very time when the Commission was holding its second symposium on community development, at Kampala (see further). These few indications illustrate the need for co-operation. On other points, on the other hand, ECA is doing original work. The Council will recall the meeting on low-cost housing and community development which was held at Tunis, in October, and where Mr. Clunies-Ross represented the Commission. It will also note the survey on the use of community development methods in urban areas in progress at Addis Ababa. In accordance with the advice received from the members of the panel, future activities undertaken by the Commission will be organised jointly, or at least in close liaison with the United Nations Commission, in so far as the ECA authorities will agree.

(b) Symposium on community development in Eastern and Central Africa

A symposium for West African countries was held in Accra in 1959. This symposium was followed by a study tour to which the United Nations Bureau of Social Affairs in New York contributed. Both these activities were intended for West African countries; their success has encouraged the Commission to arrange a similar programme for East and Central Africa.

The symposium was held at Kampala from 20 to 30 November. There were fifty participants, from countries in East Africa as well as from Mali, Nigeria, Belgium, France and the United Kingdom, Israel, the United States and FAO. The agenda covered seven points:

- Group work at the village level.
- Anti-illiteracy work.
- Health education.
- Agricultural extension work.
- Women's work in rural and in urban conditions.
- Education for citizenship.
- Training of senior staff for community development work, with special reference to the contribution of the universities.

Each of these items had been the subject of careful preparation, under the direction of the Chairman of the symposium, Mr. A. R. G. Prosser, from Kampala, and of the Director of the Inter-African Centre. Rapporteurs had been appointed, particularly a rapporteur general who was to draw the conclusions of the discussions, Mr. W. H. Chinn, from London. Thanks to this preparation, the discussions had a concrete and constructive character. This was undoubtedly one of the good CCTA meetings: Dr. Verdier, who took a considerable part in it, will report to the Council.

An exposé preceded the opening of the discussion on each point which was then referred to two working groups. In addition, the delegates had been asked to describe the experience acquired in their respective countries and the holding of this meeting in Kampala added to its interest, Uganda having had great experience in this field.

The terms of reference of the symposium precluded any discussion on administrative structures and general definitions. Commonplaces and interminable discussions were thus avoided. It should also be noted that in spite of the fundamentally different concepts of the two major groups mentioned at the beginning of this chapter, it was possible to reach common conclusions.

The fundamental character of community development having been postulated, the symposium recalled that in all cases the educators of the community should take local culture as a starting point of their action. The object of "community education", which was the theme of the meeting, is to provide for the education of the individual, his family, and wider groups, in order that they should become familiar with the ideas and methods best

suitable to their development. One must consider the adult, in his family circle, with his place to hold, his part to play, and his responsibilities in the community.

The symposium requested that community development officers should be appointed in each community, as well as at provincial level. It is also proposed that co-ordinators should be appointed to give effective support to the action of the officers working throughout the country.

The difficult subject of relations between agricultural extension, measures against illiteracy and community development were the subject of long discussions. Extension work and measures against illiteracy are important aspects of community development, but do not constitute ends in themselves. Civic instruction should be placed on the same level; it is part of the social studies the object of which is to stress the responsibilities of the citizen in the community.

As might be expected when dealing with such a subject, several sessions were devoted to the part played by women in the community. Women delegates took an active part in the discussion. Everybody agreed that women have their place in the community, just as the men, the difficult problem being that one does not yet know what are their respective places.

Finally, it was recalled that the methods of community development were applicable in the towns as well as in rural areas.

(c) Community development and agricultural extension study tour (FAMA/FAO)

It had been planned to arrange a study tour on community development to follow immediately on the Kampala Symposium, similar in all respects to the tour organised in 1959. The plan has been changed, however, in view of the fact that ECA has its own project for a tour involving two or three CCTA member countries, and the undertaking postponed until October/November 1962. The study tour will cover agricultural extension in addition to community development. FAO has agreed to participate and will provide one specialist to lead the tour with a specialist appointed by CCTA. The tour is intended for twelve participants and will last a month, visiting five countries: Uganda, Cameroon, Ivory Coast, Eastern Nigeria and Mali. Numerous field visits are planned with intervals to enable those taking part to sum up their impressions and draw conclusions. The FAMA Secretariat will provide fellowships to meet a substantial proportion of the costs. The American authorities have kindly agreed to finance part of the tour; the Secretariat is very grateful to them for this.

The Commission has shown great interest in this mode of work and, at its Seventeenth Session, it recommended that other study tours should be organised in the future, in this field as in others. The Council may wish to submit suggestions.

(d) Future meetings

At the Seventeenth Session the Member Governments asked that priority should be given to direct contacts between specialists, thus giving study tours their full value; but this will lead Dr. Russell, Member of the Council, and Mr. Clunies-Ross to wonder whether it would not be appropriate to hold a meeting in 1964, specialised on community development. Fourteen countries have expressed agreement in respect of such a meeting, following upon a consultation by the Director of the Inter-African Centre. Certain members of the panel have even proposed that a further symposium similar to those of Accra and of Kampala should be held, as well as a specialised meeting. The Secretariat would be in favour of holding only a meeting of specialists. It hopes to be able to give the Council more complete information when the subject comes up for discussion at the initiative of Dr. Russell.

Génie Rural

At its Sixteenth Session, the Commission "... requested the Secretariat to furnish information on problems of agricultural engineering, particularly on questions of agricultural and pastoral hydrology in relation to the improvement of living conditions in rural areas." It considered "that it would be desirable to establish co-operation in this field".

The concept of "génie rural" is essentially French. A definition of the term according to specialists in this field, includes the following points:

—Improvement of human living conditions: water supplies for rural populations and rural housing.

—Improvement of conditions of production—hydro-agricultural development and estate management—pastoral hydrology and mechanisation of agriculture.

—Improvement of planting conditions, housing of animals and crops processing installations and storing of products.

These tasks, in the opinion of the experts, come in the following order of importance: supplies of drinking water; rural roads; pastoral hydrology; housing of animals and crops; storage of products; and finally, mechanisation of agriculture—especially animal-drawn equipment. Specialised activities such as rural housing, electrification, in short, modernisation, come last on the list.

The importance attached to each of these factors naturally varies from one country to another, depending on local conditions. However, the order of priority is almost the same everywhere and difficulties occurring in countries of comparable climate, with similar geological structures can be resolved by similar methods.

The first preoccupation proposed for the Commission must, therefore, be to maintain liaison so that Member Governments may exchange information in the following cases:

—Activities already completed in the field of “génie rural”, stressing achievements realised collectively.

—Technical difficulties and solutions.

—Unsolved difficulties preventing the realisation of certain tasks.

The second action, to which the Secretariat would be inclined to give priority, would be to contribute to the establishment of regional centres intended for technical assistants and “moniteurs”. This topic is considered in the report on the “Training of middle-grade personnel”.

Consultations are still in progress. The Scientific Secretary will report to the Council at Muguga.

Study centre on agricultural extension in East and Central Africa

In July 1959, FAO conducted a study centre at Ibadan, jointly sponsored with CCTA. The results were excellent and the Commission then decided to include a similar study centre in the programme to take in rural areas in East and Central Africa. This development centre took place at Arusha, from 6 to 16 February, under the direction of FAO. Mr. Clunies-Ross conducted the discussions on behalf of the Commission. Some forty trainees, from fourteen different member countries in East and Central Africa and Ethiopia, attended the meeting. The United States, UNESCO and UNICEF had sent observers. It was not a conference but a study centre, directed by a few animators. The lectures dealt with subjects that should be known by those responsible for extension work in each country. An exposé was first made giving the background of agricultural extension, then of the part played by this concept in the planned development of a country and the gradual extension of the idea from the economic field to a number of other aspects of agricultural production, including marketing. The basic principles were set out, then the programmes and methods. The social aspects of the problem were recalled and the essential part played by women in rural communities was stressed. The problems of structure were studied, both central organisations and local services and liaison with other administrative departments, including community development officers. The training of personnel was the subject of the concluding discussions.

The participants recommended that meetings should be organised in the future to deal with certain technical problems, particularly among administrative officers responsible for the practical organisation of the services.

Symposium on agricultural research

For several years the Council has been recommending the convening of a symposium on agricultural research in countries in process of development. The symposium took place at Muguga from 11 to 15 December, under the Chairmanship of Dr. Russell, who will report to his colleagues on the subject. Twenty-five participants attended the meeting, from several member countries of CCTA, as well as observers from FAO, Ethiopia, the

United States, Israel and Federal Germany. It is to be regretted that West Africa did not participate to a greater extent. The agenda approved by the Council included the following items:

—Definition of the objectives pursued by agricultural research organisations.

—Structure of agricultural research organisations; relations with forestry and grazing research.

—Liaison with fundamental research centres and administrative departments, particularly those concerned with agricultural extension.

—Basic and advanced training of research workers both outside and inside agricultural research organisations.

Part of the meeting was devoted to structures and methods in the different countries. On the basis of this information it was possible to direct the discussion towards concrete facts. A number of similarities were noted between the types adopted by English-speaking countries; there is even greater uniformity in French-speaking countries. The differences between the two systems are considerable, however. The present organisation in French-speaking countries received special attention. The great effort made by France, from a financial and scientific point of view, was noted. Pure research is carried out in institutes situated in France. Applied research is ensured by institutes situated in the various countries; these institutes are administered by national committees and 50 per cent of the expenditure is met by France.

Methods applied in other countries also received attention, particularly those applied in British East Africa, in the Federation of Rhodesia and in South Africa. The meeting noted the importance of research work undertaken by institutes entirely or partly financed by private enterprise (tea, coffee, tobacco, etc.).

There were only a few recommendations. They dealt with the more important problems. The symposium stressed—as have done a number of other meetings in the most varied fields during the last two years—that an overall plan was necessary; agricultural research must be integrated into plans for economic and social development; such is the set-up in which financial support will be found and where personnel may be recruited. The symposium stressed the importance of liaison between research and extension work; it suggested that research workers should contribute to the training of extension and community development officers. It also stressed that close relations should be established between the various sectors of research. Finally, it raised the problem of university and post-graduate training.

The Secretariat wishes to pay tribute to the work accomplished by the specialists convened at Muguga last December. It feels that they have been able to throw light on the most important problems in this field. Dr. Russell's comments will be welcome.

Rural trades

The symposium on rural trades was held at Enugu from 13 to 19 December. The Inter-African Labour Institute was responsible for its preparation, in co-operation with an expert seconded from FAMA at Zanzibar, Mr. Arnaud. ILO sent a representative, Mr. Hajeez, an expert in rural trades and small industries in Sierra Leone. The agenda of this meeting included the following items:

- Part played by rural trades and their importance.
- Planning the development of rural trades.
- Training of craftsmen and increasing their proficiency.
- Assistance to craftsmen.
- Marketing.
- Modernisation of rural trades.
- Permanent centre for the development of rural trades and small industries.

General recommendations were adopted on the need to plan the development of rural trades at national level, thus making the most profitable use of one of the valuable forms of progress in rural areas. Rural trades can become a means of meeting local needs without calling on foreign imports; they also represent a progressive mode of development, bringing about the gradual establishment of small, modern industries. National bureaux should, therefore, be created in all countries to conduct surveys and research work on traditional rural trades, their possibilities and any new forms that may be desirable in given local conditions.

The training of artisans, the modernisation of their methods and equipment, will constitute one of the main preoccupations of these bureaux. Training will be provided in regional or national rural trade centres as well as in schools, where elementary knowledge on rural trades can be included in the primary syllabus. Assistance will be given to craftsmen who will be invited to form co-operative societies or other similar associations through which they may receive loans in equipment, in kind or in cash.

On the other hand, particular attention will be given to the marketing of products, not only for export but even more for domestic use.

It had been proposed to establish a permanent inter-African centre for rural trade and small industry. The symposium endorsed this idea but felt that its implementation would be premature. It is necessary, in the first place, to set up the national bureaux mentioned above. During the first phase, co-operation between them must remain comparatively flexible.

At its Seventeenth Session the Commission started on those lines. It decided to establish a Panel of correspondents and requested the Secretariat to propose an active and competent Inter-African Co-ordinator. A candidate for this post is being sought in liaison with Mr. Clunies-Ross and ILO. The Council may have a suggestion to make at its Thirteenth Meeting.

Finally, it will be noted that the field of rural trades is one of those for

which requests for technical assistance are presented. Mr. Arnaud carried out an excellent mission at Zanzibar, lasting one year, under the aegis of FAMA. Other missions will be organised in the near future in Kenya and perhaps in Uganda.

CHAPTER 5

ECONOMICS AND STATISTICS

Following upon the establishment of the United Nations Economic Commission (ECA), the Council defined the limits to be set on work in the field of economics and statistics. At the Seventeenth Session, the Commission recalled its instructions: "to confine the work in the economic field to clearly defined subjects and to surveys of a descriptive nature".

The structures of the Commission have fallen progressively into line with these directives and the following report will be short, concentrating on well defined subjects coming within the context of the recommendation quoted above.

Last year, the Commission still had a permanent body, the Inter-African Statistics Committee, which held its last meeting in Lisbon in July 1961 (in the presence of an ECA representative). It was decided to suspend the activities of the Committee in view of the fact that ECA and its specialist body, the Conference of African Statisticians, afford those responsible for statistics departments many occasions to meet and that an adequate meeting place was now provided for them.

The chapter on economics should not be completely closed, however. On the one hand, certain work will be useful, but essentially it would be inadmissible to lose sight of the economic objectives when examining the other activities of the Council. Therefore, even if CCTA/CSA were to have no further activity in the economic field—and such is not the case—it is essential that there should be some economists among the members of the Council and that they should give their views on all problems that are the subject of its annual discussions. In this respect, the departure of Mr. Martin is a serious loss. For four years he rendered eminent services to the Council and his replacement during the Thirteenth Meeting of the Council is of great importance.

Completed joint projects

(a) Inventory of economic studies (Joint Project No. 4)

The interest shown for the work of Miss Ady, Associate Member of the Council, has continued during the past year. It will be recalled that it was decided to publish supplements at intervals, to cover new works published since the original inventory. It is astonishing to see from the list how

numerous these new works are; 700 works will be covered in the first supplementary list.

These lists are prepared by the Institute of Commonwealth Studies in Oxford, under the supervision of Miss Ady.

OECD in Paris has offered to assist the Commission in preparing and distributing these supplementary lists. This offer has been gratefully accepted.

(b) Descriptive study of national accounting systems (Joint Project No. 6) with the assistance of OECD.

The Council has already noted the publication of this study, carried out by Miss Ady, Associate Member of the Council, and Dr. Courcier, with the technical advice of Mr. Milton Gilbert of OECD (then OEEC). Publication has been effected by OECD.

The English version was on sale in January 1961, the French version followed in July.

