OFFICIAL RECORDS
OF THE
WORLD HEALTH ORGANIZATION
No. 118

FIFTEENTH
WORLD HEALTH ASSEMBLY
GENEVA, 8 - 25 MAY 1962

PART I
RESOLUTIONS AND DECISIONS
ANNEXES

WORLD HEALTH ORGANIZATION
GENEVA
September 1962
The following abbreviations are used in the *Official Records of the World Health Organization*:

ACABQ — Advisory Committee on Administrative and Budgetary Questions
ACC — Administrative Committee on Co-ordination
BTAO — Bureau of Technical Assistance Operations
CCTA — Commission for Technical Co-operation in Africa South of the Sahara
CIOMS — Council for International Organizations of Medical Sciences
ECA — Economic Commission for Africa
ECAFE — Economic Commission for Asia and the Far East
ECE — Economic Commission for Europe
ECLA — Economic Commission for Latin America
FAO — Food and Agriculture Organization
IAEA — International Atomic Energy Agency
ICAO — International Civil Aviation Organization
ILO — International Labour Organisation (Office)
IMCO — Inter-Governmental Maritime Consultative Organization
ITU — International Telecommunication Union
MESA — Malaria Eradication Special Account
OIHP — Office International d'Hygiène Publique
OPEX — Programme (of the United Nations) for the provision of operational, executive and administrative personnel
PAHO — Pan American Health Organization
PASB — Pan American Sanitary Bureau
SMF — Special Malaria Fund of PAHO
TAB — Technical Assistance Board
TAC — Technical Assistance Committee
UNESCO — United Nations Educational, Scientific and Cultural Organization
UNICEF — United Nations Children's Fund
UNRWA — United Nations Relief and Works Agency for Palestine Refugees
UNSCEAR — United Nations Scientific Committee on the Effects of Atomic Radiation
WFUNA — World Federation of United Nations Associations
WMO — World Meteorological Organization

The designations employed and the presentation of the material in this volume do not imply the expression of any opinion on the part of the Director-General concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers,
The Fifteenth World Health Assembly, held at the Palais des Nations, Geneva, from 8 to 25 May 1962, was convened in accordance with resolution WHA14.33 of the Fourteenth World Health Assembly and resolution EB28.R19 of the Executive Board (twenty-eighth session).

The proceedings of the Fifteenth World Health Assembly are being published in two parts. The resolutions, with annexes, are contained in this volume. The records of plenary and committee meetings will be printed, along with the list of participants, agenda and other material, in Official Records No. 119.
In this volume the resolutions are reproduced in the numerical order in which they were adopted. However, in order to facilitate the use of the volume in conjunction with the Handbook of Resolutions and Decisions, they have been grouped by title in the table of contents under the subject-headings of the Handbook. There has also been added, beneath each resolution, a reference to the section of the Handbook containing previous resolutions on the same subject. The sixth edition of the Handbook—which is indexed both by subject and by resolution symbol—contains most of the resolutions adopted up to and including the Fourteenth World Health Assembly and the twenty-eighth session of the Executive Board.

The following reference list of sessions of the Health Assembly and Executive Board shows the resolution symbol applicable to each session and the Official Records volume in which the resolutions were originally published.

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RESOLUTIONS AND DECISIONS

WHA15.1 Terms of Reference of the Main Committees

The Fifteenth World Health Assembly,

Considering Rule 33 of the Rules of Procedure of the World Health Assembly which provides, inter alia, that "the main committees of the Health Assembly shall be: (a) the Committee on Programme and Budget; (b) the Committee on Administration, Finance and Legal Matters;",

DECIDES that:

(1) the terms of reference of the Committee on Programme and Budget shall be to:
   (a) consider whether the annual programme follows the general programme of work for a specific period;
   (b) examine the main features of the proposed programme;
   (c) recommend the budgetary ceiling;
   (d) examine the operating programme in detail;
   (e) recommend the Appropriation Resolution, after inserting the amounts in the sections for the operating programme, in the text of the resolution, as recommended by the Committee on Administration, Finance and Legal Matters; and
   (f) study such other items as are referred to it by the Health Assembly;

(2) the terms of reference of the Committee on Administration, Finance and Legal Matters shall be to:
   (a) review the financial position of the Organization, including:
      (i) the Financial Report and the Report of the External Auditor for the previous financial year;
      (ii) the status of contributions and advances to the Working Capital Fund;
      (iii) the status of the Assembly Suspense Account and any other funds which have a bearing on the financial position of the Organization;
   (b) recommend the scale of assessment;
   (c) recommend the Working Capital Fund resolution, when necessary, including the amount in which it shall be established;
   (d) review the parts of the budget dealing with the estimates other than for the operating programme and report thereon to the Committee on Programme and Budget;
   (e) consider the text of the Appropriation Resolution, insert the amounts for appropriation sections other than the operating programme and report thereon to the Committee on Programme and Budget; and
   (f) study such other items as are referred to it by the Health Assembly;

(3) when items (b) and (c) under paragraph (1) are being considered in the Committee on Programme and Budget, there shall not be a meeting of the Committee on Administration, Finance and Legal Matters, and when item (d) under paragraph (2) is being considered in the Committee on Administration, Finance and Legal Matters, there shall not be a meeting of the Committee on Programme and Budget;

(4) items (b) and (c) under paragraph (1) shall not be considered by the Committee on Programme and Budget until the Committee on Administration, Finance and Legal Matters has completed the work on items (a) and (b) of paragraph (2); and finally,

(5) if, exceptionally, the physical facilities at a session of the Health Assembly do not permit the debate on the Annual Report of the Director-General to take place in plenary meeting, the review of the Annual Report (excluding the annual Financial Report) shall take place in the Committee on Programme and Budget and shall be added to the terms of reference of that committee.


Third plenary meeting, 9 May 1962
WHA15.2 Award of the Léon Bernard Foundation Medal and Prize

The Fifteenth World Health Assembly

1. NOTES the reports of the Léon Bernard Foundation Committee; ¹
2. ENDORSES the unanimous proposal of the Committee for the award of the Léon Bernard Foundation Medal and Prize for 1962;
3. AWARDS the Medal and Prize to Sir John Charles; and
4. PAYS TRIBUTE to Sir John Charles for his unremitting service and outstanding achievements in the field of public health and social medicine.


WHA15.3 United Nations Prizes for the International Encouragement of Scientific Research into the Control of Cancerous Diseases

The Fifteenth World Health Assembly,

Having studied the report of the Director-General ² on the action taken since the Fourteenth World Health Assembly in connexion with the United Nations prizes for the international encouragement of scientific research into the control of cancerous diseases; and

Having taken into account the recommendations contained in resolution EB29.R17 adopted by the Executive Board at its twenty-ninth session,

1. ACCEPTS the recommendations made by the Executive Board at its twenty-ninth session in regard to the award of the United Nations cancer prizes; and
2. REQUESTS the Director-General to transmit to the Acting Secretary-General of the United Nations the names of the persons thus recommended for these awards.

Handb. Res., 6th ed., 8.1.2.8 Seventh plenary meeting, 16 May 1962 (second report of the Committee on Programme and Budget)

WHA15.4 Contract of the Director-General: Salary and Allowances

The Fifteenth World Health Assembly,

Recognizing the increase in the responsibilities of the Director-General resulting from the growth of the Organization and the development of its programme,

1. DECIDES that as from 1 January 1962 his salary shall be $24 000, and his representation allowance $10 000;
2. REQUESTS the Executive Board at its thirty-first session to consider the question of whether a housing allowance or suitable housing should be provided for the Director-General and to report accordingly to the Sixteenth World Health Assembly; and
3. AUTHORIZES the President of the Fifteenth World Health Assembly to sign on behalf of the Organization a supplemental agreement modifying accordingly paragraphs 1 and 2 of Article II of the contract of the Director-General.³

Handb. Res., 6th ed., 7.3.10.2 Seventh plenary meeting, 16 May 1962 (section 1 of the second report of the Committee on Administration, Finance and Legal Matters)

¹ See Annex 5.
² See Annex 6.
³ See Annex 7.
### WHA15.5 Salaries of the Deputy Director-General, Assistant Directors-General and Regional Directors

The Fifteenth World Health Assembly

establishes with effect as from 1 January 1962 the salaries for the following ungraded posts:

(a) for the Deputy Director-General — $19,500 per annum;
(b) for Assistant Directors-General and Regional Directors — $17,900 per annum.

Handb. Res., 6th ed., 7.3.4

*Seventh plenary meeting, 16 May 1962 (section 2 of the second report of the Committee on Administration, Finance and Legal Matters)*

### WHA15.6 Election of Members entitled to designate a Person to serve on the Executive Board

The Fifteenth World Health Assembly,

having considered the nominations of the General Committee,¹

elects the following Members as Members entitled to designate a person to serve on the Board: Canada, Ceylon, Colombia, France, Haiti, Madagascar, Tunisia and Union of Soviet Socialist Republics.


*Seventh plenary meeting, 16 May 1962*


The Fifteenth World Health Assembly,

having examined the Financial Report of the Director-General for the period 1 January to 31 December 1960 and the Report of the External Auditor for the same financial period, as contained in *Official Records* No. 109; and

having considered the report of the Executive Board on its examination of these reports,²


*Eighth plenary meeting, 16 May 1962 (section 1 of the first report of the Committee on Administration, Finance and Legal Matters)*


The Fifteenth World Health Assembly,

having examined the Financial Report of the Director-General for the period 1 January to 31 December 1961 and the Report of the External Auditor for the same financial period, as contained in *Official Records* No. 117; and

having considered the report of the Ad Hoc Committee of the Executive Board on its examination of these reports,³


*Eighth plenary meeting, 16 May 1962 (section 2 of the first report of the Committee on Administration, Finance and Legal Matters)*

¹ For report of the General Committee, see *Off. Rec. Wld Hlth Org.* 119.
³ See Annex 8.
WHA15.9 Status of Collection of Annual Contributions and of Advances to the Working Capital Fund

The Fifteenth World Health Assembly,

Having considered the report of the Director-General on the status of collection of contributions and of advances to the Working Capital Fund as at 30 April 1962;

Noting the collection of contributions in respect of the 1962 budget and of advances to the Working Capital Fund; and

Noting with satisfaction the payments made by Members to liquidate their arrears of contributions,

1. calls the attention of Member governments to the importance of providing in their national budgets for regular payment of their annual contributions in the year in which they are due;
2. urges those Members in arrears to liquidate these arrears in good time, thus making it unnecessary in future for the Assembly to consider, in accordance with Article 7 of the Constitution, whether or not the right of vote of such a Member should be suspended;
3. decides that the arrangements made by Bolivia for payment of its arrears shall be considered as making it unnecessary to invoke the provisions of paragraph 2 of resolution WHA8.13; and
4. requests the Director-General to communicate this resolution to the Members concerned.

Handb. Res., 6th ed., 7.1.2.4; 7.1.3.3

WHA15.10 Supplementary Budget Estimates for 1962

The Fifteenth World Health Assembly,

Having considered the proposals of the Director-General and the recommendations of the Executive Board concerning supplementary budget estimates for 1962,1

1. approves the supplementary budget estimates for 1962;
2. decides to amend the Appropriation Resolution for 1962 (resolution WHA14.43) by increasing (or decreasing) the amounts voted under paragraph I as follows:

<table>
<thead>
<tr>
<th>Appropriation Section</th>
<th>Purpose of Appropriation</th>
<th>Amount US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART I: ORGANIZATIONAL MEETINGS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. World Health Assembly</td>
<td></td>
<td>7 000</td>
</tr>
<tr>
<td>2. Executive Board and its Committees</td>
<td></td>
<td>3 950</td>
</tr>
<tr>
<td>Total — Part I</td>
<td></td>
<td>10 950</td>
</tr>
<tr>
<td>PART II: OPERATING PROGRAMME</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Programme Activities</td>
<td></td>
<td>967 920</td>
</tr>
<tr>
<td>5. Regional Offices</td>
<td></td>
<td>174 763</td>
</tr>
<tr>
<td>7. Other Statutory Staff Costs</td>
<td></td>
<td>(133 823)</td>
</tr>
<tr>
<td>Total — Part II</td>
<td></td>
<td>1 008 860</td>
</tr>
</tbody>
</table>

1 See Annex 9.
### RESOLUTIONS AND DECISIONS

**Appropriation Section**

<table>
<thead>
<tr>
<th>Purpose of Appropriation</th>
<th>Amount US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Administrative Services</td>
<td>210 312</td>
</tr>
<tr>
<td>9. Other Statutory Staff Costs</td>
<td>26 498</td>
</tr>
</tbody>
</table>

**PART III: ADMINISTRATIVE SERVICES**

<table>
<thead>
<tr>
<th>Amount</th>
<th>US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total — Part III</td>
<td>236 810</td>
</tr>
</tbody>
</table>

**Total — Parts I, II and III**

<table>
<thead>
<tr>
<th>Amount</th>
<th>US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1 256 620</td>
</tr>
</tbody>
</table>

3. **DECIDES** further to amend paragraph III of resolution WHA14.43 by increasing the amount under sub-paragraph (iii) and by adding a new sub-paragraph (iv) as follows:

- (iii) the amount of $ 475 049 representing miscellaneous income available for the purpose
- (iv) the amount of $ 781 571 available by transfer from the cash portion of the Assembly Suspense Account

Total $ 1 256 620

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**WHA15.11 Assessment of New Members for 1961 and 1962**

The Fifteenth World Health Assembly,

Noting that several States became Members of the Organization during 1961 and 1962 by depositing with the Secretary-General of the United Nations a formal instrument of acceptance of the WHO Constitution,

**DECIDES** that these Members shall be assessed as follows:

<table>
<thead>
<tr>
<th>Member State</th>
<th>1961</th>
<th>1962</th>
</tr>
</thead>
<tbody>
<tr>
<td>Republic of the Congo (Leopoldville)</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>Mongolia</td>
<td>—</td>
<td>0.04</td>
</tr>
<tr>
<td>Tanganyika</td>
<td>—</td>
<td>0.04</td>
</tr>
</tbody>
</table>

---

**WHA15.12 Addition to Schedule A to the Appropriation Resolution for the Financial Year 1962**

The Fifteenth World Health Assembly

**DECIDES** that, since Mongolia, the Republic of the Congo (Leopoldville), Sierra Leone and Tanganyika are carrying out malaria programmes, they are eligible for credits in 1962 in the same way as those Members listed in Schedule A attached to the Appropriation Resolution for the financial year 1962 (WHA14.43).
WHAM.13 Scale of Assessment for 1963

The Fifteenth World Health Assembly

I

DECIDES that the scale of assessment for 1963 shall be as follows:

<table>
<thead>
<tr>
<th>Member</th>
<th>Scale (Percentage)</th>
<th>Member</th>
<th>Scale (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>0.05</td>
<td>Libya</td>
<td>0.04</td>
</tr>
<tr>
<td>Albania</td>
<td>0.04</td>
<td>Luxembourg</td>
<td>0.05</td>
</tr>
<tr>
<td>Argentina</td>
<td>0.92</td>
<td>Madagascar</td>
<td>0.04</td>
</tr>
<tr>
<td>Australia</td>
<td>1.52</td>
<td>Malaya, Federation of</td>
<td>0.12</td>
</tr>
<tr>
<td>Austria</td>
<td>0.41</td>
<td>Mali</td>
<td>0.04</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.10</td>
<td>Mauritania</td>
<td>0.04</td>
</tr>
<tr>
<td>Bolivia</td>
<td>0.04</td>
<td>Mexico</td>
<td>0.68</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.94</td>
<td>Monaco</td>
<td>0.04</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.18</td>
<td>Mongolia</td>
<td>0.04</td>
</tr>
<tr>
<td>Burma</td>
<td>0.06</td>
<td>Morocco</td>
<td>0.13</td>
</tr>
<tr>
<td>Byelorussian SSR</td>
<td>0.47</td>
<td>Nepal</td>
<td>0.04</td>
</tr>
<tr>
<td>Cambodia</td>
<td>0.04</td>
<td>Netherlands</td>
<td>0.92</td>
</tr>
<tr>
<td>Cameroun</td>
<td>0.04</td>
<td>New Zealand</td>
<td>0.37</td>
</tr>
<tr>
<td>Canada</td>
<td>2.85</td>
<td>Nicaragua</td>
<td>0.04</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>0.04</td>
<td>Niger</td>
<td>0.04</td>
</tr>
<tr>
<td>Ceylon</td>
<td>0.08</td>
<td>Nigeria</td>
<td>0.19</td>
</tr>
<tr>
<td>Chad</td>
<td>0.04</td>
<td>Norway</td>
<td>0.41</td>
</tr>
<tr>
<td>Chile</td>
<td>0.24</td>
<td>Pakistan</td>
<td>0.38</td>
</tr>
<tr>
<td>China</td>
<td>4.17</td>
<td>Panama</td>
<td>0.04</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.24</td>
<td>Paraguay</td>
<td>0.04</td>
</tr>
<tr>
<td>Congo (Brazzaville)</td>
<td>0.04</td>
<td>Peru</td>
<td>0.09</td>
</tr>
<tr>
<td>Congo (Leopoldville)</td>
<td>0.06</td>
<td>Philippines</td>
<td>0.37</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>0.04</td>
<td>Poland</td>
<td>1.17</td>
</tr>
<tr>
<td>Cuba</td>
<td>0.20</td>
<td>Portugal</td>
<td>0.15</td>
</tr>
<tr>
<td>Cyprus</td>
<td>0.04</td>
<td>Romania</td>
<td>0.29</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>1.07</td>
<td>Ruanda-Urundi</td>
<td>0.02</td>
</tr>
<tr>
<td>Dahomey</td>
<td>0.04</td>
<td>Saudi Arabia</td>
<td>0.06</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.53</td>
<td>Senegal</td>
<td>0.05</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>0.05</td>
<td>Sierra Leone</td>
<td>0.04</td>
</tr>
<tr>
<td>Ecuador</td>
<td>0.05</td>
<td>Somalia</td>
<td>0.04</td>
</tr>
<tr>
<td>El Salvador</td>
<td>0.04</td>
<td>South Africa</td>
<td>0.48</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>0.05</td>
<td>Spain</td>
<td>0.78</td>
</tr>
<tr>
<td>Federation of Rhodesia and Nyasaland</td>
<td>0.02</td>
<td>Sudan</td>
<td>0.06</td>
</tr>
<tr>
<td>Finland</td>
<td>0.34</td>
<td>Sweden</td>
<td>1.19</td>
</tr>
<tr>
<td>France</td>
<td>5.43</td>
<td>Switzerland</td>
<td>0.87</td>
</tr>
<tr>
<td>Gabon</td>
<td>0.04</td>
<td>Syrian Arab Republic*</td>
<td>*</td>
</tr>
<tr>
<td>Germany, Federal Republic of</td>
<td>5.21</td>
<td>Tanganika</td>
<td>0.04</td>
</tr>
<tr>
<td>Ghana</td>
<td>0.08</td>
<td>Thailand</td>
<td>0.15</td>
</tr>
<tr>
<td>Greece</td>
<td>0.21</td>
<td>Togo</td>
<td>0.04</td>
</tr>
<tr>
<td>Guatemala</td>
<td>0.05</td>
<td>Tunisia</td>
<td>0.05</td>
</tr>
<tr>
<td>Guinea</td>
<td>0.04</td>
<td>Turkey</td>
<td>0.37</td>
</tr>
<tr>
<td>Haiti</td>
<td>0.04</td>
<td>Ukrainian SSR</td>
<td>1.81</td>
</tr>
<tr>
<td>Honduras</td>
<td>0.04</td>
<td>Union of Soviet Socialist Republics</td>
<td>13.67</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.51</td>
<td>United Arab Republic*</td>
<td>0.27</td>
</tr>
<tr>
<td>Iceland</td>
<td>0.04</td>
<td>United Kingdom of Great Britain and Northern Ireland</td>
<td>6.92</td>
</tr>
<tr>
<td>India</td>
<td>1.85</td>
<td>United States of America</td>
<td>31.12</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.41</td>
<td>Upper Volta</td>
<td>0.04</td>
</tr>
<tr>
<td>Iran</td>
<td>0.18</td>
<td>Uruguay</td>
<td>0.10</td>
</tr>
<tr>
<td>Iraq</td>
<td>0.08</td>
<td>Venezuela</td>
<td>0.47</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.13</td>
<td>Viet-Nam, Republic of</td>
<td>0.15</td>
</tr>
<tr>
<td>Israel</td>
<td>0.14</td>
<td>Yemen</td>
<td>0.04</td>
</tr>
<tr>
<td>Italy</td>
<td>2.05</td>
<td>Yugoslavia</td>
<td>0.35</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>2.07</td>
<td>Total</td>
<td>100.00</td>
</tr>
</tbody>
</table>