Methodology of family budget surveys (Joint Project No. 9)

The Council is aware of the fact that Mr. Martin, then a Member of CSA, had accepted to direct the work for the collection of available information on the methodology of family budget surveys and its publication in the form of a descriptive report. A questionnaire has been distributed to all statistical departments and replies have been collected by the two authors of the project: Mr. Martin for English-speaking countries and Mr. Causse for French-speaking countries. The first draft was submitted to the final meeting of the Statistics Committee in July. The questionnaire has produced information on the scope, purpose and organisation of surveys undertaken. With regard to "scope", the inquiries were directed to ascertaining the geographical area covered, the types of communities investigated and the strata of society selected within each community. Under the heading of "purpose", information was sought regarding the reasons for the selection of areas and social groups. And under "organisation", the aim was to obtain information concerning the pre-survey work (with special reference to the selection and training of personnel), the use of pilot surveys and, for the survey itself, the actual methods used, i.e. whether it was based on a sample or complete coverage, the enumeration system and the system of control and analysis.

The synthesis prepared jointly by the two authors has yet to be completed; it will reveal similarities and differences of the two survey methods. It suggests a standardisation of nomenclature and definitions: this subject is being studied by ECA.

The study will be published in 1962 and will then be available to the Specialised Agencies and other international or national organisations. The Secretariat does not intend to propose any new activity in this sphere.

The Secretary-General would like to express his warm appreciation to Mr. Causse and Mr. Martin who have rendered the publication of this study possible; their complete impartiality, objectivity and ability will be recognised as soon as their work is published.

Case studies on economic development (Joint Project No. 12) (CSA)

Mr. Martin had concentrated on a particular project that the Council had agreed to sponsor directly. Very detailed resolutions were adopted at the Eleventh and Twelfth Meetings (Nos. XLVII and LIV). To facilitate the discussion that will take place at the Thirteenth Meeting, it seems useful to recall, in this report, the principles of the project.

Documentation on economic development in countries in Africa, south of the Sahara, is very limited. Many works have been published on economic theories and the achievements of nineteenth century Europe and twentieth century America: it is, however, regrettable that so little information is available on concrete cases in Africa. This was the reason for the proposal which was submitted to the Scientific Council by Mr. Martin, an economist and Member of the Council, and eventually placed under his direct supervision. The Commission has not yet been given a detailed report on the project, as a report was not made at the Sixteenth Session.

One might wonder why such a project is not undertaken by any body other than CSA. There are several reasons for this. First of all, international organisations have very full programmes and give priority to studies by country over specific case studies. The executive Secretariat of ECA recently confirmed to the Secretariat that it did not intend to undertake such a project in the near future, although it recognised its merits. On the other hand, for specific studies to be of any value, to the specialist and to the student, they must be conducted more from an academic than governmental point of view and an international organisation can sometimes be inconvenienced by Governments, which are unwilling to reveal reasons for partial failures, when it is precisely details of these failures which may be of most value.

At its Twelfth Meeting, the Council agreed to the proposals of Mr. Martin, which can now be reported upon (Recommendation LIV).

Mr. Martin suggested that case studies should be initiated and published, presenting the data available on various typical cases of economic development in Africa. Governmental sources would be used, through the agency of the CCTA Correspondents, but information might also come from private undertakings, trade unions, universities, research bodies and so on. The studies as published, while mainly descriptive, would also comprise a critical examination of the project and an assessment of the results in the context of the development of the country concerned.

The purpose of these researches would not be to provide economic history alone. The series of case studies envisaged would be of great value to professors and teachers concerned with the training of African personnel by providing specific, contemporary illustrations from the students' own

countries. Thus there can be no doubt as to the usefulness of such studies to any institution, national or international, engaged in the compilation of textbooks of economic development. Lastly, the material will certainly prove useful to theoreticians and research workers in considering the basic facts of economic development in non-industrial countries. From these various angles, the case studies of economic development should equal in value the business case studies published by the Harvard School of Business Administration in respect of the more highly developed countries.

Though not wishing at this stage to draw up a detailed list of case studies, Mr. Martin has suggested the following subject headings:

- Development of land consolidation schemes.
- Public investment in general economic development.
- Major hydro-electric projects.
- Incentives for industrial development.
- Planning of transport systems and the importance of investment in transport.

The proposal is not to make an exhaustive study of each subject but to select a few typical examples under each heading and publish a descriptive study, without attempting comparisons or seeking to draw general conclusions. Accordingly, the bulletin to be devoted to these studies would contain a series of monographs each dealing with a specific project, but the individual items in each issue would not necessarily be related.

This Joint Project would have a permanent character, several case studies being published each year. A Steering Committee is responsible for the whole programme, with Professor Leduc (Member of the Council) as Chairman; this Committee will be made up of five other persons from various African countries, including a Co-ordinator of the project; one of its responsibilities will be to select suitable subjects for studies.

Editorial boards will be appointed for each subject heading. These will consist of persons chosen for their special knowledge of the subjects covered, together with the Co-ordinator, and will be responsible for editing the studies prior to publication. Their members will normally be experts working in Africa. The people selected to write the studies could be civil servants or research workers according to circumstances; some might be familiar with African problems, others might be postgraduates working for their Ph.D thesis.

The project, which is not governmental, is under the direct control of CSA. Institutions from outside Africa will be requested to give assistance without which the project could not be implemented. Several universities could contribute in this way. Once the necessary finance is obtained, the project will be implemented in accordance with a timetable drawn up by the Council which provides for the work to be started six months later, the first issue to be published eighteen months later. After five years, the Steering Committee will consider the expediency of continuing with the project, or

proposing its transfer to an international organisation such as ECA if at that time the programmes of these organisations are less extensive.

The Commission accepted the proposals of the Council and recognised, without enthusiasm, that the Governments should not intervene in the implementation of the project. It would, therefore, be possible to go ahead resolutely now. Two problems arise, however, in respect of which the Thirteenth Meeting of the Council will have to adopt a position.

On the one hand, there is no longer a Co-ordinator, since Mr. Martin is resigning. Somebody working in Africa will have to be appointed, preferably working within the sphere of an institute of economics, who would be able and prepared to take over the functions of Mr. Martin, in spite of the responsibilities entailed.

On the other hand, and this is a problem that must be examined in relation to the first, outside sources of assistance must be found. During the CSA mission to the United States, in May 1961, Mr. Martin often explained his project. It raised considerable interest. In university circles, it was indicated that the students could work for several months in Africa, for certain studies, thus completing the preparation of their doctorate thesis (Ph.D.). This is an interesting idea, but does not provide an answer to all the problems.

From the financial point of view, the situation is not so brilliant. AID is not prepared to support the project alone. It will, therefore, be necessary to obtain assistance from certain foundations. But these can only sponsor such a project if it has been initiated by an institute or a higher education establishment.

One is thus led to wonder whether it would not be appropriate to entrust the direction of the project to an existing institute of economics in Africa. The Institut de Sciences Economiques Appliquées, in Paris, has just opened an institute at Dakar, which will work under the leadership of Mr. Perrous, of the Collège de France and under the actual direction of Mr. de Bernis. The Secretary-General hopes to be able to give additional information on the subject, which he discussed a few weeks ago in Washington with Mr. Martin.

CHAPTER 6

LABOUR

Labour is becoming an increasingly important activity for CCTA. The publications of the Institute are widely read, meetings organised in the labour field are followed with close attention and proposals for new activities are always increasing. This reflects present evolution in Africa, and is also largely due to the untiring efforts of the personnel directing ILI. The Commission expressed the grateful thanks of the Governments to Mr. Haighton, the Director, who left the Institute after six years' service, and to

Mr. de Lusignan, his assistant, who has been transferred to the Secretariat. The Commission also expressed its thanks to the new Director and Assistant Director, Messrs. Chukwumah and Jullien.

Inter-African Labour Institute

Until the spring of 1961, the activities of the Institute were mainly centred on the preparation of the Sixth Inter-African Labour Conference. A report on the work of this Conference was submitted to the Council at its Twelfth Meeting. The Council expressed its satisfaction. It will be noted that Publication No. 69, dealing with research on absenteeism and labour turnover (Joint Project No. 5) will be distributed towards the autumn of 1962, as well as a special publication dealing with observations collected on the occasion of the Conference on migration of labour. Publication No. 68, covering the other items of the Conference, will be distributed at the end of the year.

Since the end of the Abidjan Conference, in April, the Institute has resumed its normal activities. These have, however, been disturbed by major changes in the staff. The new Director, Mr. Chukwumah, arrived in Brazzaville in March and Mr. Haighton left the Institute in May. Mr. G. de Lusignan, the Assistant Director, was transferred to the Secretariat in November 1961 and the new Assistant Director reached Brazzaville in April.

In spite of this, the Institute has carried on its usual work. The Director and his Assistant have made several tours in West Africa, visiting Cameroon, Gabon and the Congo, and in East Africa and Madagascar. They have represented the Commission at several international meetings and in particular at the meetings convened by the International Labour Organisation (Forty-sixth International Labour Conference, in Geneva, and Second Meeting of the African Advisory Committee, at Tananarive).

The quarterly bulletin of ILI, dealing with problems of labour in Africa has been published in a new format. Eight hundred copies are distributed, and others are the object of paid subscriptions. The circulation is increasing regularly and it is less difficult to obtain contributions from experts and officers working in Africa. An information sheet, giving non-specialists information in the field of labour, is also distributed in roneotyped form every other month. Its circulation is near on 1,000 copies.

In addition to its major rôle as a documentation centre, the Institute is consulted by Governments on a number of matters. It also advises the Secretariat, particularly the Secretariat of FAMA, on matters within its competence. The Inter-African Labour Conference, and thereafter the Inter-African Committee decided to entrust the Institute with the task of collecting social and labour legislation of interest to Africa. The Institute carries out this work regularly and it is thus possible to consult it on legislation adopted in other countries. More precisely, in accordance with Recommendation LVI of the Twelfth Meeting of the Council, the Institute collects legislation and by-laws on the social aspects of major industrial schemes in

Africa; a first comprehensive report will be distributed towards the end of 1962. Finally, following upon the recommendations of the meetings of specialists on psychotechnical tests, the Institute has been requested to draw up an inventory of the methods of selection at present applied in Africa. It will have a part to play in the implementation of Joint Project No. 18, with which we have already dealt (Chapter 2 of Part I).

The Inter-African Committee, which met in June 1961, held its Thirteenth Meeting in Geneva on 4 and 5 June 1962. It reviewed the various activities of the Institute and gave directives to the new senior officers. The greater part of the discussions dealt with specialised meetings which the Institute is to prepare and which we shall now discuss.

Meeting of specialist personnel in the field of technical training

The Bulletin of the Institute published a series of articles on the training of senior staff, technical training being one of the primary concerns of the Commission (cf. Part I, Chapter 3). The Advisory Committee therefore recommended the convening of a meeting of specialist officers to determine the fields in which ILI could undertake or co-ordinate activities in respect of technical training.

The agenda includes the following items:

- Inventory of training requirements.
- Programmes, resources and results in the various sectors of activity (public and private, agriculture, commerce, industry, public services).
- Requirements not met.
- Possible action of ILI and FAMA.
- Liaison with international or foreign organisations.

This meeting was to take place at the end of July 1962, at Brazzaville. Preliminary documentation is not satisfactory, however, and the Inter-African Advisory Committee has decided to postpone this meeting until 1963, in order to ensure better preparation.

Productivity

(a) Seminars

The Inter-African Labour Conference which met in Abidjan noted with particular interest observations made by a number of labour departments and research workers on the interrelationship between productivity on the one hand, and management policy and working conditions on the other. Productivity often depends, it appears, on labour management relations and the extent to which the workers are informed of policy. Accordingly, the conference recommended the holding of seminars for employers' representatives to discuss productivity questions, together with representatives fully acquainted with the workers' point of view in suitable cases.

The ILI Advisory Committee at its meeting in June 1961 endorsed this recommendation and arranged for study seminars on productivity to be organised, first at national level and then on a regional scale. This

recommendation was endorsed by the Council at its Twelfth Meeting (No. LV) and the Seventeenth Session of the Commission put it into force.

During the first year, it is proposed to hold three information sessions. Each one of these would deal with the following themes:

- Definition of the term “ productivity ”.
- Principles influencing productivity in industrialised countries.
- Factors of productivity in Africa.
- Methods of increasing productivity.
- Comparison with productivity in industrialised countries.

If this first experiment is conclusive, the seminar could then turn to more technical matters, problems of administration, wage policies, etc. in subsequent years.

The sessions will be attended separately by representatives of employers, and representatives of workers; in 1963, the sessions will be for the former only, as decided by the Inter-African Labour Committee. It is feared that, in the present stage of relations, joint meetings would give rise to arguments which would be detrimental to the technical character of the work. It is not excluded, however, that in a more distant future and if ILO is prepared to take the responsibility, tripartite meetings could be organised, with representatives of governments, employers and workers.

Each session will gather approximately twenty-five participants, speaking the same language, and coming from countries in the same region. It will last some ten days and be directed by a leader. The first three sessions, however, will be of a national character and include labour officers of the countries concerned. In the light of experience thus acquired, regional sessions may then be organised.

It is desirable that institutes for economic development should be associated in the organisation of the sessions without giving them full responsibility, however, in order to avoid the session taking on too theoretical a character. The venues of the first three sessions have been chosen by reason of the existence of active institutes; they will take place at Ibadan, Kampala and Leopoldville. ILO should play a major part in the organisation of the work and their co-operation will be invited.

The financing of these sessions raises a delicate problem, since the annual expenditure for four sessions would be in the neighbourhood of 60,000 dollars. A reaction of AID, as yet informal, reveals a favourable attitude on the American side, in respect of a form of action with which they are familiar on their side of the Atlantic; this possibility must be pursued at a later date, in the light of the results of the three experimental sessions in 1963.

(b) New surveys on levels of productivity

The Abidjan conference requested that new surveys should be conducted on levels of productivity. For reasons of economy, the Inter-African Labour

Committee thought of taking advantage of the seminars on productivity which we have just mentioned to collect information for the purpose of a survey. At its Twelfth Meeting, the Council stated that this method did not appear suitable and that these surveys should be conducted separately. It proposed the following objectives:

- to assess the levels of productivity of African workers by making comparisons between productivity in Africa and productivity in other parts of the world that have reached a higher level of technical development, as well as between various African countries, such comparisons to be conducted in a series of specific undertakings;

- to study, in selected undertakings, the areas of labour supply and the demographic and cultural characteristics of such labour force, its aspirations and motivations, and its degree of efficiency;

- to study individual undertakings in order to determine their conditions of work and methods of management and production control;

- to study policies relating to personnel and wages (the part played by monetary inducements in increasing productivity should be the subject of a thorough study). (Recommendation LV).

Without expressing any views on the technical aspects, the Commission recommended that in 1963 a meeting of experts should be convened to examine the programme of such surveys. This meeting would include specialists in the field of labour, economists, statisticians, sociologists and experts in productivity. All organisations concerned should be represented. In order that such meetings may produce results (and here we should recall the precedent of the Salisbury meeting which was the basis of research work on absenteeism and labour turnover) it is necessary that the experts should be well chosen and that the discussions should be conducted in an orderly manner. That is why the Secretariat and ILI turn to the Council and invite it, in view of the interest it showed last year in the matter, to consider devoting one of its 1963 meetings of specialists to this question. In the event of it agreeing to the principle, a draft agenda will be submitted, at Muguga, as well as a few names of specialists covering the disciplines listed above. The date should be chosen as late as possible in 1963, in order to get the benefit of the first three seminars on productivity.