* The assessments for the Syrian Arab Republic and the United Arab Republic are reflected in total under the United Arab Republic and the allocation between these two Members remains to be determined.
Considering that the WHO scale of assessment for 1963 is based on the latest available scale adopted by the United Nations, in accordance with the provisions of resolution WHA8.5, paragraph 2 (5), adopted by the Eighth World Health Assembly;

Noting that the General Assembly of the United Nations in its resolution 1691 (XVI), after fixing the United Nations scale of assessment for 1962, 1963 and 1964 in paragraph 1 of the resolution, provides in paragraph 5 that “in the event that the [General] Assembly should at its seventeenth session revise the scale set out in paragraph 1 above, the contributions for 1962 shall be adjusted accordingly”;

DECIDES that, if the General Assembly of the United Nations retroactively adjusts the United Nations scale of assessment for 1962, the WHO scale of assessment for 1963 should be similarly adjusted, provided, however, that such adjustments shall be taken into account in calculating the contributions to be paid by Members in respect of the budget of the Organization for the year 1964.


WHA15.14 Accommodation for the Regional Office for Africa

The Fifteenth World Health Assembly,

Having considered the report of the Director-General on accommodation for the Regional Office for Africa; ¹

Having noted with satisfaction the generous cession to WHO by the French Government of ownership of the Djoué Estate;

Having noted with gratification that some Members in the African Region, and especially the host country, have generously contributed to help finance the cost of extending the accommodation of the Regional Office;

Recognizing the importance of adequate accommodation being provided without delay to facilitate the effective functioning of the services and assistance to Members in the Region,

1. EXPRESSES its sincere thanks to the French Government for its generous action;
2. AUTHORIZES the Director-General to proceed with the construction of an extension to the existing building for the Regional Office for Africa;
3. INVITES all the Members in the African Region which have not yet done so to make contributions for the extension of the regional office accommodation;
4. AUTHORIZES the Director-General, notwithstanding the provisions of part II, paragraph 1 (2) of resolution WHA13.41, to advance from the Working Capital Fund an amount not exceeding $300 000 to be credited to the African Regional Office Building Fund, to help finance the said construction, reimbursement to the Working Capital Fund of the sum so advanced to be provided for, if necessary, in the programme and budget estimates for 1964.


WHA15.15 Housing of Staff of the Regional Office for Africa

The Fifteenth World Health Assembly,

Having considered the report of the Director-General on the housing of staff of the Regional Office for Africa; ²

Noting that the shortage of adequate housing has impeded the recruitment of additional staff for this office and that the staff is needed to provide the increased services required by the Members of the Region;

¹ See Annex 10.
² See Annex 11.
I

Realizing the necessity of taking some immediate step to alleviate this situation; and

Noting that the Director-General believes that additional study of the problem is necessary before attempting to meet the long-term needs,

AUTHORIZES the Director-General to acquire the tract of land with the four existing buildings and to construct additional housing units, as outlined in his report, in order to meet the immediate and urgent needs within a total cost of $482,000;

II

Noting also that the Director-General is studying the problem of the real estate management activities of the Organization in the African Region with a view to determining the most efficient methods of these operations; and

Noting further that he is considering the establishment of a revolving fund for such operations and will report fully on this matter to the Executive Board at its thirty-first session,

AUTHORIZES the Executive Board, should it see fit, to approve on behalf of the Assembly the establishment of such a fund.

Handb. Res., 6th ed., 5.2.1 Eighth plenary meeting, 16 May 1962 (section 3 of the fourth report of the Committee on Administration, Finance and Legal Matters)

WHA15.16 Admission of New Members: Western Samoa

The Fifteenth World Health Assembly

ADmits Western Samoa as a Member of the World Health Organization, subject to the deposit of a formal instrument with the Secretary-General of the United Nations in accordance with Article 79 of the Constitution.

Handb. Res., 6th ed., 6.2.1.1 Eighth plenary meeting, 16 May 1962 (section 4 of the fourth report of the Committee on Administration, Finance and Legal Matters)

WHA15.17 Annual Report of the Director-General for 1961: Programme Aspects

The Fifteenth World Health Assembly,

Having reviewed the Report of the Director-General on the work of WHO during 1961,¹

1. NOTES with satisfaction the manner in which the programme was planned and carried out in 1961, in accordance with the established policies of the Organization; and

2. COMMENDS the Director-General for the work accomplished.


WHA15.18 Report on Assistance to the Republic of the Congo (Leopoldville)

The Fifteenth World Health Assembly,

Having considered the report of the Director-General on assistance to the Republic of the Congo (Leopoldville),²

1. NOTES the report with appreciation;

2. COMMENDS the Director-General for, in particular, the way in which the World Health Organization programme of education and training of Congolese health personnel is being developed;

² See Annex 12.
3. **EXPRESSES** the hope that countries intending to give assistance to the Congo in the field of health will take advantage of the co-ordinating role of the Organization, and

4. **EXPRESSES** the hope that the United Nations resources will continue to be made available for the assignment of health personnel in the Congo to teaching and operational posts, until such time as the Government of the Republic is in a position to assume responsibility for the recruitment of its own personnel.

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**WHA15.19 Report on Development of the Malaria Eradication Programme**

The Fifteenth World Health Assembly,

Having considered the report of the Director-General on the development of the malaria eradication programme; ¹

Noting the satisfactory progress being made, with large areas in the advanced programmes entering the consolidation phase or approaching the achievement of eradication;

Noting further that newly developing countries are embarking on pre-eradication programmes;

Recognizing that, while it is normally necessary for a malaria eradication programme to be implemented by a specialized service, the active participation of the health service assumes considerable importance as the programme progresses towards its goal, becoming fundamental in the maintenance phase when vigilance against the re-establishment of the infection becomes the responsibility of health services,

1. **URGES** governments with malaria eradication programmes in operation to ensure active participation of the health service, particularly in the epidemiological activities;

2. **URGES** countries which have areas in the consolidation phase, and are therefore approaching the maintenance phase, to ensure that the health services are being adequately prepared to assume vigilance responsibilities during this phase; and

3. **RECOMMENDS** that countries which are embarking upon pre-eradication programmes plan the development of their health services with a view to building up a basic infrastructure in the malarious areas to make possible the implementation of a malaria eradication programme.

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**WHA15.20 Development of the Malaria Eradication Programme: Acceleration of the Programme from Continued Voluntary Contributions**

The Fifteenth World Health Assembly,

Bearing in mind that the advances in knowledge, methodology and techniques of malaria eradication operations now enable WHO to assist in the solution of technical and operational problems of the eradication of this disease in all parts of the world,

Recognizing that the rapid undertaking of new malaria eradication programmes, the speeding-up of the projects already under way and the accelerated promotion of pre-eradication programmes in Africa are of primary importance for shortening the time needed for total malaria eradication;

Having reviewed the report of the Director-General ² on the possible acceleration of the malaria eradication programme,

1. **NOTES** the report; ³ and

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¹ See Annex 19.

² See Annex 13.
2. **REQUESTS** the Director-General to implement the activities outlined in the report in so far as they conform to the accepted principles of assistance by the Organization and to the extent to which financial resources become available in the Malaria Eradication Special Account and suitable staff is forthcoming.

Handb. Res., 6th ed., 1.4.2; 7.1.8  
*Tenth plenary meeting, 21 May 1962 (section 3 of the third report of the Committee on Programme and Budget)*

### WHA15.21 Health Problems of Seafarers

The Fifteenth World Health Assembly,

Bearing in mind resolution WHA13.51 of the Thirteenth World Health Assembly concerning the health problems of seafarers;

Having considered the third report of the Joint ILO/WHO Committee on the Hygiene of Seafarers, the comments and recommendations made by the Executive Board at its twenty-ninth session, and the report on the subject by the Director-General,

1. **NOTES** the report of the Joint ILO/WHO Committee;  
2. **ENDORSES** the recommendations of the Executive Board, emphasizing particularly that adequate health services be made available to seafarers;  
3. **DRAWS THE ATTENTION** of governments to the beneficial effect of health centres for seafarers already established in some larger ports;  
4. **REQUESTS** the Director-General:  
   (1) to continue the Organization's efforts to assist nations to improve the health of seafarers generally, with the valuable co-operation, as appropriate, of the International Labour Organisation, the Inter-Governmental Maritime Consultative Organization, and other interested organizations and bodies;  
   (2) to undertake, in conjunction with ILO, in 1965 a study of progress in the provision of health services to seamen throughout the world, and to report thereon to the Executive Board and the World Health Assembly in 1966.

*Tenth plenary meeting, 21 May 1962 (section 4 of the third report of the Committee on Programme and Budget)*

### WHA15.22 Continued Assistance to Newly Independent States

The Fifteenth World Health Assembly,

Having studied the report of the Director-General on continued assistance to newly independent States, including the programme for assisting such States in developing national health plans and in accelerating the education and training of their national staff, and the possible provision of operational assistance to such States;  
Taking into account the discussion of the Executive Board at its twenty-ninth session on this subject;  
Cognizant of the urgent need to develop the health services of newly independent States which are of such significance for the health of their people and for their socio-economic progress;

2. See minutes of the second, third and fourth meetings of the twenty-ninth session of the Executive Board (EB29/Min/2 Rev.1, section 3; EB29/Min/3 Rev. 1, section 2; EB29/Min/4 Rev.1, section 1); and resolution EB29.R10.  
5. See minutes of the fifth, seventh and twelfth meetings of the twenty-ninth session of the Executive Board (EB29/Min/5 Rev.1, section 3; EB29/Min/7 Rev.1, sections 5 and 7; EB29/Min/12 Rev.1, section 1).
Realizing further that such development cannot be effective unless it is integrated with the overall development programme of these States,

1. NOTES with satisfaction the assistance being provided by WHO in developing the health programmes of newly independent States and the emphasis placed in the proposed programme on national health planning and on education and training of national staff;

2. REQUESTS the Director-General to continue to report to the World Health Assembly and the Executive Board on assistance to newly independent States;

3. DECIDES that assistance to these countries should be accelerated along the lines recommended by the Director-General in his report and, for this purpose, approves the following programme provisions and financial arrangements:

   I. Programme Provisions

4. AUTHORIZES the Director-General to implement an accelerated programme for assisting newly independent and emerging States, particularly in Africa, concentrating on:
   (a) national health planning and related training;
   (b) expanding and accelerating medical education and training of national staff;
   (c) providing operational assistance in accordance with the principles set forth in paragraph 6 below;

5. REQUESTS the Director-General to study the question of WHO's serving as a co-ordinator in the provision of assistance to newly independent States with a view primarily to assisting them in the basic training and higher education of their national medical staff;

6. DECIDES that the principles under which WHO may provide operational assistance shall be as follows:
   (a) that the role of WHO be one of filling gaps in the maintenance of a minimum skeleton staff essential for tiding over a critical situation in the development of a basic health service and of raising the health services of countries where the services are below standard. Special emphasis should be put on the possibilities of combining this with the efforts to train medical and auxiliary personnel at all levels;
   (b) that the Organization be satisfied that the countries are making every effort to achieve self-sufficiency in the shortest possible time in meeting the costs of essential medical and paramedical staff from their own resources;
   (c) that such operational staff shall be placed at the disposal of governments concerned and shall carry out their assigned duties under the administrative control of the government concerned;
   (d) the responsibility for defraying the costs of such staff shall be established by special agreements between WHO and each recipient government, it being understood that the financial participation of the government may, where necessary, be limited to an agreed contribution;
   (e) that WHO operational assistance be provided either (i) by recruiting staff in co-operation with the government concerned or (ii) by a system of grants-in-aid for the purpose of meeting the urgent needs of operational staff, each grant-in-aid to be governed by the terms of an agreement between WHO and the recipient government under which WHO would retain adequate control commensurable with its financial investment.

II. Financial Arrangements

Recognizing that the current legislation governing the United Nations Special Fund and the Expanded Programme of Technical Assistance does not make it possible for operational staff to be financed from those sources of funds;

Recognizing further that the resources at present available to the Expanded Programme and the Special Fund are limited;

Recognizing also that financing by the Organization of operational staff as described in paragraph 6 above, even on a limited scale, is not feasible without substantial aid from additional sources,
7. **APPEALS** to the General Assembly of the United Nations to arrange that the Expanded Programme, the Special Fund and OPEX be given sufficient resources, with such alteration in legislation as may be appropriate, so that they can be adequate to finance the health needs defined in part I above; and further, pending the time when resources are available in the Special Fund, OPEX and in the Expanded Programme;

8. **AUTHORIZES** the establishment of a Special Account for Accelerated Assistance to Newly Independent and Emerging States, to be part of the Voluntary Fund for Health Promotion and to be governed by the provisions of resolution WHA13.24;

9. **DECEDES** further that the programmes defined under part I of this resolution may be financed from any source of funds available to the Organization, provided that the costs in 1963, under the regular budget, for operational staff as described in paragraph 6 above shall not exceed $700,000; and

10. **REQUESTS** the Director-General and the Executive Board to continue to study methods and forms of providing effective assistance to newly independent States and, in particular, to review the financial aspects of the provision of such assistance, bearing in mind the criteria set forth in part I of this resolution;

11. **REQUESTS** the Director-General to bring this resolution together with his report to the attention of Members and Associate Members.

---

**WHA15.23 Effective Working Budget and Budget Level for 1963**

The Fifteenth World Health Assembly

**DECIDES** that:

1. the effective working budget for 1963 shall be US $29,956,000;

2. the budget level for 1963 shall be established in an amount equal to the effective working budget as provided in paragraph (1) above, plus the assessments represented by the Undistributed Reserve, and

3. the budget for 1963 shall be financed by assessments on Members after deducting:
   
   (i) the amount of US $721,000 available by reimbursement from the Special Account of the Expanded Programme of Technical Assistance, and
   
   (ii) the amount of US $500,000 available as casual income for 1963.

---

**WHA15.24 Application for Admission to Membership: Sultanate of Muscat and Oman**

The Fifteenth World Health Assembly,

Having considered the application made by the Sultanate of Muscat and Oman for admission to membership of the World Health Organization,

**DECIDES** to postpone consideration of this application.

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1 See Annex 18.
WHA15.25  Admission of New Associate Members: Jamaica

The Fifteenth World Health Assembly

ADMENTS Jamaica as an Associate Member of the World Health Organization, subject to notice being
given of acceptance of associate membership on behalf of Jamaica in accordance with Rules 111 and 112
of the Rules of Procedure of the World Health Assembly.

Handb. Res., 6th ed., 6.2.1.2  Tenth plenary meeting, 21 May 1962 (section 2 of
the fifth report of the Committee on Administration,
Finance and Legal Matters)

WHA15.26  Admission of New Associate Members: Uganda

The Fifteenth World Health Assembly

ADMENTS Uganda as an Associate Member of the World Health Organization, subject to notice being
given of acceptance of associate membership on behalf of Uganda in accordance with Rules 111 and 112
of the Rules of Procedure of the World Health Assembly.

Handb. Res., 6th ed., 6.2.1.2  Tenth plenary meeting, 21 May 1962 (section 3 of
the fifth report of the Committee on Administration,
Finance and Legal Matters)

WHA15.27  Communication from the Government of Argentina concerning the Holding of a World Health
Assembly in Argentina

The Fifteenth World Health Assembly,

Noting the communication of 10 May 1962 from the Government of Argentina postponing its invitation
to hold a World Health Assembly in Argentina;

Understanding the circumstances which have prompted this postponement,

1. EXPRESSES its sincere appreciation to the Government of Argentina for its desire to serve as host to
the World Health Assembly;

2. HOPES that this may be possible on a suitable occasion in the future.

Handb. Res., 6th ed., 4.1.1  Tenth plenary meeting, 21 May 1962 (section 4 of
the fifth report of the Committee on Administration,
Finance and Legal Matters)

WHA15.28  Selection of the Country in which the Sixteenth World Health Assembly will be held

The Fifteenth World Health Assembly,

Considering the provision of Article 14 of the Constitution with regard to the selection of the country
or region in which the next Health Assembly will be held,

DECIDES that the Sixteenth World Health Assembly shall be held in Switzerland.