In respect of the surveys proper, the first draft prepared by ILI and distributed to Member Governments provides that they should be conducted by fourteen teams (six in West Africa, four in Central Africa and four in East and Southern Africa), working under the supervision of the Director of the Project. It would, therefore, be appropriate to devote a joint project to such a survey, the cost of which will be high. A first assessment reaches more than 500,000 dollars.

Unemployed youth

The fate of unemployed youth constitutes one of the major concerns of the new Governments. Many of them are seeking means of associating

labour in major projects and of improving the training of young people who have not had the opportunity of attending specialised centres; it is in this spirit that several Governments have adopted methods of compulsory civic service.

Twelve Governments have asked CCTA to collect available information and it has been decided to hold a meeting on this subject, it being understood that the problems would be set in the general framework of measures against unemployment. The meeting will make a thorough examination of experiments in civic service in African countries, in order to exchange information on their economic value, their effectiveness and the extent to which they are in keeping with the international conventions of ILO. This organisation will present two preliminary reports and will send two observers.

The agenda will include the following items:

- Present employment situation.
- Forecast of development in the next five years.
- General policies to combat unemployment, employment of school leavers.
- Exchange of experience of civic service.
- Organisation of civic service; limitations enforced by international labour conventions costs, training courses.

The meeting will take place in Tanganyika from 25 to 29 September next.

Specialist meeting on safety, health and hygiene at work

The Labour Conference at Abidjan provided an opportunity, for the first time in Africa, to examine, from the point of view of the inspection of labour, problems of safety and health at work. The highly technical discussions covered industrial diseases, safety measures in ports, safety regulations for wood-working and other machines, and so on. The conclusions are in line with the international conventions of ILO.

The Inter-African Labour Committee is anxious to ensure their strict enforcement; ILI was requested by the Thirteenth Meeting of the Committee to report on the implementation, or otherwise, of the Abidjan recommendations and to collect examples of legislation in African countries, dealing with the prevention of occupational diseases.

Taking note of these discussions, the Twelfth Meeting of the Council recommended (Recommendation LVII) that, in liaison with ILO and WHO, a meeting of specialists should be convened to examine these problems. The object, this time, would be to compare the views of all the specialists concerned, and not to deal with the problem from two different angles, that of the medical officers and that of the labour departments.

WHO, consulted by Dr. Demarchi, Inter-African Correspondent for Health, was in favour of this suggestion, on condition that the meeting did not take place before 1964. A favourable reply is also expected from ILO.

The Commission approved the project at its Seventeenth Session. Contrary to the views of the Inter-African Correspondent for Health and of the Inter-African Labour Committee, the Governments consider that a meeting of specialists should be devoted to this question if CSA is prepared to include it in its 1964 programme.

The Director of ILI has proposed a preliminary agenda, adding that it should be reviewed in the light of the consultations that will take place with ILO and WHO. Nevertheless, it would seem interesting to make note of it, in order to obtain the comments of the Thirteenth Meeting and in particular those of Dr. Fraga de Azevedo, who initiated the project:

- Legislation relating to occupational health in African countries.
- Effects on occupational hygiene and productivity:
 - of food and nutritional customs,
 - of housing,
 - of unfavourable conditions of work.
- Effects of certain occupational diseases.

The Council is invited to give its views on the character of the meeting, its date and, if it is to be a meeting of specialists, the persons to be invited and the appointment of the Chairman. It is probable that it will be possible to submit new proposals to the Council, at Muguga.

CHAPTER 7

TECHNOLOGY

As the Council expected, activities in the technological field are developing. Experience acquired in one country can be transposed to another more easily than in any other field, for its application depends to a lesser extent on specific local conditions than in those fields that are related to social or natural sciences. Finally, in this branch of activity, the work of the Commission is original, more so than in any other, since no other international organisation is dealing with technology at present in Africa.

Housing

(a) Inter-African Secretariat, Committee and Bureau on Housing

The Committee held its Fifth Meeting in Livingstone in October. Discussions were based on the report of the Inter-African Secretary, who was given instructions regarding the work of the Secretariat during the coming months.

Since the Inter-African Conference held in January 1959 and until June 1962, the Secretariat has based its work on recommendations adopted in Nairobi. The Committee paid tribute to the Inter-African Secretary,

Mr. Richards, who has achieved a great deal during the past year. A check list of roofing materials has been circulated; on the recommendation of the Committee, a bibliography will be appended towards the middle of 1962. A directory of research bodies and research workers active in this field was circulated in 1961 (Publication No. 72); to comply with a recommendation of the Committee, this pamphlet will be brought up to date by the summer of 1962. A brochure has been prepared on methods of diagnosing soil phenomena and related questions; the English version has been distributed and the French version will follow at an early date. Finally, in view of the constant references made to the excellent technical report which was issued after the Nairobi meeting, a detailed table of contents, which will facilitate reference to this document, has been prepared.

The meeting of the Committee was a sequel to the symposium attended by representatives of research bodies which will be discussed later in this chapter: participants considered the proposal of this symposium regarding the establishment of a permanent Inter-African Housing Bureau. This Bureau could collect information and thus constitute a documentation centre from where information would be regularly distributed, and would advise Governments and their specialised departments as to the other CCTA bureaux. It would be set up in a similar manner to these other bureaux and its Director would maintain similar relations with African departments and institutes as does, for example, Mr. Beaton with veterinary departments and institutes. It would thus become a valuable stimulant and a co-ordinating element for research work in all problems relating to housing and possibly to town planning.

Last February, at Abidjan, the Administrative Committee, that is to say, in fact, the Member Governments, accepted the principle of the establishment of such a Bureau. It recalled that "in a field in which the African Governments spend considerable amounts of money, the services that such an Institute could render should make it possible to introduce extensive economies and to improve general conditions".

The implementation of this decision of principle is, nevertheless, subject to a number of conditions. A detailed project is under consideration, under the responsibility of the Scientific Secretary and with the assistance of Mr. Richards, former Inter-African Secretary for Housing. Contacts have been established with the United Nations specialised services and with ECA, in order to avoid any duplication. Members of the Inter-African Housing Committee will be consulted on the technical aspects and the Secretariat will endeavour to find financial assistance. Only when all these elements have been assembled will the Commission take a decision. This will take a comparatively long time and the Secretariat is somewhat concerned about the delay. For reasons of economy, it was decided to close down the Inter-African Housing Secretariat, as from 25 May 1962, and it will be difficult to carry on the work satisfactorily during the coming months.

The establishment of such a Bureau fits in with the objectives of the Commission. This field is one of those where the most obvious progress can be rapidly achieved by closer inter-African co-operation.

An additional proof, if need be, is given by requests for, and offers of, technical assistance received by the Secretariat of FAMA, in respect of building. The Council will note the offer made by the Government of Israel to organise a series of training courses for specialised workers, foremen and works engineers.

(b) Symposium for representatives of building research organisations

Research is essential if the most advantageous solutions are to be found to housing problems, whether social, economic or technical, especially in connection with large-scale housing projects. Close co-operation between research bodies is, therefore, desirable. A symposium was held in Livingstone in October.

The agenda included:

- Current research projects (on housing design, building costs, soils, materials, services).
- Work proposed.
- Co-operation between research bodies and with departments or individuals concerned in applying the results of research.

The symposium recorded that some measure of co-operation did exist between various research bodies. It considered that closer co-operation could be established and this was one of the reasons which inspired the adoption of the recommendation for a permanent housing Bureau mentioned above.

There were several technical recommendations devoted to roofing materials, sanitary installations, etc. The symposium warned Governments against the use of standard plans for collective or individual buildings. Constructions should be adapted to natural conditions and local requirements. However great may be the desire for standardisation, it is impossible to propose the same type of construction for Sahara, equatorial areas and temperate zones.

(c) Specialist meeting on the production and use of local building materials

The Livingstone symposium examined the problem of using local materials for construction. Participants felt that in too many instances methods and materials to be found in Europe were used in Africa (curiously enough, this recommendation is very similar to a recommendation adopted by economists and sociologists at the urbanisation meeting in Abidjan); and yet in many instances local materials may solve a large part of the difficulties.

Certain techniques used by craftsmen should be revised and modernised: improvements should be proposed. The symposium suggested that a specialist meeting be convened at some future date to consider these questions.

The Council is invited to approve this recommendation and, if it does so, to consider the time when it would suggest holding this meeting of specialists, probably in 1964 or 1965. The Scientific Secretary is invited to submit to the Thirteenth Meeting of the Council the first suggestions that he will have received, in consultation with Mr. Richards, in respect of the agenda and of the specialists to be invited. The Secretariat will also propose a draft agenda; it will be suggested to extend the theme to the production and use of local building materials.

Specialist meeting on the construction of school buildings

CSA decided to reserve one of its specialist meetings in 1961 to the construction of school buildings, stressing the necessity for adapting them to local, sociological and economic conditions. The agenda will cover the following:

- Minimum basic requirements for school buildings as related to educational needs in Africa (classroom dimensions, lighting, ventilation, ancillary space requirements).

- Functional needs and their implication on design.

- Effects on design of local factors such as sun path, site, transport.

- Preliminary studies.

- Economic aspects.

- Building materials and other technical questions.

The meeting was held immediately before the two meetings mentioned above, in Livingstone, under the chairmanship of Dr. Stutterheim, Associate Member of the Council and former Inter-African Housing Secretary. Six other specialists, urbanists, administrators and architects, were invited by CSA. Twenty observers were present, representing Member Governments, the Building Research Institute of Accra, United States Government and the European Economic Community. UNESCO was very interested in the technical aspects of these problems, was associated with the meeting but was unable to send any expert to attend.

Every aspect of the construction of school buildings was discussed, with special regard to primary school buildings. Secondary schools in Africa are for functional reasons little different from secondary schools in other continents: the same laboratories and educational facilities are required. Primary schools, however, must be carefully adapted to ways of life, requirements and resources of local communities. The finance required to maintain adequate teaching personnel is so extensive that it is inadmissible to reserve a large proportion of any credits available—always inadequate—for the construction of unsuitable expensive buildings. In extreme cases, the

authorities could have limited jurisdiction over the preparation of the site and the raising of the roof. Local communities are usually responsible for building schools, with the aid of technical assistance from central departments. In short, the meeting considered that, generally speaking it was neither possible nor advisable to propose standard requirements.

The necessity for considering physical and human factors, induced the meeting to recommend that local or national Advisory Committees should be set up, on which would sit architects, administrators and educationists.

CCTA/WHO Seminar on Hygiene and Sanitation in relation to Housing

The Nairobi Conference noted that poor conditions of domestic sanitation seriously affect the health of urban communities. The problem is currently aggravated by the rapid rate of urbanisation and the fact that the new town dwellers are not adjusted to urban conditions. In accordance with the conference recommendation, the Commission decided to devote a seminar to the subject. WHO attaches great importance to this subject which has been discussed at many meetings. It has agreed to collaborate in the organisation of the symposium and to reserve a substantial amount of scholarships to enable the participation of representatives from all the African states.

The symposium was held at Niamey, from 4 to 9 December 1961, under the technical direction of the representative of WHO and the Inter-African Secretary for Housing who represented the Commission. Thirty-three documents were distributed beforehand. Forty-two delegates represented twenty countries and EEC. This shows the interest raised by this meeting.

The agenda covered the following questions:

- Scope of public health aspects of housing in Africa.
- Technical problems (water, sanitation, housing design, facilities) considered from the sanitary and medical angle.
- Conclusions of the WHO Committee of Experts.
- Future action at inter-African level.

Participants were medical practitioners and public health officers on the one hand, and on the other, town-planning experts and public works engineers.

The discussions were of a technical nature and were satisfactory on the whole. The report of the meeting and the preparatory documents will be distributed as a printed publication. Recommendations were adopted in respect of water supplies and drainage in all forms. The Council will also note some general recommendations. Health education was one of the major concerns of the participants. It is through such education that the co-operation of the communities will be obtained in order to achieve a satisfactory level of hygiene and sanitation. Without it, housing programmes

would lose part of their effectiveness. WHO has offered to advise Governments and communities on the public health aspects of their building programmes. Governments have been invited to carry out a programme of sanitation to prevent the spread of disease—and this is in line, point by point, with the recommendations already adopted at Niamey in 1961, by the symposium on migrations and by the meeting of specialists at Abidjan. Governments have also been requested to establish national committees for housing and health, in order to enable the departments concerned to combine their efforts. Finally, the symposium approved the recommendations of the Livingstone meetings, calling for the establishment of a permanent Inter-African Housing Bureau.

The Niamey symposium achieved good results. As already reported last year, the joint organisation of meetings between two international organisations comes up against serious difficulties, however, on account of the differences in style and expenditure that is considerable when one compares CCTA and other organisations.

Roads

The panel of correspondents set up by CCTA and the specialised correspondents have all been very active since the meeting on soils stabilisation held in Nairobi in 1960. The Co-ordinator, Dr. Rigden, circulated a questionnaire on soil stabilisation with a view to collecting as much information as possible on stabilisation processes used in Africa for surfaced roads. The specialist correspondent for pavement design, Dr. Millard, did likewise. Other contacts have also been maintained by correspondents. It is desirable that Dr. Rigden should retain the functions of Co-ordinator of the Panel; if he cannot do so, the Council will be called upon to take a decision at Muguga.

These activities of the Panel will greatly facilitate the preparation of the next symposium which is scheduled to be held early in 1963 in Abidjan. The agenda has been drawn up by the Co-ordinator with the aid of several correspondents. The general theme is "principles of road building and maintenance in Africa". The agenda covers the following items:

- Earth and gravel roads.
- Surfaced roads.
- Stage construction and cost minimisation.
- Survey on soil stabilisation.

Correspondents have been consulted in connection with this agenda which is still provisional.

The West African Public Works Conference, with which we are now going to deal, recommended the convening of a West African symposium on roads and aerodromes. In view of the similarity between the proposed agendas for this meeting and the Abidjan symposium, it was decided to cancel the meeting.

Public Works

(a) West African Public Works Conference

The Council has already been informed of the assistance requested from the Commission by the West African Public Works Conference. This organisation was composed of Directors of Public Works in the English-speaking countries of West Africa. It used to meet once a year. Since 1960, it has asked the Commission to organise its annual meetings and endeavour to extend them to French-speaking countries. The Fifteenth Meeting of the Conference took place at the end of 1960, at Ibadan. The Sixteenth was held at Monrovia, from 22 to 26 January.

The agenda had been drawn up by the Chairman of the previous Conference (as is customary in the case of meetings of this nature; the intervention of the Commission in the organisation of such regional meetings in no way alters the customary procedure adopted in the context of regional co-operation: each regional body is completely independent and decides on the invitations to be issued, the agenda and working programme of the meeting). The agenda included the following items:

- Training and registering of personnel.
- Civil engineering.
- Construction and housing.
- Hydrology, water resources.
- Contracts.
- Electric power.

Representatives of six countries and one organisation of the region attended the meeting, as well as representatives of two other member countries, of Israel and of the International Roads Federation, making a total of twenty-four participants. The discussions, which had not been sufficiently prepared by the participants, were disappointing. They dealt with the same themes as the previous year at Ibadan. Only a few technical recommendations are worthy of note, dealing with the registration of engineers, architects and public works contractors, road signalling, etc. Particular attention was given to suggestions on technical and sub-technical training. The ambitious projects of CCTA were the subject of favourable comments, both from a general point of view as in respect of regional training centres. Moreover, the conference often reverted to recommendations of past meetings or to proposals for future activities; this was the case when dealing with soil stabilisation and road construction. The agreement for permanent co-operation between the countries bordering on the Niger (Ségou meeting, May 1961) was quoted as a model of the results that can be expected from inter-African technical co-operation.