Handb. Res., 6th ed., 4.1.1.2  Tenth plenary meeting, 21 May 1962 (section 5 of
the fifth report of the Committee on Administration,
Finance and Legal Matters)
WHA15.29 Headquarters Accommodation: Progress Report

The Fifteenth World Health Assembly

1. NOTES the report of the Director-General on developments since the Fourteenth World Health Assembly with regard to headquarters accommodation; and

2. CONGRATULATES the Director-General on the efforts made and the good results already obtained.

Handb. Res., 6th ed., 7.4.2.1

Eleventh plenary meeting, 23 May 1962 (section 1 of the sixth report of the Committee on Administration, Finance and Legal Matters)

WHA15.30 Advances from the Working Capital Fund for Provision of Emergency Supplies to Member States

The Fifteenth World Health Assembly,

Having considered the report by the Director-General on the provision of emergency supplies to Member States presented in accordance with the requirements of resolution WHA13.41,

NOTES the report.

Handb. Res., 6th ed., 1.12.1; 7.1.3.2

Eleventh plenary meeting, 23 May 1962 (section 2 of the sixth report of the Committee on Administration, Finance and Legal Matters)

WHA15.31 Amendments to the Staff Rules

The Fifteenth World Health Assembly

NOTES the amendments to the Staff Rules made by the Director-General and confirmed by the Executive Board.


Eleventh plenary meeting, 23 May 1962 (section 3 of the sixth report of the Committee on Administration, Finance and Legal Matters)


The Fifteenth World Health Assembly

NOTES the status of the operation of the Joint Staff Pension Fund as indicated by the annual report for the year 1960 and as reported by the Director-General.

Handb. Res., 6th ed., 7.3.7.2

Eleventh plenary meeting, 23 May 1962 (section 4 of the sixth report of the Committee on Administration, Finance and Legal Matters)

1 See Annex 15.

2 The Director-General stated in his report that advances totalling $17,984 had been made in 1961 to provide emergency supplies of vaccines as follows: Burma, $6,861; Hong Kong, $8,980; Sarawak, $2,143. All three Governments had indicated that payment was being arranged.

WHA15.33 Appointment of Representatives to the WHO Staff Pension Committee

The Fifteenth World Health Assembly

RESOLVES that the member of the Executive Board designated by the Government of Canada be appointed as member of the WHO Staff Pension Committee, and that the member of the Board designated by the Government of the Union of Soviet Socialist Republics be appointed as alternate member, the appointments being for a period of three years.


Eleventh plenary meeting, 23 May 1962 (section 5 of the sixth report of the Committee on Administration, Finance and Legal Matters)

WHA15.34 Malaria Eradication Special Account

The Fifteenth World Health Assembly,

Having considered the report of the Director-General on the Malaria Eradication Special Account;¹ Bearing in mind the report of the Director-General on acceleration of the malaria eradication programme² and the decision thereon in resolution WHA15.20;

Having noted that the contributions received, pledged and expected are sufficient:
(a) to cover the amount required from the Special Account for the financing of the malaria eradication programme under the transitional arrangements laid down in resolution WHA14.15, and
(b) to begin in 1962 to accelerate the programme by providing additional assistance as envisaged in the report of the Director-General;³

Bearing in mind the provisions of resolution WHA8.30,

1. NOTES the report;¹
2. THANKS the governments and other donors that have contributed to the Malaria Eradication Special Account in cash and in kind;
3. REITERATES its conviction that continued voluntary contributions in cash and in kind are essential for accelerating the malaria eradication programme;
4. EXPRESSES its confidence that Members that are in a position to do so will contribute to the Malaria Eradication Special Account in order to make possible a more rapid implementation of the global malaria eradication programme; and
5. REQUESTS the Director-General to continue his efforts as in the past for increasing voluntary contributions to the Malaria Eradication Special Account and to report on this matter regularly to the Health Assembly.


Eleventh plenary meeting, 23 May 1962 (section 6 of the sixth report of the Committee on Administration, Finance and Legal Matters)

WHA15.35 Criteria for determining Eligibility for Credits towards the Payment of Contributions for Financing Malaria Programmes

The Fifteenth World Health Assembly,

Having considered the report of the Executive Board⁴ on the question concerning the establishment of criteria for determining which Members carrying out malaria programmes, whose per capita income is low but whose assessments exceed 0.50 per cent., shall be eligible for credits towards the payment of contributions for financing the malaria field operations under the regular budget during the period of transition from 1962 through 1964,

¹ See Annex 16.
² See Annex 13.
FIFTEENTH WORLD HEALTH ASSEMBLY, PART I

Decides that the Members to be given credits under the provisions of resolution WHA14.15, paragraph 2 (1) (b), shall be those which have requested credits and which are receiving assistance under the United Nations Expanded Programme of Technical Assistance.


Eleventh plenary meeting, 23 May 1962 (section 7 of the sixth report of the Committee on Administration, Finance and Legal Matters)

WHA15.36 Periodicity of Meetings of the Committee on International Quarantine

The Fifteenth World Health Assembly,

Having considered the question of periodicity of meetings of the Committee on International Quarantine, and resolution EB29.R4 of the Executive Board at its twenty-ninth session,

1. AUTHORIZES the Director-General
   (a) to postpone as from 1963, at his discretion, the annual meeting of the Committee on International Quarantine to the following year, provided that the Committee is convened at least every other year;
   (b) to convene a meeting of the Committee at other times when he considers it necessary, this authority being additional to that provided for in Article 9 of the Regulations for the Committee on International Quarantine;

2. REQUESTS the Director-General to submit for review to the Committee on International Quarantine in 1966 the question of periodicity of its meetings, and to present the report and recommendations of the Committee to the Twentieth World Health Assembly.

Handb. Res., 6th ed., 1.5.7.6

Eleventh plenary meeting, 23 May 1962 (section 1 of the sixth report of the Committee on Programme and Budget)

WHA15.37 Committee on International Quarantine: Ninth Report

The Fifteenth World Health Assembly,

Having considered the ninth report of the Committee on International Quarantine,

1. THANKS the members of the Committee for their work;

2. REQUESTS the Director-General to refer to the Committee on International Quarantine at its next meeting:
   (a) the record of the discussions of the Fifteenth World Health Assembly on the ninth report of the Committee on International Quarantine;
   (b) section 74 of the report for reconsideration; and

3. ADOPTS, except for section 74, the ninth report of the Committee on International Quarantine, subject to resolution WHA15.36 on periodicity of meetings of the Committee.

Handb. Res., 6th ed., 1.5.7.6

Eleventh plenary meeting, 23 May 1962 (section 2 of the sixth report of the Committee on Programme and Budget)

1 See Annex 1, ninth report of the Committee on International Quarantine, section 18.
3 See Annex 1, part 1.
WHA15.38  **Committee on International Quarantine: Tenth Report**

The Fifteenth World Health Assembly,

Having considered the tenth report of the Committee on International Quarantine on the relationship, under the International Sanitary Regulations, between El Tor infection and classical cholera,

1. **THANKS** the members of the Committee for their work;

2. **ACCEPTS** the recommendation contained in the tenth report that the opinion of the Committee in its fifth report and endorsed by the Eleventh World Health Assembly (in resolution WHA11.44) concerning El Tor infection shall be amended to accord with the opinion expressed in the tenth report of the Committee; and

3. **ADOPTS** the tenth report of the Committee on International Quarantine.

Handb. Res., 6th ed., 1.5.7.6

Eleventh plenary meeting, 23 May 1962 (section 3 of the sixth report of the Committee on Programme and Budget)

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WHA15.39  **Priorities in Programme**

The Fifteenth World Health Assembly,

Having considered resolution EB29.R6 of the Executive Board and the report of the Director-General on priorities in programme,

1. **DECIDES** to reaffirm the priorities in programme as outlined in the Third General Programme of Work Covering a Specific Period; and

2. **REQUESTS** the Director-General to continue to develop his annual programme proposals in accordance with the principles and criteria for the selection of programme activities as they appear in the general programme of work covering a specific period as submitted by the Executive Board and approved by the World Health Assembly from time to time, in accordance with Article 28 (g) of the Constitution.