(b) West African symposium on water supplies

The same delegates, assisted by a representative of WHO, then held a

symposium on water supplies, from 29 to 31 January, in the capital of Liberia. The agenda included the following items:

- Documentation in the field of hydrology.
- Sources of water.
- Abstraction of water, impounding reservoirs, pumping.
- Purification, distribution and management of water supplies.
- Training of personnel for water departments.

A few general recommendations endorsed the recommendations of the Nairobi Inter-African Conference. On the other hand, some recommendations dealt with more practical aspects, covering equipment, methods, technical incidents. They cover concrete problems arising from the extraction of water, pumping, purification and distribution. Once again, training at middle-grade level held the attention of the meeting, this time in connection with water department personnel; the two proposed regional centres for French-speaking hydrologists (Joint Project No. 23) and for French-speaking assistant hydrologists (Joint Project No. 24) were noted with satisfaction. A warm tribute was paid to the work of the panel of correspondents, under the direction of its Inter-African Co-ordinator, Dr. Rodier.

(c) Future of West African meetings

As a general rule, the Commission is concerned with regional activities that provide an opportunity for directors of technical services to meet periodically. It feels that this is a practical form of co-operation. Nevertheless, these meetings must be carefully prepared and include all the countries of a region; this is not the case with the meeting of the West African Public Works Conference. On the other hand, the budget of the Commission is limited and the activities of the personnel of the Commission are increasing year by year. The West African Conference has asked ECA to establish a permanent West African Bureau for public works, to deal with economic problems connected with road development, and to standardise certain elements relating to roads (signalising, etc.). This Bureau could usefully be entrusted with the Secretariat of the West African Conference. Unless the Council objects, it is the intention of the Secretariat to see whether the project is taking shape. If so, within the framework of the co-operation that will be established between ECA and CCTA, the latter will be pleased to leave the United Nations Commission to assist the West African Conference.

(c) On-site training

On several occasions already, the Council has been informed of arrangements made under the aegis of the Secretariat of FAMA to enable young engineers or specialised personnel to spend some time on open sites in neighbouring countries, that may present particular technical interest. This initiative was noted by the Commission at its Seventeenth Session and was the subject of new arrangements.

Specialist Meeting on the transmission of electric power

The Scientific Council decided to organise a specialist meeting in 1962 for engineers concerned with the problems of long-distance power transmission (Recommendation LVIII). The Scientific Secretariat has consulted a number of experts in Africa in consultation with Mgr. Gillon, Member of the Council, who will preside at the meeting. The agenda will include the following:

- Comparison of present standard practices; establishment of new standards better suited to African conditions.
- Determination of isokeraunic level according to scientific criteria.
- Protection of overhead lines against lightning.
- Protection of overhead lines against atmospheric and micro-biological agents, parasites, birds, etc.
- Rationalisation of types of pylon—metal, wooden, concrete.
- Cost of power transmission and of distribution of current.
- Prospects of linked systems.
- Standardisation of tensions.

In addition to Mgr. Gillon, the Council has invited four engineers. A number of questions have been raised by specialists and the meeting will certainly be followed with great interest. It will even be difficult to limit the number of participants in view of the many requests from specialised firms to be allowed to send representatives. It is proposed to hold the meeting at Lagos, during the International Fair, from 1 to 3 November, and to ask exhibiting firms to present equipment used in connection with the themes under discussion.

Future technological meetings

In its Recommendation LIX, the Council approved of two themes for future meetings: "the protection of wood" and "the protection of materials in a marine environment". The Scientific Secretary has exchanged correspondence with specialists in South Africa, Angola and France. He has thus prepared an agenda the details of which will be submitted to the Council at Muguga and which includes the following items:

- Present knowledge: woods used in Africa, conditions of use, parasites.
- Protecting treatment, economic aspects.
- Comparative advantages of wood and other materials.

A list of specialists will also be proposed at Muguga, prepared in consultation with Dr. Stutterheim, Associate Member of the Council. A decision will have to be taken in respect of the place of the meeting, which could be Gabon, and the date, in 1963 or 1964.

As far as the second subject is concerned, the specialists consulted by Dr. Verdier have stated that they considered it as too wide and have proposed to limit the meeting to the corrosion of metals. In West Africa, the corrosion of metals in marine environments is more extensive than in any other part of

the world. This is, therefore, an interesting subject. Little work has been done and it would be necessary to depart from the usual composition of meetings and add to South African experience such experience as may have been gathered in other tropical regions such as the United States.

Inter-African Co-ordinator for radio-isotopes

Until now BPITT has been responsible for co-ordinating activities of the CCTA panel of correspondents on radio-isotopes. This procedure was not satisfactory and the Council recommended that an Inter-African Co-ordinator be appointed. It proposed one of its Members, Monseigneur Gillon, Rector of the University of Lovanium, physicist and specialist in radio-isotopes. It will be recalled that Monseigneur Gillon played a very important part in the organisation and direction of the FAMA training course on the utilisation of radio-isotopes held in May/June 1960. The Seventeenth Session ratified this choice.

CHAPTER 8

CARTOGRAPHY

Dr. Jackson, Inter-African Correspondent for Cartography has continued to play an important part in the activities of the Commission, by devoting a considerable part of his time to the various cartographic projects in which CCTA/CSA has been interested: the Climatological Atlas (Joint Project No. 1, see Part II, Chapter 2), Atlas of Vectors of Diseases (Joint Project No. 8, see Part III, Chapter 1), Pedological Map of Africa (Joint Project No. 11, see Part II, Chapter 3), Soil Erosion Map (Joint Project No. 22, see Part II, Chapter 3).

Moreover, Dr. Jackson has always been ready to advise the Commission whenever he has been asked. Finally, he completed a base map on the scale of 1/30,000,000 which adds to the existing series of base maps on scales of 1/5,000,000, 1/10,000,000 and 1/15,000,000 prepared within the scope of Joint Project No. 7. These base maps are presented to the Bureaux of the Commission, or sold to persons or services requiring them for the mapping of technical or scientific data. The Council is well informed of this method which it recommended in the first place.

During the same time, the Inter-African Committee for Maps and Surveys has undertaken new activities. This is due to the dynamic qualities and competence of its President, Brigadier Collins. Exchange of information has taken place between the members and nearly all the Governments have appointed their correspondent.

Last year, the United Nations Economic and Social Council suggested an early convening of a conference on maps and surveys, under the aegis of

ECA. It was then decided to combine the Fourth Meeting of the Inter-African Committee with this conference. On account of the delay in convening the conference and of the very general character of the proposed discussions, the Committee decided not to wait for the UNO meeting and to organise its own meeting in June, keeping the agenda to strictly defined subjects.

The meeting will take place on the 29 and 30 June, in Salisbury. The agenda will include the following items:

- Mapping on a scale of 1/1,000,000.
- Triangulation and geodetic levelling.
- Limnography.
- Training of topographers and cartographers at the technician level and at engineer level.
- Means whereby the member countries can assist one another in concrete manner in the field of maps and surveys.
- Possibility of organising a documentation centre for questions of geodesy and geophysics.

The meeting will be preceded by a symposium on the requirements of countries in the process of development, in respect of maps and surveys, from 25 to 27 June. The agenda is as follows:

- Preparation of topographical maps.
- Geodetic problems of triangulation and levelling.
- Geophysical, gravimetric, magnetic and seismic problems.
- Other survey needs (cadastral, mining, geological, for the purpose of agricultural or regional development).

The Scientific Secretary will inform the Council, at its Thirteenth Meeting, on the work of the Committee and of the symposium, which he will attend.

APPENDIX I

MEETINGS HELD UNDER CCTA/CSA/FAMA AUSPICES FROM JUNE 1961 TO JUNE 1962

	<i>Place</i>	<i>Date</i>
Meetings of the Commission, the Scientific Council and the Foundation for Mutual Assistance		
21st Meeting of the Executive Committee of CSA.	Pointe-Noire	8 Aug. 1961
12th Meeting of CSA.	Pointe-Noire	9-18 Aug.
3rd Meeting of the Administrative Committee.	Abidjan	5-16 Feb. 1962
4th Meeting of FAMA.	Abidjan	8, 9 Feb.
17th Session of CCTA.	Abidjan	10-16 Feb.
22nd Meeting of the Executive Committee of CSA.	Abidjan	8-15 Feb.
Inter-African Conferences		
Conference on the Conservation of Nature and Natural Resources in modern African States (CCTA/IUCN)	Arusha	5-12 Sept. 1961
4th Conference on Food and Nutrition (CCTA/FAO/WHO)	Douala	4-13 Sept.
Symposia		
Symposium on Poultry Disease.	Livingstone	17-19 July 1961
Meeting on the Guinean Year (Joint Project 19).	Lagos	1-4 Aug.
Meeting on the Pedological Map (Joint Project 11).	Paris	18-21 Sept.
Symposium for representatives of Building Research Organisations.	Livingstone	16-19 Oct.
Symposium on Weed Control.	Ibadan	23-27 Oct.
2nd Symposium on Community Development in East and Central Africa.	Kampala	20-30 Nov.
Symposium on Hygiene and Sanitation in Relation to Housing (CCTA/WHO).	Niamey	4-9 Dec.
Symposium on Agricultural Research.	Muguga	11-15 Dec.
Symposium on Rural Trades.	Enugu	13-19 Dec.
16th West African Public Works Conference.	Monrovia	22-26 Jan. 1962
West African Symposium on Water Supplies.	Monrovia	29-31 Jan.
Symposium on Stored Food Products (CCTA/FAO).	Freetown	20-24 Feb.
Symposium on the Infertility of Domestic Animals and Artificial Insemination.	Muguga	19-22 Feb.
Meeting on Psychotechnical Tests (Joint Project 18).	Lagos	27 Feb.-2 Mar.
Symposium on the Survey Needs of Developing Countries.	Salisbury	25-27 June
Preparatory Meeting		
For the Seminar on Health and Nutrition Education (CCTA/CIE/FAO/WHO/UNICEF).	Paris	29 June 1961
CSA Specialist Meetings		
Ankylostomiasis (CSA/WHO).	Brazzaville	22-29 Aug. 1961
Social Aspects of Urbanisation.	Abidjan	23-31 Aug.
Construction of School Buildings.	Livingstone	11-14 Oct.
Teaching of a Second European Language.	Yaoundé	15-21 Nov.
Tropical Specialisation of Veterinarians and Zoo-technicians.	Salisbury	25-27 June

	<i>Place</i>	<i>Date</i>
Training Centres, Seminars		
West African Training Centre on Poultry Production (in French).	Bingerville	3-26 July 1961
Training Course on Nutrition (FAO/WHO/FAMA).	Dakar	{ 9 Nov.-22 Dec. 1-15 Jan. 1962
Agricultural Extension Development Centre (East and Central Africa) (FAO/FAMA).	Arusha	6-16 Feb.
Training Course on the Infertility of Domestic Animals and Artificial Insemination.	Muguga/ Kabete	19-28 Feb.
Regional Training Centre on Agricultural Extension (SARCCUS).	Salisbury	14-24 May
Seminar on Health and Nutrition Education (CCTA/CIE/FAO/WHO/UNICEF).	Pointe-Noire	5-12 June
Meetings of Committees, Councils of Management, Panels of Correspondents, etc.		
BIS, Executive Committee.	Paris	6 June 1961
ILI Advisory Committee, 12th Meeting.	Geneva	5-6 June
Statistics Committee, 6th and last Meeting.	Lisbon	10-13 July
Inter-African Committee for Animal Health, 7th Meeting.	Livingstone	20-24 July
Tsetse Control (Joint Project 17), Standing Committee, 1st Meeting.	Livingstone	23 July
IBAH, Council of Management, 10th Meeting.	Livingstone	25-26 July
Nutrition, Panel of Correspondents, 9th and last Meeting.	Douala	8-9 Sept.
Geology, Southern Regional Committee, 4th Meeting.	Pretoria	11-16 Sept.
SPI, Council of Management, 5th Meeting.	Paris	22 Sept.
Phytopathological Commission, 6th Meeting.	Ibadan	16-20 Oct.
Housing Committee, 5th Meeting.	Livingstone	22 Oct.
Budgetary Committee, 12th Meeting.	Lagos	30 Oct.-1 Nov
Soils, CROACUS, 4th Meeting.	Samaru/Mokwa	6-11 Nov.
Community Development, Panel of Correspondents, 1st Meeting.	Kampala	end Nov.
History of the African Peoples, Panel of Correspondents, 1st Meeting.	Dakar	20 Dec.
Administrative Committee.	Abidjan	6-8 Feb. 1962
Chad, Committee on Fisheries Co-ordination.	Fort-Lamy	6-9 March
BIS, Council of Management, 13th Meeting.	Paris	7-8 May
Soils, SARCCUS, 8th Meeting.	Lobatsi	8-11 May
ILI Advisory Committee, 13th Meeting.	Geneva	4, 5 June
Maps and Surveys Committee, 4th Meeting.	Salisbury	29, 30 June
Working Parties		
Liaison Officers.	Lagos	7 June 1961
Regional Training Centre for English-speaking Staff of National Parks (Joint Project 22).	Arusha	3-10 Sept.
Future of BPITT.	Leopoldville	22 Sept.
Training Centre for French-speaking Laboratory Assistants.	Brazzaville	28 Sept.
Liaison Officers (2).	Lagos	30 Oct.
Sub-Committee of the Administrative Committee.	Abidjan	6-7 Feb. 1962
Liaison Officers (3).	Lagos	3 July

**MEETINGS TO BE HELD UNDER CCTA/CSA/FAMA AUSPICES
IN THE SECOND HALF OF 1962, IN 1963 AND 1964**

	<i>Place</i>	<i>Date</i>	<i>Year</i>		
			1962	1963	1964
Meetings of the Commission, the Scientific Council and the Foundation for Mutual Assistance					
23rd Meeting of the Executive Committee of CSA.	Muguga	13-22 Sept.	x		
13th Meeting of CSA.	Muguga	13-22 Sept.	x		
24th Meeting of the Executive Committee of CSA.	Tanganyika	Feb.		x	
4th Meeting of the Administrative Committee.	Tanganyika	Feb.		x	
5th Meeting of FAMA.	Tanganyika	Feb.		x	
18th Session of CCTA.	Tanganyika	Feb.		x	
Inter-African Conferences					
Conference on Malaria (CCTA/WHO).	Yaoundé	3-13 July	x		
4th Soils Conference.	E. Africa (?)			x	
Symposia					
Symposium on Multilingualism.	Brazzaville	16-23 July	x		
Meeting of Experts on the Campaign against Rinderpest (2nd Regional Project).	Bamako	9-10 Aug.	x		
Symposium on Savannah Zone Cereals.	Dakar/Bambey	29 Aug.-4 Sept.	x		
Symposium on Unemployed Youth.	Tanganyika	25-29 Sept.	x		
Informatory Session on the Fund for Middle-Grade Training in Africa.	Paris	Oct.	x		
2nd Meeting of Experts on Joint Action in the Fouta Djallon.	Fouta Djallon	beginning		x	
2nd Road Symposium (gravel roads and pavement design).	Abidjan	March		x	
Conference on Archives.	Salisbury	summer		x	
Meeting of Specialist Officials in the Field of Technical Training.	Brazzaville			x	
Meeting on Tsetse Control in the Caprivi Strip.	Livingstone			x	x
Symposium on the Classification of Soils (CCTA/FAO) (?).	Lovanium			x	x
3rd Meeting on Community Development.					x
5th Symposium on Freshwater Fisheries and Hydrobiology: Pisciculture.	Madagascar				x
Symposium on Wet Rice Cultivation (CCTA/FAO).	Madagascar				x
CSA Specialist Meetings					
Transport and Electricity.	Lagos	1-3 Nov.	x		
Acculturation.	Lagos (?)			x	
Woodland Protection.	Gabon (?)			x	
Surveys on productivity levels.	Brazzaville	end		x	

	Place	Date	Year		
			1962	1963	1964
Libraries and Documentation.				x	x
Marine Invertebrates.		beginning			x
Safety, Health and Hygiene at Work.					x
Utilisation of Local Materials for Construction.					x
Metal Corrosion in Marine Environment.					x
Soil Evolution under intermittent and intensive cultivation.					x
Phytogeography.					x (?)
Conservation, Storage and Transport of Fish.					x (?)
Meetings of Committees, Councils of Management, Panels of Correspondents, etc.					
Linguistics Committee, 2nd Meeting.	Brazzaville	16-23 July	x		
Inter-African Committee for Animal Health, 8th Meeting.	Dalaba	13-18 Aug.	x		
IBAH, Council of Management, 11th Meeting.	Dalaba	17 Aug.	x		
ISCTR, 9th Meeting.	Dalaba	21-25 Aug.	x		
Phytosanitary Commission, 7th Meeting.	London	15-19 Oct.	x		
Chad, Advisory Committee, 1st Meeting.	Fort-Lamy	23-25 Oct.	x		
Budgetary Committee, 13th Meeting.	Lagos	29-31 Oct.	x		
Mechanisation of Agriculture, Committee, 3rd Meeting.	Lagos	7-10 Nov.	x		
Scientific Committee for the Guinean Year, 1st Meeting.	Paris (?)	autumn	x		
Geology, West Central Committee, 3rd Meeting.	Uganda		x (?)	x (?)	
Niger, Advisory Committee, 2nd Meeting.	Niamey	Jan.-Feb.		x	
Soils, CROACUS, 5th Meeting.	Sierra Leone	beginning		x	
ILI, Advisory Committee, 14th Meeting.	Geneva (?)	June		x	
Archives, Panel of Correspondents, 1st Meeting.	Salisbury	summer		x	
History of the African Peoples, Panel of Correspondents, 2nd Meeting (?).	Salisbury	summer		x	
Soils, EARCCUS, 4th Meeting.				x (?)	
Tanganyika, Committee on Fisheries Co-ordination, 1st Meeting.				x (?)	
Soils, CRACCUS, 5th Meeting (?).	Lovanium			x	x
Working Parties					
Regional Campaign against Trypanosomiasis and its Vectors (ISCTR).	Dalaba	18-20 Aug.	x		
New Convention (?).	Lagos.	Oct.	x		
FAMA, Committee, 8th Meeting (?).	Lagos		x		

**CCTA/CSA WAS REPRESENTED AT THE FOLLOWING MEETINGS
HELD BY OTHER ORGANISATIONS BETWEEN
JUNE 1961 AND JUNE 1962**

	<i>Place</i>	<i>Month</i>	<i>By</i>
Seminar on the Development of an underdeveloped agricultural area (DEEC).	Nimes	May/June 1961	Dr. MENSAH
1st Meeting of the World Soils Map Advisory Committee (FAO).	Rome	June	Dr. d'HOORE
35th Session of the FAO Council.	Rome	June	Mr. HAWKINS Dr. d'HOORE Mr. MARTIN
2nd Conference of African Statisticians (ECA).	Tunis	June	Dr. DEMARCHI
2nd African Conference on Onchocercosis (WHO).	Brazzaville	June	Dr. DEMARCHI
45th Session of the International Labour Conference (ILO).	Geneva	June	Mr. HAUGHTON
Conference of the 12 Heads of State (UAM).	Tananarive	Sept.	Mr. CHEYSSON
Meeting on Foot and Mouth Disease.	Pirbright	Sept.	Mr. BEATON
12th Meeting of the Association of African Sciences.	New York	Oct.	Mr. CHEYSSON
8th Meeting of the United States National Committee for UNESCO.	Boston	Oct.	Mr. CHEYSSON
Workers' Week (Union Camerounaise des Travailleurs Croyants).	Yaoundé	Oct.	Mr. DE LUSIGNAN
Conference on Low-Cost Housing and Community Facilities within Community Development Programmes in Africa (ECA).	Tunis	Oct.	Mr. CLUNIES-ROSS
11th Conference of FAO.	Rome	Nov.	Dr. FOURNIER
Symposium on the Tectonic Map of Africa (Association of African Geological Services).	Paris	Nov.	MM. HAUGHTON TRUTER SOUGY HARKIN
Oceanographic Committee (UNESCO).	Nov.		Dr. POSTEL
Seminar on Ethnohistory (International African Institute).	Dakar	Dec.	Dr. VANSINA
Conference on the development of information media (UNESCO).	Paris	Feb. 1962	Dr. BOURKE
Congress of the "Geological Society of South Africa".	Potchefstroom	Feb.	Dr. HAUGHTON
4th Session of the Economic Commission for Africa (ECA).	Addis Ababa	Feb.	Mr. MORRIS
3rd Session of the Regional Association I (WMO).	Addis Ababa	Mar.	Dr. TAYLOR
Franco-British Economic Conference (Institute for Applied Economic Sciences).	London	Mar.	Mr. SA RAUTTE
Conference on Audio-Visual Aids in Education (University of Ibadan).	Ibadan	Mar.	Dr. TAYLOR
2nd Meeting of the African Consultative Committee (ILO).	Tananarive	Apr.	MM. HAUGHTON CHUKWUMAH
30th Annual Congress (OIE).	Paris	Apr.	Mr. BEATON

	<i>Place</i>	<i>Month</i>	<i>By</i>
Meeting of Directors of Micro-organic Collections (OIE) (Swiss Academy of Medical Sciences and International Association of Microbiological Societies).	Lyons	Apr.	Mr. BEATON
10th Conference of the Standing Committee for Foot and Mouth Disease (OIE).	Paris	Apr.	Mr. BEATON
1st Meeting of the Economic and Social Committee (OAMCE).	Douala	May	Mr. DE LUSIGNAN
1st Meeting of the Committee for Scientific Research (OAMCE).	Douala	May	Dr. VERDIER Mr. DE LUSIGNAN
Meeting on the Oceanographic Campaigns for the Guinean Year (United States).	Washington	June	Prof. MONOD
Committee of Experts on Trypanosomiasis (WHO).	Geneva	June	Dr. VAUCEL
Conference on Science in General Education.	Rome (Basutoland)	June	Mr. KNOTTENBELT
46th Session of the International Labour Conference.	Geneva	June	Mr. CHUKWUMAH Mr. HAIGHTON
1st World Conference on National Parks (IUCN, American Council for Natural Resources).	Seattle	June-July	Prof. MONOD
World Conference on Thunnidae (FAO).	La Jolla	June-July	Dr. POSTEL

LIST OF PUBLICATIONS ISSUED SINCE JUNE 1961 OR TO BE ISSUED SHORTLY

Technical and Scientific Publications

- 54.—List of Maps of Africa South of the Sahara (Publications Nos. 15 and 17 revised and brought up to date).*
- 63.—Third Symposium on Hydrobiology and Inland Fisheries: Major Lakes (Lusaka, 1960).
- 64.—CSA Specialist Meeting on Water Treatment (Pretoria, 1960).
- 66.—First Inter-African Conference on Hydrology (Nairobi, 1961).
- 67.—Twelfth Meeting of the Scientific Council (Pointe-Noire, 1961).
- 68.—Sixth Inter-African Labour Conference (Abidjan, 1961).
- 69.—Absenteeism and Labour Turnover (Joint Project 5).*
- 70.—Migrations in West Africa (Joint Project 3).*
- 71.—Map on the Dangers of Soil Erosion (Joint Project 20—CCTA/EEC).*
- 72.—Directory of Research and other Organisations providing Information on Housing in Africa South of the Sahara (Multigraphed).
- 73.—Handbook of Harmful Aquatic Plants (Joint Project 14).
- 74.—Inter-African Co-operation. Booklet on CCTA/CSA/FAMA.
- 75.—CSA Meeting of Specialists on Urbanisation and its Social Aspects (Abidjan, 1961) (Multigraphed).
- 76.—Fourth Symposium—Hydrobiology and Inland Fisheries: River basins subject to heavy seasonal floods (Fort-Lamy, 1961).
- 77.—Fourth Inter-African Conference on Food and Nutrition (CCTA/FAO/WHO) (Douala, 1961).*
- 78.—Archival Facilities in Sub-Saharan Africa (Multigraphed).
- 79.—Migrant Labour in Africa. Sixth Inter-African Labour Conference (Abidjan, 1961).*
- 80.—Fourth Meeting of Southern Committee for Geology (Pretoria, 1961).
- 81.—Foundation Problems experienced in Africa (Multigraphed).
- 82.—Phytosanitary Memorandum.
- 83.—Thirteenth Meeting of the Scientific Council (Muguga, 1962).
- 84.—Symposium on Hygiene and Sanitation in Relation to Housing (Niamey, 1961).*
- 85.—Symposium on Stored Food Products (Freetown, 1962).*
- 86.—First Inter-African Plant Nematology Conference (Kikuyu, 1960).

Periodicals

CCTA/CSA Secretariat

Folder—CCTA/CSA/FAMA.
Fourth Annual Report of FAMA.

Inter-African Bureau for Soils (BIS)

African Soils. Vol. VI, Nos. 1, 2 and 3.
Monthly Analytic Bulletin (Multigraphed).

Inter-African Bureau for Animal Health (IBAH)

Bulletin of Epizootic Diseases. Vol. IX, Nos. 2, 3 and 4. Vol. X, Nos. 1 and 2.
Information Sheets (Multigraphed).
Tenth Annual Report of IBAH.

Inter-African Labour Institute (ILI)

Bulletin. Vol. VIII, Nos. 3 and 4. Vol. IX, Nos. 1, 2 and 3.
Information Sheets (Multigraphed).

Inter-African Committee on Statistics (CIE)

Bulletin. Vol. VI, No. 2.

Inter-African Community Development Clearing House

Bulletin. Vol. II, Nos. 1, 2, 3 and 4 (Fr.). Vol. XIII, No. 2 (Eng.).

Inter-African Committee on Agricultural Mechanisation

Bulletin. Vol. I, Nos. 1 and 2.*

Inter-African Scientific Correspondent for Geology

Summaries XLV and XLVI (Multigraphed).

* To be issued shortly

JOINT PROJECTS

- 1.—Climatological Atlas¹ (see Part II, ch. 2).
- 2.—Science in the Development of Africa (Dr. Worthington).
- 3.—Study of Migrations in West Africa (see Part II, ch. 2).
- 4.—Inventory of Economic Studies:
Periodical Supplements² (see Part III, ch. 5).
- 5.—Research on Absenteeism and Labour Turnover² (see Part II, ch. 7).
- 6.—Systems of National Accounts in Africa (see Part III, ch. 5).
- 7.—Base Maps¹ (see Part III, ch. 8).
- 8.—Mapping of Vectors of Diseases² (see Part III, ch. 1).
- 9.—Methodology of Family Budget Surveys² (see Part III, ch. 5).
- 10.—(CCTA/ILO) Occupational Classification in Africa South of the Sahara.
- 11.—Pedological Map of Africa² (see Part II, ch. 3).
- 12.—(CSA) Case Studies of Economic Development² (see Part III, ch. 5).
- 13.—Analysis of the Salinity of Sea Water¹ (see Part II, ch. 7).
- 14.—Handbook of Harmful Aquatic Plants² (see Part II, ch. 5).
- 15.—Rinderpest Campaign in the Niger-Chad area² (see Part II, ch. 8).
- 16.—Bovine Pleuropneumonia Vaccine Research² (see Part II, ch. 8).
- 17.—Tsetse Campaign in South-East Africa² (see Part II, ch. 8).
- 18.—Psychometric Tests for Use at the Conclusion of Primary Education² (see Part III, ch. 3).
- 19.—Gulf of Guinea Campaign² (see Part II, ch. 7).
- 20.—Map of the Dangers of Erosion in Africa² (see Part II, ch. 3).
- 21.—Regional Training Centre for French-speaking Customs Officers² (see Part I, ch. 3).
- 22.—Regional Training Centre for English-speaking Staff of National Parks² (see Part I, ch. 3).
- 23.—Regional Training Centre for French-speaking Hydrological Assistants (see Part I, ch. 3).
- 24.—Regional Training Centre for French-speaking Hydrogeological Assistants (see Part I, ch. 3).

¹ Permanent projects.

² Projects in hand.

³ Projects under study.