Eleventh plenary meeting, 23 May 1962 (section 4 of the sixth report of the Committee on Programme and Budget)

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WHA15.40  **Organizational Study on Co-ordination with the United Nations and the Specialized Agencies**

The Fifteenth World Health Assembly,

Having considered the organizational study prepared by the Executive Board on co-ordination with the United Nations and the specialized agencies,

I

1. **CONCURS** in the satisfaction with the present mechanism for co-ordination expressed by the Executive Board as the result of its study;

2. **REQUESTS** the Director-General to continue to achieve co-ordination and co-operation with the other international agencies, bearing in mind the constitutional and technical requirements of the Organization and the need for economy and efficiency in co-ordination among the international agencies;

---

1 See Annex 1, part 2.


3. REQUESTS the Director-General, should the results of the studies now under way in other bodies call for any significant alteration to the Organization's practice, to report this to the Executive Board;

4. DECIDES that a review of this subject as a whole be undertaken by the Executive Board after a lapse of five years, or before that at the request of the Director-General;

5. RECOMMENDS to the Executive Board that, during its yearly review of the decisions of the United Nations, the specialized agencies and the International Atomic Energy Agency affecting WHO's activities, it give particular attention to specific aspects of the question; and

II

6. EMPHASIZES the desirability of measures to ensure co-ordination at the national level.

Handb. Res., 6th ed., 7.5.7; 8.1.1.4

Eleventh plenary meeting, 23 May 1962 (section 5 of the sixth report of the Committee on Programme and Budget)

WHA15.41 Clinical and Pharmacological Evaluation of Drugs

The Fifteenth World Health Assembly,

Considering that

(1) new pharmaceutical preparations appear in a steadily increasing number on the market;
(2) in many of these preparations a great therapeutic activity may be combined with serious side-effects demanding particular care in administration;
(3) recent experience has shown certain defects in existing safety control measures;
(4) these defects are especially related to insufficient clinical trials;
(5) clinical evaluation represents the final assessment of pharmaceutical preparations and is the principal means of detecting harmful side-effects following long-term use;
(6) clinical trials are highly time-consuming, need very large numbers of patients to be observed according to generally accepted principles, and would often be facilitated by international co-operation;
(7) it should be the responsibility of national health authorities to ensure that the pharmaceutical preparations available to the medical profession are therapeutically efficient and that their potential dangers are fully recognized,

1. REQUESTS the Director-General to pursue, with the assistance of the Advisory Committee on Medical Research, the study of the scientific aspects of the clinical and pharmacological evaluation of pharmaceutical preparations;

2. REQUESTS the Executive Board and the Director-General to study the feasibility or otherwise, on the part of WHO, of

(a) establishing minimum basic requirements and recommending standard methods for the clinical and pharmacological evaluation of pharmaceutical preparations;
(b) securing regular exchange of information on the safety and efficacy of pharmaceutical preparations; and, in particular,
(c) securing prompt transmission to national health authorities of new information on serious side-effects of pharmaceutical preparations,

and to report to the Sixteenth World Health Assembly on the progress of this study.


Twelfth plenary meeting, 24 May 1962 (section 1 of the seventh report of the Committee on Programme and Budget)
WHA15.42 Appropriation Resolution for the Financial Year 1963

The Fifteenth World Health Assembly

RESOLVES to appropriate for the financial year 1963 an amount of US $32,105,570 as follows:

<table>
<thead>
<tr>
<th>PART I: ORGANIZATIONAL MEETINGS</th>
<th>Purpose of Appropriation</th>
<th>Amount US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. World Health Assembly</td>
<td></td>
<td>329,310</td>
</tr>
<tr>
<td>2. Executive Board and its Committees</td>
<td></td>
<td>191,290</td>
</tr>
<tr>
<td>3. Regional Committees</td>
<td></td>
<td>80,600</td>
</tr>
<tr>
<td><strong>Total — Part I</strong></td>
<td></td>
<td><strong>601,200</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART II: OPERATING PROGRAMME</th>
<th>Purpose of Appropriation</th>
<th>Amount US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Programme Activities</td>
<td></td>
<td>14,683,328</td>
</tr>
<tr>
<td>5. Regional Offices</td>
<td></td>
<td>2,463,225</td>
</tr>
<tr>
<td>6. Expert Committees</td>
<td></td>
<td>220,400</td>
</tr>
<tr>
<td>7. Other Statutory Staff Costs</td>
<td></td>
<td>4,768,630</td>
</tr>
<tr>
<td><strong>Total — Part II</strong></td>
<td></td>
<td><strong>22,135,583</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART III: ADMINISTRATIVE SERVICES</th>
<th>Purpose of Appropriation</th>
<th>Amount US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Administrative Services</td>
<td></td>
<td>1,722,427</td>
</tr>
<tr>
<td>9. Other Statutory Staff Costs</td>
<td></td>
<td>527,790</td>
</tr>
<tr>
<td><strong>Total — Part III</strong></td>
<td></td>
<td><strong>2,250,217</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART IV: OTHER PURPOSES</th>
<th>Purpose of Appropriation</th>
<th>Amount US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Headquarters Building: Repayment of Loans</td>
<td></td>
<td>387,000</td>
</tr>
<tr>
<td>11. Contribution to the Malaria Eradication Special Account</td>
<td></td>
<td>4,000,000</td>
</tr>
<tr>
<td>12. African Regional Office Building Fund</td>
<td></td>
<td>100,000</td>
</tr>
<tr>
<td>13. African Regional Office: Staff Housing</td>
<td></td>
<td>482,000</td>
</tr>
<tr>
<td><strong>Total — Part IV</strong></td>
<td></td>
<td><strong>4,969,000</strong></td>
</tr>
</tbody>
</table>

**SUB-TOTAL — PARTS I, II, III AND IV** | | **29,956,000** |

<table>
<thead>
<tr>
<th>PART V: RESERVE</th>
<th>Purpose of Appropriation</th>
<th>Amount US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Undistributed Reserve</td>
<td></td>
<td>2,149,570</td>
</tr>
<tr>
<td><strong>Total — Part V</strong></td>
<td></td>
<td><strong>2,149,570</strong></td>
</tr>
</tbody>
</table>

**TOTAL — ALL PARTS** | | **32,105,570** |

II. Amounts not exceeding the appropriations voted under paragraph I shall be available for the payment of obligations incurred during the period 1 January to 31 December 1963 in accordance with the provisions of the Financial Regulations.

Notwithstanding the provisions of this paragraph, the Director-General shall limit the obligations to be incurred during the financial year 1963 to the effective working budget established by the World Health Assembly, i.e. Parts I, II, III and IV.

1 See Annex 18. For analysis of these appropriations under chapters, see Annex 17.
III. The appropriations voted under paragraph I shall be financed by contributions from Members, after deduction of:

(i) the amount of $ 721,000 available by reimbursement from the Special Account of the Expanded Programme of Technical Assistance

(ii) the amount of $ 195,040 representing assessments on new Members from previous years

(iii) the amount of $ 304,960 representing miscellaneous income available for the purpose

$1,221,000

thus resulting in assessments against Members of $30,884,570.

IV. The Director-General is authorized to transfer an amount not exceeding US $282,470 from the cash balance available in the Malaria Eradication Special Account to cover the credits towards the payment of contributions of Members, in accordance with Schedule A attached.

SCHEDULE A

TO THE APPROPRIATION RESOLUTION FOR THE FINANCIAL YEAR 1963

Members eligible for credits of 50 per cent.¹ towards the payment of their contributions in respect of that portion of their assessments corresponding to the total amount voted for Appropriation Section I of the Appropriation Resolution:

Afghanistan
Albania
*Argentina
Bolivia
*Brazil
Bulgaria
Burma
Cambodia
Cameroon
Central African Republic
Ceylon
Chad
*China
Colombia
Congo (Brazzaville)
Congo (Leopoldville)
Costa Rica
Cuba
Dahomey
Dominican Republic
Ecuador

El Salvador
Ethiopia
Federation of Rhodesia and Nyasaland
Gabon
Ghana
Greece
Guatemala
Guinea
Haiti
Honduras
*India
Indonesia
Iran
Iraq
Israel
Ivory Coast
Jordan
Korea, Republic of
Laos
Lebanon
Liberia
Libya
Madagascar
Malaya, Federation of
Mali
Mauritania
*Mexico
Mongolia
Morocco
Nepal
Nicaragua
Niger
Nigeria
Pakistan
Panama
Paraguay
Peru
Philippines
Portugal
Romania
Ruanda-Urundi
Saudi Arabia
Senegal
Sierra Leone
Somalia
South Africa
Spain
Sudan
Syrian Arab Republic
Tanganyika
Thailand
Togo
Tunisia
Turkey
United Arab Republic
Upper Volta
Venezuela
Viet-Nam, Republic of
Yemen
Yugoslavia

¹ In accordance with resolution WHA14.15.
² See also resolution WHA15.46.
* Eligible under resolution WHA15.35.

Twelfth plenary meeting, 24 May 1962 (section 2 of the seventh report of the Committee on Programme and Budget)

WHA15.43 Second Report on the World Health Situation

The Fifteenth World Health Assembly

1. NOTES the second report on the world health situation prepared by the Director-General in pursuance of resolution WHA11.38;

2. THANKS the Member governments for their assistance in providing material for this report;

3. **REQUESTS** the Member governments of WHO to submit before 31 August 1962 any amendments they wish to include in this report before it is finalized;

4. **REQUESTS** the Director-General to prepare a revised questionnaire on public health and demographic aspects so that it may be used by Member States as a guide for the preparation of their future reports;

5. **INVITES** the Members of the World Health Organization to provide, as a further step towards fulfilment of their obligations under Article 61 of the Constitution, information for the preparation of a third report covering as far as possible the period 1961 to 1964;

6. **REQUESTS** the Director-General to prepare for the Nineteenth World Health Assembly the third report on the world health situation; and

7. **REQUESTS** the Director-General to prepare supplements to the four-yearly reports at two-year intervals, which should contain:
   
   (a) amendments to and expansions of previously published information;
   
   (b) a review of the health situation of new countries; and
   
   (c) a review of a special topic.

---

**WHA15.44 Communication from the International Fertility Association**

The Fifteenth World Health Assembly

**NOTES** resolution EB29.R21, adopted by the Executive Board at its twenty-ninth session, concerning the IVth World Congress on Fertility and Sterility.

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**WHA15.45 Assessment for 1962 and 1963 of Western Samoa**

The Fifteenth World Health Assembly,

**DECIDES** that Western Samoa shall be assessed for 1962 and 1963 at 0.04 per cent., provided that, because of the difficulties of this newly independent country, the contribution for 1962 shall be reduced by 50 per cent.