THIRTEENTH MEETING OF THE SCIENTIFIC COUNCIL

MUGUGA, KENYA, 13-22 SEPTEMBER 1962

INDEX

	PAGE
LIST OF PARTICIPANTS	151

RECOMMENDATIONS

PART ONE.—GENERAL QUESTIONS

I. Vote of thanks	153
II. Mr. C. Cheysson	153
III. Dr. E. T. Verdier	153
IV. Future of CSA	153
V. Scientific team of the Joint Secretariat	154
VI. Title of the Council	154
VII. Relations with outside bodies	154
VIII. Advice requested by Governments	154
IX. Main themes for the Commission	155
X. Qualifications of participants at meetings	155
XI. Study tours	155
XII. Elections	155
XIII. Appointment of new Scientific Secretary	155
XIV. Publications	156
XV. Science-Afrique	156

PART TWO.—NATURAL RESOURCES

XVI. Conservation of nature : new Convention	156
XVII. Charter for the conservation and protection of nature	157
XVIII. Climatological Atlas (J.P. 1)	158
XIX. Hydrology	158
XX. Regional schemes for the development of river basins and major lakes	158
XXI. Geological Bureau	159
XXII. CCTA scientific and technical bureaux	159
XXIII. Council of Management of BIS	160
XXIV. CCTA/FAO symposium on the classification of tropical soils	160
XXV. Meeting of CRACCUS	160
XXVI. Symposium on soil conservation	160
XXVII. Training course in the field of soil conservation and utilisation	161
XXVIII. Survey on the evolution of soils under shifting cultivation	161
XXIX. Phytogeography	162
XXX. Symposium on paddy rice cultivation	162
XXXI. Symposia on other crops	162
XXXII. Beekeeping	162
XXXIII. Handbook of Harmful Aquatic Plants (J.P. 14)	163
XXXIV. Stored food products	163
XXXV. Handbook on Stored Food Products	163
XXXVI. Symposium on the processing, conservation and marketing of freshwater fish	163
XXXVII. Specialist meeting on crustaceans	164
XXXVIII. Inter-African Bureau for Animal Health	165

	PAGE
PART THREE.—SOCIAL, ECONOMIC AND TECHNICAL	
XXXIX. Bureau for Human Health	165
XL. Control of tsetse flies and trypanosomiasis	165
XLI. Mapping of vectors of diseases (J.P. 8)	166
XLII. Inter-African Correspondent for Mental Health	166
XLIII. Specialist meeting on acculturation	167
XLIV. Meeting of specialists on teaching and research in psychiatry	167
XLV. Symposium on social sciences and medicine	168
XLVI. Inter-African Correspondent for Nutrition	168
XLVII. Linguistics	169
XLVIII. Specialist meeting on libraries and documentation	169
XLIX. Panels of correspondents for archives and history of peoples of Africa	169
L. Co-ordinator for the panel of correspondents for the history of the peoples of Africa	169
LI. Specialist meeting on urbanisation	169
LII. Psychotechnical tests	169
LIII. Community development	170
LIV. Economic development (J.P. 12)	170
LV. Inter-African Labour Institute	171
LVI. Specialist meeting on productivity	171
LVII. Symposium on industrial health (occupational hygiene)	172
LVIII. Inter-African Housing Bureau	172
LIX. Specialist meeting on the production and use of local building materials	172
LX. Panels of correspondents on roads	172
LXI. Specialist meeting on timber protection	173
LXII. Future meetings devoted to technology	173
LXIII. Relations with the International Atomic Energy Agency	174
LXIV. The Quiet Sun Year	174
LXV. Fourteenth Meeting of the Council	174

LIST OF PARTICIPANTS

CHAIRMAN

Professor TH. MONOD . . . Directeur de l'Institut Français d'Afrique Noire, IFAN, B.P. 206, Dakar, Senegal.

VICE-CHAIRMEN

Dr. S. M. NAUDÉ . . . President of the South African Council for Scientific and Industrial Research, CSIR, P.O. Box 395, Pretoria, South Africa.

Professor L. VAN DEN BERGHE . . . University of California, Los Angeles, U.S.A.

MEMBERS

Professor G. AUBERT . . . 80 route d'Aulnay, Bondy (Seine), France.

Dr. G. R. BATES . . . Chief Botanist and Plant Pathologist, Federal Ministry of Agriculture, P.O. Box 8100, Causeway, Salisbury, Southern Rhodesia.

Mr. H. R. BINNS, C.M.G., O.B.E. . . Director, East African Veterinary Research Organisation, EAVRO, Muguga, Kenya.

Dr. P. J. DU TOIT, F.R.S. . . CSIR, P.O. Box 395, Pretoria, South Africa.

Professor DARRYL FORDE . . . University College, London, W.C. 2, England.

Mgr. L. P. GILLON . . . Recteur de l'Université Lovanium, Léopoldville XI, République du Congo.

Dr. T. A. LAMBO, O.B.E. . . Senior Specialist, Neuro-Psychiatric Centre, Aro Hospital, Abeokuta, Western Nigeria.

Professor G. LEDUC . . . Professeur de Sciences Economiques, Faculté de Droit, Université de Paris, France.

Dr. A. LY . . . Directeur adjoint, IFAN, B.P. 206, Dakar, Senegal.

Professor J. MILLOT . . . Professeur Directeur du Musée de l'Homme, 14bis avenue du Président Wilson, Paris 16^e, France.

Dr. E. W. RUSSELL . . . Director, East African Agriculture and Forestry Research Organisation, EAAFRO, Muguga, Kenya.

INVITED TO PARTICIPATE

P. ROBSON . . . Adviser and Head of the Planning Division, Ministry of Economic Affairs, P.O. Box 13, Entebbe, Uganda.

Dr. E. T. VERDIER . . . Aumessas, Gard, France.
(ex-Scientific Secretary CCTA/CSA).

SECRETARIAT

SECRETARY-GENERAL

Mr. MAMOUDOU TOURÉ . . . P.M.B. 2359, Lagos, Nigeria.

DEPUTY SECRETARY-GENERAL

Mr. RICHELIEU MORRIS . . . P.M.B. 2359, Lagos, Nigeria.

SCIENTIFIC SECRETARY

Mr. A. E. LAHOUSSE . . . P.O. Box 30234, Nairobi, Kenya.

PUBLICATIONS OFFICER

Mr. J.-P. SARRAUTTE . . . Watergate House, York Buildings, London,
W.C. 2, England.

LINGUISTIC ADVISER

Mr. J. HEYMANS . . . C/o CCTA/CSA, Watergate House, York
Buildings, London, W.C. 2, England.

INTERPRETER

Mrs. C. DUNFORD . . . P.O. Box 30123, Nairobi, Kenya.

TRANSLATOR

Miss J. DAVIES . . . P.M.B. 2359, Lagos, Nigeria.

BILINGUAL SECRETARIES

Mrs. B. L. DUNCAN SMITH . . . P.O. Box 30234, Nairobi, Kenya.

Miss P. NOYCE . . . P.M.B. 2359, Lagos, Nigeria.

Mme M. L. VAN DER BORGH T . . . P.O. Box 30234, Nairobi, Kenya.

RECOMMENDATIONS

PART ONE.—GENERAL QUESTIONS

I. Vote of Thanks

The Council expresses its sincere gratitude to the East African Common Services Organisation for the hospitality extended to it at its Thirteenth Meeting. Thanks to the facilities made available at the EAAFRO and EAVRO offices, it was able to conduct its work in excellent conditions. The Council requests the Secretary-General to convey this message to Mr. A. L. Adu, the Secretary-General of EACSO, who kindly consented to open the meeting.

II. Mr. Claude Cheysson

The Council expresses its deep gratitude to Mr. Claude Cheysson, on his retirement as Secretary-General, for the outstanding services he has rendered to the cause of scientific and technical co-operation in Africa, as a Secretary-General whose exceptional qualities, ability, energy and unfailing devotion to duty have been fully appreciated by the Council.

III. Dr. E. T. Verdier

The Council deeply regrets that Dr. E. T. Verdier is obliged to give up his post as Scientific Secretary and desires to thank him publicly for the exemplary devotion and great ability with which he has always, in circumstances which have often been difficult and too often with insufficient staffing, served most effectively the interests of the Scientific Council and, in so doing, those of the cause of science in Africa.

IV. Future of CSA

Convinced of the need to unite the endeavours of all those who are able to contribute to a greater knowledge and more rational utilisation of factors directly or indirectly affecting the populations of the continent,

Convinced that the development of science and the judicious application of methods and techniques recommended by qualified scientists having a wide experience of Africa can and should contribute in a decisive manner to the progress of Africa and its peoples,

The Council reaffirms its unfailing devotion in heart and in mind to this great cause.

It points out that all its Members, insofar as their participation in the work of the Council is concerned, serve in a spirit of complete impartiality and objectivity, regardless of political considerations and without reference to their national governments.

Convinced that the two essential and fundamental liberties upon which the true effectiveness of its action depends—freedom to choose its Members irrespective of their nationality and to hold its meetings in any of the countries belonging to the Commission—will always be guaranteed,

The Council considers that there will be every advantage in its continuing to work in close liaison with CCTA.

Being desirous of taking fully into account the implications of the consideration of the constitution in the context of Africa and of the CCTA, the Council decides to postpone until its next annual meeting the item on its Agenda covering elections.

V. Scientific Team of the Joint Secretariat

The Council must stress that its activities have sometimes suffered from the inadequate scientific staffing of the Joint Secretariat, an inadequacy which has been rendered even greater by the continually increasing scope of its activities and by the additional administrative or representative missions often imposed upon the Scientific Secretaries.

The Council therefore requests that in future :

(1) the Joint Secretariat should include at least three qualified officers, each specialising in one of the main branches of activity of the Council : Biological Sciences, Social Sciences, Physical and Technical Sciences ;

(2) the Scientific team should be given every opportunity to devote itself to its scientific tasks.

Unless the Council is assisted by such a scientific team within the Joint Secretariat it will be unable to give Governments in Africa all the services they are entitled to expect.

VI. Title of the Council

The Council recommends that henceforth the phrase " South of the Sahara " be deleted from all texts concerning the Council. In future, therefore, it will be known as the Scientific Council for Africa though by virtue of its present composition it will continue to concentrate more particularly on problems affecting the region south of the Sahara.

VII. Relations with Outside Bodies

Many new organisations are being set up in Africa for the purpose of co-ordinating research at regional or wider level. The Council notes these developments with satisfaction and expresses its readiness to co-operate with such bodies.

VIII. Advice Requested by Governments

The Council, while reaffirming its desire to assist all States requesting its specialist advice in connection with the study and assessment of projects

drawn up for these countries by various bodies, notes that whereas it would have difficulty in giving an official view on matters of which the politico-economic consequences are obvious, it will always make every endeavour, when asked by States for advice on scientific matters, to indicate by the intermediary of its secretariat and after consultation with certain of its members, the most appropriate independent specialists to give both valid and unbiased opinions.

IX. Main Themes for the Commission

The Council notes with interest that at the last session of the Commission, an entire day was devoted to the problem of the training of middle-grade personnel in Africa.

It notes that the theme for the Eighteenth Session will be the Common Fund and suggests as a possible subject for a later session "the training of scientific research workers in Africa". Discussions on this topic would cover both problems of recruitment and training and the question of the status to be given to research workers.

X. Qualifications of Participants at Meetings

The Council wishes to draw the attention of the Commission to the need for Governments to ensure that the qualifications of their representatives at meetings should be appropriate to the nature and purpose of the meeting.

XI. Study Tours

The Council notes the interest shown by the Commission in study tours, such as the one organised on Community Development, and its desire, expressed in Recommendation XXIX of the Seventeenth Session, to extend this type of activity to other fields.

The Council, recognising the value of such activities, nevertheless draws the attention of the Commission to the need to select candidates and to organise such study tours with great care, and also to the financial implications of this method.

XII. Elections (*see Recommendation IV*)

The Council expresses the wish that the Secretariat make arrangements to draw up a list of suitably qualified African scientists who could be elected to the Council. The purpose of this list would be to enable Members of the Council to elect new Members, taking into account the rapid development of Africa.

XIII. Appointment of a New Scientific Secretary

The Council recommends to the Commission that Dr. A. C. Evans, former Director of the Research Division of the Ministry of Agriculture of Tanganyika, be appointed Scientific Secretary to succeed Dr. E. T. Verdier.

It hopes that this appointment will be made as soon as possible so that Dr. Evans may take up his duties before the departure, in November 1962, of Mr. A. E. Lahousse, the Assistant Scientific Secretary.

XIV. Publications

On several occasions during the meeting various Members of the Council commented upon both the quality of CCTA publications and the rapidity with which lengthy conference reports are published and in particular the publication on the hydrology conference which was held in January 1961 in Nairobi.

The Council was happy to receive a report from the Publications Officer, Mr. J.-P. Sarraute, on the activities of the Publications Bureau and would like to congratulate him on the progress made in the circulation of publications.

XV. Science-Afrique

The Council notes that the need to effect budgetary savings combined with shortage of staff have prevented this publication from appearing since early 1961. It considers that this is regrettable and hopes that Science-Afrique will reappear in the near future, as soon as circumstances permit. It draws the attention of the Commission to the value of this publication which gave information on all the scientific and technical activities of the Commission.

PART TWO.—NATURAL RESOURCES

XVI. Conservation of Nature : New Convention

The Council considers that the new structure of Africa, together with the development in the concept of the protection of nature and natural resources, and the ever growing need to provide the necessary conservation measures for the latter, demand that the revision of the London Convention of 1933, a subject raised on a number of occasions but to date never seriously discussed, be undertaken as soon as possible.

It therefore recommends that a proposal should be made to the International Union for the Conservation of Nature suggesting that :

(1) in the coming months and in consultation with the specialists concerned, in particular the CCTA Inter-African Co-ordinator for the Conservation of Nature and various Members of the Council, a draft revised Convention should be prepared ;

(2) an item covering the presentation and discussion of this project should be included in the agenda for the meetings to be held in September 1963 in Nairobi (Eighth General Assembly and Ninth Technical Meeting of IUCN) in order that it might subsequently be

possible, through the appropriate channels, to approach all countries concerned, whether or not they be Signatories of the original agreement or CCTA Members.

XVII. Charter for the Conservation and Protection of Nature

In accordance with the wish expressed by the Commission in Recommendation VII of the Seventeenth Session, the Council studied the draft Charter presented to it by the Chairman. It approves the new text resulting from this discussion and submits it to the Commission for transmission to Member Governments for rapid adoption.

Draft African Charter for the Protection and Conservation of Nature

The African States, fully aware of their responsibilities towards humanity in general and the peoples of Africa in particular, by the obligation placed upon them freely to administer their natural heritage, have agreed to define as follows the policy they undertake to apply in this field :

1. Nature, especially in Africa where it is so mighty and so varied, represents in all its many forms a sacred trust of which the people of today enjoy the benefits during their lifetime and for which they will have to account to their descendants.

2. Its manifold riches—economic, scientific, cultural, aesthetic—form an irreplaceable capital which can never be administered too wisely or too carefully ; in fact, many examples may be cited to illustrate the catastrophic and irreparable consequences of thoughtless exploitation.

3. Rational exploitation based on specific and well proved scientific rules is the only satisfactory means of complying with both moral obligations and legitimate material interests. The importance of such a policy is all the greater in that its benefits are felt not only at the point of application but also, in many cases, in adjoining areas, in particular in having a regulating effect on the flow of rivers, etc.

4. The utilisation and exploitation of water, soils, animals or plants shall be suitably related to the rate of renewal or maintenance of the resource in question, always bearing in mind the ease with which so many natural balances can be upset and the seriousness of the consequences, should this be allowed to happen, in the distant future.

5. For example, any new major project, such as a barrage, a hydro-electric scheme, a hydraulic, mining or agricultural project, etc., should be seriously studied by all the specialists concerned, including biologists, so that its probable effect on natural conditions may be accurately assessed.

6. In order to protect habitats, of which the general preservation is a major scientific objective and to protect flora and fauna, the extinction of which would be an irreparable loss to the entire world, the following measures shall be taken :

(a) the establishment or extension of protected areas of various kinds (natural parks, fully protected natural reserves, etc.) chosen from among the most representative natural environments of African nature which have been relatively undisturbed ;

(b) the enforcement of game laws in a fully efficient manner ;

(c) the possible extension, after consultation with the appropriate scientific authorities, of the official inter-African list of partially or fully protected species.

The increase in the number of protected areas, and of those intended to become nature sanctuaries, which is essential to ensure in the latter—at least locally—conditions of survival, could also promote the extension of human activities in the adjoining areas.

7. A constant and active informational and educational campaign, designed especially for school children, will propagate both practical and ethical fundamental principles on which should be based the protection of nature and the conservation of natural resources in a modern nation.

8. The conservation of nature and natural resources should in every state be the responsibility of specialised scientific and technical organisations.

XVIII. Climatological Atlas (J.P. 1)

Being informed of progress achieved in connection with Joint Project 1, the Council stresses once more the importance of this Project and the need to complete it as soon as possible.