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**WHA15.46 Appropriation Resolutions for the Financial Years 1962 and 1963: Jamaica and Uganda**

The Fifteenth World Health Assembly

**DECIDES** that, since Jamaica and Uganda are carrying out malaria programmes, they are eligible for credits in 1962 and 1963 in the same way as those Members listed in Schedule A attached to the Appropriation Resolutions for the financial years 1962 and 1963 (resolutions WHA14.43 and WHA15.42).
WHA15.47 Malaria Eradication Postage Stamps

The Fifteenth World Health Assembly,

Having considered the Director-General's report on malaria eradication postage stamps;

Noting with satisfaction that the issue of malaria eradication postage stamps is appreciably contributing to increased publicity, in this way creating a better knowledge and consciousness in the public in relation to the malaria eradication programme, and will also provide some financial assistance for the malaria eradication programme—for the Malaria Eradication Special Account as well as for certain national programmes;

Considering the desirability that malaria eradication postage stamps and related philatelic items be issued in sufficient quantities to ensure the wide distribution which is essential for the publicity aspects of this project,

1. Notes with satisfaction the progress and the arrangements which have been made;
2. Expresses its appreciation to the large number of governments which are participating;
3. Thanks those governments which have made donations of stamps and other philatelic material;
4. Urges the governments which have not yet done so to issue postage stamps devoted to the malaria eradication programme as a further demonstration of their interest in the world-wide campaign against malaria and of their support of the efforts to participate in "The World United against Malaria" campaign;
5. Appeals to the governments concerned to take the necessary measures to publish and distribute all antimalaria postage stamps and related philatelic items in ample quantities, in the interest of the international character of this philatelic project;
6. Expresses the hope that governments will find it possible to donate adequate quantities of antimalaria postage stamps and all related philatelic items to the Organization for philatelic sale, thus also helping to increase the confidence of philatelists in the possibility of acquiring antimalaria stamps;
7. Reaffirms the arrangements announced that any postage stamps related to malaria issued after 31 December 1962 are not a part of the Organization's malaria eradication postage stamp plan;
8. Congratulates the Director-General for his continued and successful efforts to carry out the antimalaria postage stamp plan in compliance with the ethical standards of such plans.


Twelfth plenary meeting, 24 May 1962 (section 3 of the seventh report of the Committee on Administration, Finance and Legal Matters)

WHA15.48 Assignment of Mongolian People's Republic to a Region

The Fifteenth World Health Assembly,

Having considered the request from the Mongolian People's Republic for the inclusion of that country in the South-East Asia Region,

Decides that the Mongolian People's Republic shall form part of the Region of South-East Asia.

Handb. Res., 6th ed., 5.1.3.1

Twelfth plenary meeting, 24 May 1962 (section 4 of the seventh report of the Committee on Administration, Finance and Legal Matters)
WHA15.49  Decisions of the United Nations, Specialized Agencies and IAEA affecting WHO’s Activities: Administrative and Financial Matters

The Fifteenth World Health Assembly

Notes the report 1 on decisions on administrative and financial matters of the United Nations, specialized agencies and the International Atomic Energy Agency which have been taken since the Fourteenth World Health Assembly and which affect the activities of the World Health Organization.


Twelfth plenary meeting, 24 May 1962 (section 5 of the seventh report of the Committee on Administration, Finance and Legal Matters)

WHA15.50  Amendments to the Rules of Procedure of the World Health Assembly

The Fifteenth World Health Assembly,

Having considered the amendments to the Rules of Procedure of the Health Assembly as proposed by the Executive Board at its twenty-ninth session and the additional amendments thereto submitted subsequently,

Adopts the following amendments to the Rules of Procedure: 2

Rule 3. In the first paragraph, delete “related” in the sixth line, and in the seventh line insert “admitted into relationship with the Organization” between “organizations” and “invited”.

In the second paragraph, delete “or States which were represented in any way at the International Health Conference in New York in 1946”. As a consequence “and” should be inserted before “States” in the third line.

Rule 5 (a). Replace “the annual report” by “the Annual Report”.

Rule 5 (b). Delete, and replace by new paragraph as follows:

“(b) all items that the Health Assembly has, in a previous session, ordered to be included;”

Rule 5 (f). Delete “a formal agreement, subject to the relevant provisions thereof” and replace by “effective relations”.

Rule 8. In the second and eleventh lines, delete “other”.

Rule 10. In the second line, delete “other”.

Rule 12. In the fourth line, insert “Health” before “Assembly”.

Rule 13. In lines 2 and 3, delete “if any”.

Rule 14. In line 6, after “sent to”, delete “related non-governmental organizations” and insert “non-governmental organizations admitted into relationship with the Organization”.

Rule 16. In the first line, replace “act as” by “be ex officio”.

Rule 19. Delete “related non-governmental organizations” from the end of the first paragraph, and insert “non-governmental organizations admitted into relationship with the Organization”.

Rule 20. Delete, and replace by new rules as follows:

Rule 20

Plenary meetings of the Health Assembly shall be held in public unless the Health Assembly decides that exceptional circumstances require that the meeting be held in private. The Health Assembly shall determine the participation at private meetings beyond that of the delegations of Members, the representatives of Associate Members and the representative of the United Nations. Decisions of the Health Assembly taken at a private meeting shall be announced at an early public meeting of the Health Assembly.

Rule 20 (bis)

Subject to any decision of the Health Assembly, the Director-General shall make appropriate arrangements for the admission of the public and of representatives of the press and of other information agencies to the plenary meetings of the Health Assembly.

Rule 21 (a). Delete "related" from the second line, and insert "invited".

Rule 26. Revise as follows:

"In addition to exercising the powers which are conferred upon him elsewhere by these Rules, the President shall declare the opening and closing of each plenary meeting of the session, shall direct the discussions in plenary meetings, ensure observance of these Rules, accord the right to speak, put questions and announce decisions. He shall rule on points of order, and, subject to these Rules, shall control the proceedings at any meeting and shall maintain order thereat. The President may, in the course of the discussion of any item, propose to the Health Assembly the limitation of the time to be allowed to each speaker or the closure of the list of speakers."

Rule 32 (a). Delete, and replace by the following:

"(a) decide the time and place of all plenary meetings, of the meetings of the main committees and of all meetings of committees established at plenary meetings during the session. Whenever practicable, the General Committee shall make known a few days in advance the date and hour of meetings of the Health Assembly and of the committees;".

Rule 32 (b). In the second line, delete "of" and replace by "during".

Rule 32 (c). Replace "on the agenda" by "of the agenda".

Rule 32 (e). After "co-ordinate the work of", insert "the main committees and".

Rule 33. At the end of the last paragraph but one, replace "on the agenda" by "of the agenda".

Rule 45. In the last line, delete "the circulation" and replace by "their circulation".

Rule 48. Replace "on the agenda" by "of the agenda".

Rule 49. Replace "on the agenda" by "of the agenda".

Rule 51. In the fourth line, delete "and editing".

Rule 52. Immediately following this rule, insert a new rule as follows:

Rule 52 (bis)

No delegate may address the Health Assembly without having previously obtained the permission of the President. The President shall call upon speakers in the order in which they signify their desire to speak. The President may call a speaker to order if his remarks are not relevant to the subject under discussion.

Rule 60. Immediately following this rule, insert a new rule, as follows:

Rule 60 (bis)

Subject to Rule 60, any motion calling for a decision on the competence of the Health Assembly to adopt a proposal submitted to it shall be put to the vote before a vote is taken on the proposal in question.

Rule 62. In the seventh line, after "put to the vote", insert the following:

"Where, however, the adoption of one amendment necessarily implies the rejection of another amendment, the latter amendment shall not be put to the vote."

Rule 70. Immediately following this rule, insert a new rule as follows:

Rule 70 (bis)

After the President has announced the beginning of voting, no delegate shall interrupt the voting except on a point of order in connexion with the actual conduct of voting.

Rule 71. Delete the footnote, and add a new second paragraph as follows:

"A decision under this rule by the Health Assembly whether or not to vote by secret ballot may only be taken by a show of hands; if the Assembly has decided to vote on a particular question by secret ballot, no other mode of voting may be requested or decided upon."
Rules 84 to 87. Delete, and replace by the following:

Rule 84

Verbatim records of all plenary meetings and summary records of the meetings of the General Committee and of committees and sub-committees shall be made by the Secretariat. Unless otherwise expressly decided by the committee concerned, no record shall be made of the proceedings of the Committee on Nominations or of the Committee on Credentials other than the report presented by the Committee to the Health Assembly.

Rule 85

The summary records referred to in Rule 84 shall be sent as soon as possible to delegations, to representatives of Associate Members and to the representatives of the Board, who shall inform the Secretariat in writing not later than forty-eight hours thereafter of any corrections they wish to have made.

Rule 86

As soon as possible after the close of each session, copies of all verbatim and summary records, resolutions, recommendations and other formal decisions adopted by the Health Assembly shall be transmitted by the Director-General to Members and Associate Members, to the United Nations and to all specialized agencies with which the Organization has entered into effective relations. The records of private meetings shall be transmitted to the participants only.

Rule 87

Verbatim and summary records of public meetings and the reports of all committees and sub-committees shall be published in the Official Records of the Organization.