It notes with satisfaction that thirty-seven maps have been completed and that the remaining eighteen maps are also to be printed shortly by the department which so competently produced the first thirty-seven. The Council expresses its gratitude to Professor Jackson and his collaborators for their contribution to this project and hopes no difficulty will occur to delay the completion of the Atlas.

XIX. Hydrology (Senegal Basin)

The Council notes with interest the information it has received on a programme for the development of the River Senegal undertaken by the Hydraulic Division of the United Nations Economic and Social Council. The Council has long attached great importance to this type of activity and hopes that the Commission will be invited to send representatives to the meeting of the Committee of countries bordering on this river, which will probably be convened early in 1964. It hopes that, in the event of such an invitation, Dr. J. Rodier, CCTA Inter-African Co-ordinator for Hydrology, would be able to represent CCTA.

XX. Regional Schemes for the Development of River Basins and Major Lakes

The Council stresses the desirability of preparing for Africa regional plans designed to facilitate the development of vast areas such as river

basins and great lakes regardless of any political and administrative division. It hopes that this possibility will be carefully investigated whenever an opportunity to do so occurs. It notes the interest in plans of this nature shown at the meeting of the Co-ordinating Committee for Lake Chad and suggests that CCTA and FAMA endeavour to obtain the necessary outside assistance from both international and national organisations to enable such projects to be realised.

XXI. Geological Bureau

The Council, considering the excellent work carried out by Dr. Haughton, the Inter-African Correspondent for Geology, expresses the wish that, in spite of the recent changes in membership of the Commission, the authorities of the host country continue to extend their hospitality to the Geological Bureau for a further period of one year.

XXII. CCTA Scientific and Technical Bureaux

In addition to the services they were intended to provide, i.e. information, documentation and liaison, the CCTA scientific and technical bureaux are increasingly called upon to serve as working or specialisation centres for young African research workers and students. In so doing, they are of particular importance for the development of science in Africa.

Recognising that these bureaux can satisfactorily fulfil this role only if situated in Africa, and that the psychological effect of transferring such bureaux as are still in Europe can only increase the interest of the African Governments in their work and, consequently, their efficacy, the Council stresses the need for CCTA scientific and technical bureaux to be established in Africa, on condition that they are still able, in practice, to carry out their technical work, even if this is rendered slightly more difficult.

The Council therefore recommends that BIS be transferred to Africa, and that the Secretariat conduct a survey on places in Africa suitable for the establishment of this Bureau if possible in a French-speaking area. The results of their research should be presented to the Council of Management of this Bureau at its next meeting which should then be held in the spring of 1963.

The Council stresses that when this survey is conducted, the following factors likely to affect the technical efficiency of the Bureau in its new location should be borne in mind :

- proximity to an active intellectual centre, if possible a university with its libraries ;
- proximity to agricultural and pedological research centres and to a large agricultural department, thus facilitating frequent contact with specialists in this sphere, on which work BIS is based ;
- good postal facilities and convenient airline connections.

XXIII. Council of Management of BIS

Being aware of how difficult it is for African countries to be represented at the many technical or administrative meetings, even of short duration, organised by CCTA,

In view of the limited interest often shown by the Governments in meetings held in Europe,

Considering, in particular, the very limited number of Governments represented at meetings of the Council of Management of BIS held in Paris on 7 and 8 May 1962,

The Council thanks those Governments who were able to send representatives and recommends that in future, one in every two meetings of this Council and of the Executive Committee of this Bureau, which are held alternately once every two years, should be held in Africa.

XXIV. CCTA/FAO Symposium on the Classification of Tropical Soils

Recognising :

—the importance, for pedologists from Africa, of the possibility of studying in detail with their colleagues from other continents, such correlations as may exist between types of soil to be found in Africa and those of other tropical regions in the world ;

—the need for establishing such correlations before a world soils map is prepared ;

—the general value of a map on a scale of 1/5,000,000 as is being prepared for Africa under J.P. 11 and as is planned for the world in an FAO/UNESCO project ;

the Council recommends that the CCTA/FAO meeting already scheduled on the classification of tropical soils should be held, if possible, in May 1963.

It expresses its gratitude to Mgr. Gillon for his proposal that this meeting should be held at Lovanium University.

XXV. Meeting of CRACCUS

The Council notes with satisfaction that the Central African Regional Committee for the Conservation and Utilisation of the Soil has resumed its activity.

It recommends that this Committee should hold its next meeting immediately before or after the meeting referred to in Recommendation XXIV above, which will be held in Leopoldville.

It expresses its gratitude to the Government of the Congo (Brazzaville) for offering to receive this meeting in its capital.

XXVI. Symposium on Soil Conservation

In view of the difficulties now arising over the organisation of general conferences, which are very expensive and often relatively ineffective on

such extensive general subjects as soils, the Council recommends that, in this field, CCTA should organise smaller symposia on specific topics.

The Council therefore recommends that a Fourth Inter-African Soils Conference scheduled, according to the recommendations of the Dalaba meeting, for 1964, should not be held but that a symposium should be organised early in 1965 on the conservation of soil fertility and the practical methods of achieving this.

It requests Dr. Fournier, Director of BIS to prepare an agenda and, in consultation with the Secretariat, to propose a date and venue for this meeting.

XXVII. Training Course in the Field of Soil Conservation and Utilisation

Middle-grade personnel in agricultural, soil or soil conservation departments in the various African States are usually too few in number to cover the extensive work to be done in these fields, so that their release from duty to attend long meetings and even training courses is very difficult to arrange, especially during farming seasons. The Council considers that this is one of the main reasons for the limited number of participants scheduled to attend the Soil Conservation Course which is to be held in Ouahigouya (Upper Volta) in October 1962. It therefore recommends that, in future, when a training course is to be organised on a subject such as soil conservation or agronomy in which this difficulty is likely to arise, consideration should be given to the possibility of replacing extended local courses by a series of more intensive limited courses. These should be given in the most suitably equipped centres of a group of neighbouring States by a mobile teaching unit covering several countries.

XXVIII. Survey on the Evolution of Soils under Shifting Cultivation

Recognising :

—the value of the survey proposed by Dr. Fournier on the evolution of soil under shifting cultivation and intensive cultivation and the validity of the programme for its implementation incorporated in his project ;

—the genuine practical difficulty of the proposed synthesis of documents available in the files of experimental agricultural stations, technical departments and soils bureaux of the various countries of Africa ;

The Council recommends that the Director of BIS should define the conditions of implementation of this survey in consultation with three of its members, Professor G. Aubert, Dr. G. R. Bates and Dr. E. W. Russell, as well as with the secretaries of the four Regional Committees for the Conservation and Utilisation of the Soil.

It hopes that, when the need arises and when final details of the project are available, the Secretariat will take the necessary steps to find sources of finance for this survey.

XXIX. Phytogeography

The Council notes that due to financial problems and the difficulty of finding a suitable expert to undertake the essential preparatory work necessary for the Phytogeographical Atlas of Africa and the revision of the Yangambi proposals for classifying the vegetation types of Africa, the specialist meeting agreed upon in Recommendation XXVI of the Twelfth Meeting has had to be postponed.

The Council considers that in view of the great practical importance of this subject to all African countries where land-use planning projects and other agro-economic surveys are envisaged, efforts should be continued to seek financial support to enable the Phytogeographical Atlas and its ancillary studies to be undertaken.

XXX. Symposium on Paddy Rice Cultivation

The Council, confirming Recommendation XXVIII of its Twelfth Meeting, recommends the convening of a symposium on paddy rice cultivation and approves the following agenda :

- Irrigation and water control.
- Systems of rice cultivation.
- Phytotechnics (plant breeding, disease control, etc.).

The Council hopes that this meeting may be held in Sierra Leone in 1963, immediately after the CROACUS meeting. This agenda will include several items relating to paddy rice cultivation.

XXXI. Symposia on other Crops

The Commission having decided to hold each year, jointly with FAO, if possible, a symposium to deal with crops of major economic importance, the Council considers that it would be beneficial to organise symposia on topics connected with food production.

The Council proposes therefore, after the symposium covered by the previous recommendation, the following programme :

- Symposium on fodder crops and fallows.
- Symposium on cassava and yams.

XXXII. Beekeeping

In view of the importance of beekeeping in Africa, the Council approves measures taken by FAMA to organise a beekeeping course for English-speaking participants in Arusha, Tanganyika.

It endorses the recommendation of the Advisory Committee for Animal Health and hopes that FAMA will also organise a training session for participants from French-speaking countries.

XXXIII. Handbook of Harmful Aquatic Plants (J.P. 14)

The Council notes with satisfaction the publication of the handbook on harmful aquatic plants prepared by Dr. Wild and thanks him and Dr. Bates (Member of the Council) for their work in this connection.

The Council also expresses its gratitude to the authorities of the Federation of Rhodesia and Nyasaland for their contribution to the printing of the handbook and to the British Museum (Natural History) for its substantial contribution to the preparation of Part III of this publication.

It notes that measures have been taken to prepare a French version and thanks Dr. Germain of Louvain University, who has agreed to accept responsibility for the translation of the handbook.

XXXIV. Stored Food Products

The Council recommends that Dr. Hall, of the Pest Infestation Laboratory, London Road, Slough, Buckinghamshire, England, be appointed Co-ordinator of the Panel of Correspondents for Stored Food Products.

XXXV. Handbook on Stored Food Products

The Council notes the recommendation of the symposium on stored food products concerning the preparation of a handbook on the storing of food products in African conditions. It notes that FAO has requested Dr. Hall to prepare this handbook and hopes that members of the CCTA panel of correspondents will give him every assistance in its preparation. Considering that this is an important undertaking, the Council stresses the need to ensure that this handbook is distributed as widely as possible. It relies on the Secretariat to make the necessary arrangements for the implementation of this project in association with FAO.

XXXVI. Symposium on the Processing, Conservation and Marketing of Freshwater Fish

The CCTA/FAO symposium on stored food products and the meeting of the Co-ordinating Committee for Lake Chad proposed recommendations advocating that a symposium be convened on the processing, conservation and marketing of freshwater fish.

The Council recommends that the Commission organise a meeting on this topic and approves the following agenda, submitted by Mr. Daget, CCTA Inter-African Co-ordinator for Hydrobiology :

A. Traditional Methods

1. Processing : sale of fresh fish, sun-drying, fire-drying, oil extraction.
2. Storage : in fishing villages and markets, insect control.
3. Transport : from fishing centres to markets and from these markets to the consumer.

B. Modern Methods

1. Processing :

- (a) refrigeration : packing with ice with or without antibiotics, deep-freezing ;
- (b) smoking : furnaces, fuels ;
- (c) salting : in brine, in stacks, without added brine.

2. Storage : in fishing centres, in markets, in consumer centres.

3. Transport.

C. Miscellaneous

Storage : (a) silos, (b) flour, (c) oil, (d) canning.

The Council suggests that this meeting should be organised in 1964 and hopes that it may be held in the Republic of Mali.

It considers that the subject of the symposium referred to above is of sufficient importance for this meeting to be held in place of the symposium on fish farming which was scheduled for 1964. This will be held in 1965 and will be followed in 1966 by a meeting on the hydrobiology of river basins subject to heavy seasonal flooding.

XXXVII. Specialist Meeting on Crustaceans

Confirming Recommendation XXXII of its Twelfth Meeting, the Council decides to devote a specialist meeting in 1964 to crustaceans. The agenda will include the following topics :

- 1. Introduction. General considerations. The ecological position of crustaceans (including parasitism). Their role in the nutritional chain.
- 2. Crabs and sundry crustaceans.
- 3. Atlantic prawns :
 - (a) *Penaeides*
 - (b) Other prawns.
- 4. Indian Ocean and Red Sea prawns.
- 5. Crayfish :
 - (a) *Jasus* (Cape crayfish)
 - (b) Other crayfish.

Professor Monod, Chairman of the Council, will take the chair at the meeting, to which the following specialists will be invited :

Dr. E. Postel, Inter-African Co-ordinator for Oceanography,
Dr. da Franca,
Dr. du Plessis,
Mr. Rossignol.

The Council hopes that this specialist meeting may be held in Dar es-Salaam during the second quarter of 1964.

XXXVIII. Inter-African Bureau for Animal Health

The Council was pleased that the Director and Assistant Director of IBAH were able to take part in its discussions on matters relating to animal health. It notes with satisfaction the high standard of the work carried out by the bureau for which it thanks Mr. Beaton and his staff. It notes that Dr. Lobry, the second Assistant Director, has taken up his duties and hopes that the Bureau will consequently be able to extend its activities.

PART THREE.—SOCIAL, ECONOMIC AND TECHNICAL

XXXIX. Bureau for Human Health

The Council regrets that CCTA/CSA joint action in the human health field has not, to date, produced more concrete results. The recent closing down of BPITT, in order to effect a budgetary saving and because of its relatively limited effectiveness, is a striking example of this deplorable deficiency.

The Council considers nevertheless that this is a vitally important subject for the future of Africa, which must definitely remain a concern of the Commission. It recommends therefore that the former Bureau be replaced as soon as possible by a new Bureau for Human Health in Africa which would work in close liaison with the larger international health organisations, especially WHO, and also with IBAH. A qualified person concentrating solely on the work of the Bureau should direct its activities from the outset.

It would be desirable for this bureau to be situated in an African centre having good university and hospital facilities. For this reason, Ibadan would seem to be all the more suitable in that Dr. Lambo, Professor in the Faculty of Medicine of the University, would be able to give invaluable assistance in the establishment and development of this Bureau.

The Council cannot stress too strongly the importance it attaches to this recommendation.

XL. Control of Tsetse Flies and Trypanosomiasis

The Council noted with interest the report of the Ninth Meeting of the ISCTR which was held in Conakry from 21 to 25 August 1962 and records its satisfaction at the results obtained.

The Council recognises that the control of tsetse flies and trypanosomiasis constitutes an essential part of the development of rural areas in Africa, mainly in the savannah belts.

The Council considers it essential that at the stage of planning, execution and evaluation of control projects against the tsetse fly and trypanosomiasis, full association be ensured of specialists belonging to the basic fields and especially entomologists, ecologists, hydrologists, engineers, agronomists, demographers, economists and administrators. The necessity

for such an association has been stressed repeatedly by all concerned, but so far to comparatively little avail. The present techniques for keeping the tsetse fly population below a critical biological threshold are very effective provided, however, that human and agricultural occupation consolidates immediately the treated areas. The control of tsetse flies especially in the savannah belts, should therefore be included in the framework of global rural development plans, taking also into account the opportunity of conducting simultaneously similar control projects in neighbouring countries belonging to the same fly belt.

ISCTR, comprising the leading scientists working in the whole field of tsetse research and control, has an increasingly important role to play in providing expert advice to the governments of countries in Africa, on the control of the tsetse fly and of trypanosomiasis.

Members of the Council with an interest and competence on the subject should establish, together with the CCTA Correspondent for Human Health and the Director of IBAH, close liaison with the UN Special Agencies and propose all measures suitable to ensure the necessary interdisciplinary and interterritorial approach and consequently the judicious use of funds when available.

Professor L. van den Berghe, Vice-Chairman of the Council, is requested to gather information at this stage at FAO, WHO, Special Fund and AID levels where the subject is considered and to seek together with Dr. Willett, Chairman of ISCTR, a much needed liaison.

The Council, in the long-term interest of this liaison at all levels, considers that the Commission could, with scientific benefit, approach the appropriate Agencies as to their reaction to the establishment of a WHO/FAO/CCTA-ISCTR group of experts on tsetse control and trypanosomiasis.

XLI. Mapping of Vectors of Diseases (J.P. 8)

The Council congratulates Professor van den Berghe, Vice-Chairman of the Council, on his work in this field and hopes that this Joint Project will be satisfactorily completed.

The Council decides that in 1964 or 1965 a second meeting of specialists should be convened on the mapping of vectors of diseases, mainly Culicides and Simulides. It requests Professor van den Berghe to prepare an agenda for this meeting and to draw up a list of specialists who could be invited to attend.

XLII. Inter-African Correspondent for Mental Health

The Council recommends that Dr. Asuni, of Ibadan University, be appointed Inter-African Correspondent for Mental Health, to succeed Dr. T. Lambo who is unfortunately unable to continue to act in this capacity.

The Council notes with satisfaction the development of activities in this field which it considers to be of major importance.

XLIII. Specialist Meeting on Acculturation

The Council decides, in accordance with Recommendations XXXIX and XLIV of its Tenth and Twelfth Meetings, that a specialist meeting should be convened on acculturation problems. Dr. Lambo, Member of the Council, will take the chair at this meeting, which will be held in Lagos in April 1963. The agenda will include the following points :

- Definition and criteria of acculturation.
- Trends in the development of African communities.
- Influences that have brought about acculturation.
- Consequences of acculturation, in the family and in the community.
- Medical and social aspects of acculturation.
- Special problems ; urbanisation, industrialisation, demography, social mobility.
- Comparative studies.

The following specialists will be invited to attend the meeting :

Dr. C. Pidoux—Psychosociologist (Mali),
Dr. S. Faladé—Sociologist (France),
Dr. T. Asuni—Psychiatrist (Nigeria),
Dr. S. O. Biobaku—Historian (Nigeria),
Mr. J. H. Vant—Psychosociologist (Kenya).

XLIV. Meeting of Specialists on Teaching and Research in Psychiatry

The Council decides to devote one of its specialist meetings to the problem of teaching and research in psychiatry in African medical schools. The meeting could be held in March 1964 in the buildings of Lovanium University, Congo.

The agenda will cover the following items :

1. Need for the introduction of psychiatric teaching into medical curricula.
2. Teaching and research.
3. The need for greater and more intensive interdisciplinary activities between :
 - (a) clinical psychiatry,
 - (b) social science,
 - (c) anthropology,
 - (d) neurology.
4. Special facilities and staff requirements for teaching and research.

Dr. Lambo, Member of the Council, will take the chair at the meeting, to which the following specialists will be invited by CSA :

1. Professor A. H. Leighton,
Professor of Psychiatry (Social Psychiatry),
322 Rand Hall, Cornell University,
Ithaca, N.Y., U.S.A.
2. Dr. Yomi Marinho,
Medical Officer,
Yaba Mental Hospital,
Yaba, Lagos, Nigeria.
3. Professor Henri Collomb,
Professor of Neurology and Psychiatry,
University of Dakar,
Dakar, Senegal.
4. Dr. Desmond Curran,
University of London,
London, England.

XLV. Symposium on Social Sciences and Medicine

The Council recommends that the Commission should consider convening a symposium on social sciences and medicine; the agenda would cover the following points :

Broad outlines

1. Introduction—greater inter-disciplinary action between social science and medicine, especially social medicine and mental health. New trend in medicine is to consider the individual in relation to the wider community.
2. Survey of community attitudes and health.
3. Sociology and epidemiology of diseases :
 - (a) the concept of health and disease in various cultures ;
 - (b) the influence of social and cultural and ecological factors on the aetiology, incidence and prevalence of diseases, physical and mental disorders.
4. The application of sociological methodology to the scientific investigation of diseases, especially in terms of changing cultures, stratification of social class, social mobility, changes in habits, educational trends, migration, urbanisation and industrialisation.
5. Recommendations (outlining areas in urgent need of joint exploration).

XLVI. Inter-African Correspondent for Nutrition

The Council recommends that Dr. G. L. Monekosso, Lecturer in Medicine at the University College of Ibadan, should be appointed Inter-African Correspondent for Nutrition by the Commission.

XLVII. Linguistics

The Council stresses the importance it attaches to African linguistic studies and its desire to see such studies developed at every level, especially in universities.

Problems arising over the study of vehicular languages and multi-linguism, the latter in particular, more especially in urban areas, are considered by the Council to require close consideration. The Council approves the conclusions of the Brazzaville meeting on this subject. It recommends that Dr. Guthrie be requested to send as soon as possible to the Scientific Secretary a practical plan of action for the most effective implementation of these conclusions.

XLVIII. Specialist Meeting on Libraries and Documentation

The Council notes with regret that this meeting has again had to be postponed. While retaining the principle of holding a meeting of specialists on this subject, which it considers important, for librarians and research workers in Africa, the Council considers that it would be desirable to revise the agenda, adopted at its Tenth Meeting (see Recommendation LII) in view of certain other meetings convened on this subject by UNESCO and other organisations.

XLIX. Panels of Correspondents for Archives and History of the Peoples of Africa

The Council notes with interest that, through the initiative of Dr. T. Baxter, Co-ordinator of the Panel for Archives, a meeting of this panel is to be held in Salisbury in August 1963. It hopes that the panel of correspondents for the history of the peoples of Africa will also be able to meet on this occasion.

L. Co-ordinator for the Panel of Correspondents for the History of Peoples of Africa

The Council recommends that Professor Smith, of Ibadan University, be appointed co-ordinator of this panel to succeed Dr. J. Vansina. The Council would like to express its appreciation to Dr. Vansina for his work, so conscientiously and so ably conducted.

LI. Specialist Meeting on Urbanisation

The Council notes with satisfaction the work of the specialist meeting on urbanisation held in Abidjan in August 1961. It hopes that the report on this meeting which forms an excellent summary of the main problems arising in this field, will be widely circulated.

LII. Psychotechnical Tests

Dr. Lambo, Member of the Council, reported to the Council on the results of the conference on psychotechnical tests held in Lagos in March

1962. The Council, aware of the importance of these problems in Africa, proposes the establishment under his direction of a Permanent Co-ordinating Committee, with the following terms of reference :

- to serve as a documentation centre for the development of selection methods (Joint Project 18) ;
- to pool present-day knowledge ;
- to organise such further research as necessary under Joint Project 18 ;
- to prepare programmes for regional co-operation ;
- to facilitate the training of local personnel ;
- to give Governments general advice on the utilisation of these tests.

The Council recommends that the following persons be invited to sit on this Committee : Dr. Lambo ; Professor Taylor of Ibadan University ; Professor Rodgers of the University College of the Federation of Rhodesia and Nyasaland, Salisbury ; Mr. Vant of the Ministry of Labour, Kenya, in Nairobi ; and Dr. Pidoux who is at present carrying out a mission in Bamako.

Should any of these specialists be unable to accept this invitation, Dr. Lambo would be asked to submit new proposals to the Secretariat.

LIII. Community Development

The Council decides to devote one of its meetings of specialists to the problem of community development, which would thus enable a group of experts to hold discussions on the principles and aims of community development. It considers, however, that, before convening such a meeting, it would be desirable to prepare a general working paper outlining the question of community development in Africa. The Council realises that this is an extensive task but has no doubt that Mr. Clunies-Ross, Inter-African Co-ordinator of the Panel of Correspondents for Community Development will be able either to carry out the work satisfactorily himself or make suggestions for its execution. The Council also requests him to draw up an agenda and submit a list of the names of suitable specialists to be invited to this meeting.

The Council notes, however, the considerable activity of other international and governmental bodies in this field and stresses the importance of co-operation in order to prevent overlapping.

LIV. Economic Development (J.P. 12)

The Council notes that it has not so far been possible to interest organisations outside Africa in Joint Project 12, which was discussed at the Twelfth Meeting of the Council (Recommendation LIV). It therefore considers that it would be desirable to convene a specialist meeting to carry out a more detailed study of this project and make proposals for the appointment of a director who would be responsible for the project, if this were implemented. The Council would like once more to stress the

importance it attaches to this project and considers that, in accordance with its usual procedure, only a specialist meeting convened to finalise details of the project would offer the necessary guarantees enabling the plan to be presented to organisations likely to be interested and which might contribute to its implementation.

The Council therefore decides to convene a meeting in February or March 1963, to which the following specialists will be invited :

Professor G. Leduc, Member of the Council, Chairman,
Dr. Okigbo, Associate Member of the Council,
Dr. Robson, Economic Adviser to the Government of Uganda,
Dr. Weeks, Bureau of Economic Research of Liberia,
Dr. Wade, Dakar University.

If the meeting is held in Dakar, the following persons could be invited to attend as observers :

—economists from the Faculty of Law and Economics of Dakar University,

—Mr. van der Vaerren, Directeur du Bureau de Dakar de l'Institut de Sciences Economiques Appliquées.

The agenda would cover the following points :

- Study of the project drawn up by Mr. Martin.
- Setting up of a steering committee.
- Selection of a co-ordinator (residing permanently in Africa).
- Preparation of a hierarchic list of subjects to be studied.
- Establishment of drafting committees for the first two or three subjects.
- Detailed study of financial aspects of the problem and preparation of draft annual budgets.
- Discussions on the nature of publications envisaged.
- Drawing up of a plan of action over a first pluri-annual period.
- Drafting of an explanatory note designed to serve as a basis for measures to be taken in order to obtain finance.

LV. Inter-African Labour Institute

The Council notes with satisfaction the appointments of Mr. P. A. L. Chukwumah and Mr. G. Jullien as Director and Assistant Director respectively of the Brazzaville bureau. It is confident that, under their direction, the work of this bureau will be maintained at the same high standard set by their predecessors.

LVI. Specialist Meeting on Productivity

In accordance with Recommendation V of the Advisory Committee of ILI, the Council proposes in due course to devote one of its specialist

meetings to productivity. The Council requests the Director of ILI to draw up an agenda for this meeting to be submitted to the next meeting of the Council together with the names of specialists to be invited, and proposals for a venue and date.

LVII. Symposium on Industrial Health (Occupational Hygiene)

Referring to Recommendation LVII of its Twelfth Meeting, the Council recommends that the Commission should convene a symposium on occupational hygiene. This symposium should bring together not only medical officers, but also specialists in hygiene, sociologists and labour inspectors. The main points on the agenda for this meeting would be as follows :

1. Definition of occupational hygiene in Africa.
2. Occupational hygiene and the socio-economic environment.
3. Occupational hygiene and prophylaxis.
4. Legislation governing occupational hygiene.
5. The role of international organisations.

LVIII. Inter-African Housing Bureau

The Council learns with regret that for budgetary reasons it became necessary to close the Inter-African Housing Bureau on 25 May 1962. It expresses to Mr. Richards, former Inter-African Housing Secretary, and to his predecessor, Dr. Stutterheim, Associate Member of CSA, its gratitude for the efficient manner in which they have carried out their functions. The Council expresses its entire satisfaction at the work done by these two officers who have enabled this Secretariat to carry out its task with maximum efficiency.

The Council notes that the Third Meeting of the Administrative Committee accepted the principle of the establishment of a Housing Bureau. It considers that the setting up of such a bureau would meet a very real need in Africa and hopes that the joint Secretariat will obtain the necessary finance for this purpose.

LIX. Specialist Meeting on the Production and Use of Local Building Materials

The Council recommends that one of its specialist meetings should be devoted to the problem of the use and production of local building materials as suggested by the symposium of representatives from building research organisations (Livingstone, October 1961). It requests the Secretariat to submit for its next meeting an agenda and the names of suitable specialists to be invited.

LX. Panel of Correspondents on Roads

It is with regret that the Council learns that Dr. P. Rigden will no longer be able to act as co-ordinator of this panel. The Council expresses

its thanks to Dr. Rigden for his devotion to duty and the efficient manner in which he has carried out this work. It recommends that Dr. R. S. Millard (Road Research Laboratory, Harmondsworth, England) be appointed co-ordinator of this panel to succeed Dr. Rigden.

LXI. Specialist Meeting on Timber Protection

The Council decides to convene a specialist meeting on the protection of wood as recommended at its Twelfth Meeting (Recommendation LIX). It proposes that this meeting be held in 1963 at Libreville (Gabon) under the chairmanship of Dr. Paulian, Associate Member of CSA. The following specialists will also be invited by the Council :

Mr. M. Fougereousse, Chef de la division Prévention, Centre technique forestier tropical, Nogent-sur-Marne, France,

Mr. P. M. D. Kroch, Forest Production Institute, Pretoria,

Mr. N. Sellier, Ingénieur au Centre technique forestier tropical du Gabon,

Mr. M. Whyte, Forest Product Research Laboratory, Aylesbury, Buckinghamshire, England,

another specialist working in an English-speaking area of West Africa.

The agenda for this meeting will not include timber submerged in water, but will cover the following points :

1. Review of the existing situation
 - (a) The establishment of a list of African woods utilised in the continent according to :
 - availability,
 - natural durability and resistance to parasites,
 - ease of impregnation,
 - technological characteristics.
 - (b) African wood parasites : list and their methods of attack.
2. Treatments for the protection of wood
 - (a) Methods for the protection of wood against parasites, fire, humidity, etc.,
 - (b) economic importance of such processes.
3. A critical comparison of the use of woods, as opposed to other materials and their resistance to infestation.
4. Miscellaneous.

LXII. Future Meetings Devoted to Technology

The Council proposes that the following subjects be studied in the series of meetings devoted to technology :

- Corrosion and protection of metals in a tropical environment.
- Underwater protection of timber.

LXIII. Relations with the International Atomic Energy Agency

The Council hopes that closer relations will be established with IAEA and that negotiations for an agreement with this organisation will be reopened. It considers that in view of IAEA activities in various fields concerning CCTA, particularly where training courses are concerned, there would be every advantage in establishing close co-operation between the two organisations.

LXIV. The Quiet Sun Year

The Council notes the recommendations adopted by the Inter-African Committee on Maps and Surveys at its meeting held in Salisbury in June 1962 and expresses the hope that CCTA will be represented at the meeting of the Quiet Sun Year Organisations.

LXV. Fourteenth Meeting of the Council

The Council decides to hold its Fourteenth Meeting from 1 to 10 October 1963. It hopes that it will be possible to organise this meeting in a French-speaking country in West Africa, and requests the Secretary-General to approach the responsible authorities.

Stephen Austin & Sons LTD
IMPORTERS OF THE LARGEST OF THE WORLD
— 1962-1963 —

November, 1962

AFRICAN UNION UNION AFRICAINE

African Union Common Repository

<http://archives.au.int>

Organs

African Union Commission

1962

THIRTEENTH MEETING OF THE SCIENTIFIC COUNCIL

Scientific Council for Africa

COMMISSION FOR TECHNICAL CO-OPERATION IN AFRICA SOUTH OF THE SAHARA

<http://archives.au.int/handle/123456789/2660>

Downloaded from African Union Common Repository