WHA15.51 Role of the Physician in the Preservation and Promotion of Peace

The Fifteenth World Health Assembly,

Considering the international responsibilities which rest upon the World Health Organization, and being aware of the close relationship which exists between health and the preservation of peace;

Bearing in mind the stipulations of the Preamble to the Constitution of the World Health Organization which states, inter alia: “The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest co-operation of individuals and States”;

Desiring to emphasize the close relationship which exists between health—defined as a state of complete physical, mental and social well-being—and the happiness, harmony and security of all peoples;

Considering that continuing progress in the improvement of world health will contribute importantly to peace, as well as that peace is a basic condition for the preservation and improvement of the health of people in the whole world,

1. DECLARES that physicians and all other medical workers have—in the exercise of their profession and through the relief and help they give to their patients—an important role to play in the preservation and promotion of peace, by contributing to the elimination or at least the attenuation of the causes of distress and dissatisfaction;

2. CALLS upon all Members to promote the cause of peace by intensifying their efforts to implement the principles and purposes embodied in the Constitution of the World Health Organization.

WHA15.52 Medical Research Programme for 1958-1961

The Fifteenth World Health Assembly,
Having considered the report of the Director-General on the Medical Research Programme for 1958-1961;
Having taken into account resolution EB29.R7 of the Executive Board at its twenty-ninth session;
Considering the importance of medical research in the programme of the Organization,
1. **expresses** its satisfaction with the way this programme is being developed;
2. **stresses** the importance of the training of research workers;
3. **requests** the Director-General:
   (a) to continue to promote research in the fields of major public health importance; and
   (b) to submit a report of the progress of the research programme to the Seventeenth World Health Assembly.


Thirteenth plenary meeting, 25 May 1962 (section 1 of the ninth report of the Committee on Programme and Budget)

WHA15.53 Smallpox Eradication Programme

The Fifteenth World Health Assembly,
Having considered the report of the Director-General on smallpox eradication;
Noting that the progress made since the Eleventh World Health Assembly in 1958 took the decision to initiate a world-wide eradication programme has been slow;
Recognizing that countries in the endemic areas are meeting difficulties in organizing country-wide campaigns owing to insufficient funds and health personnel, inadequacy of transport, vaccine and equipment;
Reiterating that the persistence of the disease causes a high morbidity and mortality in the endemic areas and exposes the rest of the world to risk from importation of infection,
1. **emphasizes** the urgency of achieving eradication;
2. **commends** the efforts already made in those countries which are implementing eradication campaigns;
3. **urges** the health administrations of those endemic countries which have not already done so to plan and implement country-wide eradication campaigns with stable potent vaccine, in concert with their neighbours;
4. **invites** countries able to do so to make voluntary contributions in cash or in kind of such essential requirements as freeze-dried vaccines, suitable transport and necessary laboratory and cold-storage equipment for distribution by the Organization to countries in the endemic areas with sound eradication programmes requesting such assistance; and
5. **requests** the Director-General:
   (a) to continue to offer advice and technical guidance to the countries concerned;
   (b) to provide for the necessary activities and material assistance in his programme and budget estimates for future years;
   (c) to prepare, with the aid of national governments, their requirements and firm estimates of costs for their smallpox eradication programmes; and
   (d) to report further to the Sixteenth World Health Assembly on the progress of the eradication programme.

Handb. Res., 6th ed., 1.5.4

Thirteenth plenary meeting, 25 May 1962 (section 2 of the ninth report of the Committee on Programme and Budget)
WHA15.54 Developments in Activities assisted jointly with UNICEF

The Fifteenth World Health Assembly,

Having considered the report of the Director-General on developments in activities assisted jointly with UNICEF;

Recognizing the invaluable contribution that UNICEF is making towards the success of the health programmes for mothers and children,

1. NOTES the report of the Director-General;

2. EXPRESSES to the UNICEF Executive Board its appreciation of its decision to maintain the $10 million per year ceiling for allocations for malaria programmes;

3. EXPRESSES the hope that, in view of the deleterious impact that smallpox has on the health of mothers and children, UNICEF will find it possible to give full support to the smallpox eradication programme being sponsored by the World Health Organization;

4. BELIEVES that nutritional problems should always be considered in the context of all other aspects of health which are so intimately related to them; and therefore

5. RECOMMENDS that activities dealing with the medical aspects of nutrition be as fully integrated as possible with other health activities, particularly health education, environmental sanitation and the control of communicable diseases, as well as with maternal and child and school health services; and

6. EXPRESSES its satisfaction with the close and efficient co-operation between the two organizations in assisting countries in combating communicable diseases, promoting higher standards of nutrition and environmental sanitation, the training of national staff, as well as in the more specific promotion of maternal and child health.


Thirteenth plenary meeting, 25 May 1962 (section 3 of the ninth report of the Committee on Programme and Budget)

WHA15.55 Decisions of the United Nations, Specialized Agencies and IAEA affecting WHO's Activities: Programme Matters

The Fifteenth World Health Assembly,

Having considered the report of the Director-General on the decisions of the United Nations, specialized agencies and the International Atomic Energy Agency affecting WHO's activities on programme matters,¹

NOTES the report.


Thirteenth plenary meeting, 25 May 1962 (section 1 of the tenth report of the Committee on Programme and Budget)

WHA15.56 World Food Programme

The Fifteenth World Health Assembly,

Having considered the report of the Director-General on the world food programme;

Recognizing the intimate inter-relationships between the health status and nutrition standards of individuals;

Cognizant of the co-operation between the World Health Organization and the Food and Agriculture Organization of the United Nations in the field of nutrition,

1. EXPRESSES its satisfaction with the increasing public consciousness about the problem of hunger in the world;

¹ See Annex 2.
2. SUPPORTS the initiative taken by the United Nations and the Food and Agriculture Organization in taking remedial action to solve this problem;

3. CONSIDERS that such a programme should also lead to an intensification of the assistance to promote the health and working capacity of the rural populations of developing countries, while raising their nutritional status, income and standards of living generally;

4. DRAWS ATTENTION to the role played by endemic diseases in aggravating malnutrition in and sapping the vitality of agricultural communities; and

5. RECOMMENDS that Member States request, if they deem it appropriate, the assistance of WHO in:
   (1) carrying out basic nutrition surveys to assess the nutritional status of the population;
   (2) establishing or strengthening of national nutrition services;
   (3) the development of food distribution and utilization services, supported by health education and environmental health measures; and
   (4) the education and training of staff in this field; and

6. REQUESTS the Director-General to give assistance to requesting Member States to the extent that funds are available for this purpose.

Handb. Res., 6th ed., 8.1.6.2; 1.7.3
Thirteenth plenary meeting, 25 May 1962 (section 2 of the tenth report of the Committee on Programme and Budget)

WHA15.57 United Nations Development Decade

The Fifteenth World Health Assembly,

Considering the resolution of the General Assembly of the United Nations, 1710 (XVI), which designated the current decade as the United Nations Development Decade in which Member States would intensify their efforts to accelerate progress towards economic growth and social advancement;

Cognizant of the profound effect health standards of families, communities and nations have on their social advancement and economic progress, particularly in the developing areas of the world;

Aware of the benefits accruing to health from the accelerated national programmes for general socio-economic development;

Having studied the report of the Director-General ¹ and, in particular, the health programme for the Development Decade ² he has forwarded to the Secretary-General of the United Nations at the request of the latter;

Taking into account the views expressed by the Executive Board at its twenty-ninth session,

1. EXPRESSES its appreciation to the General Assembly of the United Nations for its decision to establish the Development Decade with a view to, inter alia, accelerating "the elimination of illiteracy, hunger and disease, which seriously affect the productivity of the people of the less developed countries";

2. ENDORSES the Executive Board's recommendation ³ that, in so far as the health aspects of accelerated economic and social development are concerned, governments participate in these programmes, with the assistance of the World Health Organization if they so wish, by undertaking a ten-year public health programme with the objective of raising the standards of the health of the peoples, such as:

   (1) the preparation of national plans for the development of public health programmes for the Decade, co-ordinating these programmes with other related plans in the social and economic fields;
   (2) to concentrate on the education and training of professional and auxiliary staff for strengthening their health services, with specific measurable targets for expanding each category of staff, depending on pre-determined needs for each;

¹ See Annex 3.
² See p. 76.
³ In resolution EB29.R44.
(3) to establish as baselines certain indices of their current health situation wherefrom to gauge the
degree of realization of certain goals. predetermined as target figures for the Decade;

(4) to devote increased national resources to the control of disease and the improvement of health;

3. CALLS THE ATTENTION of Member States to the proposals made and the quantitative targets set by the
Director-General for a health programme for the Development Decade, as outlined in his report,1 amplifying
the above-listed health objectives;

4. CONSIDERS that, in developing countries, the creation of a network of minimum basic health services
must be regarded as an essential pre-investment operation, without which agricultural and industrial develop-
ment would be hazardous, slow and uneconomic;

5. REQUESTS the Director-General to circulate his report to Member States, together with this resolution;

6. RECOMMENDS that Member States study the proposals and targets outlined in the Director-General's
report and adopt them in their programmes for the Development Decade to the extent that they deem fit,
requesting, if necessary, the assistance of the World Health Organization for this purpose;

7. URGES donor countries, which are in a position to provide assistance to developing countries, to increase
the level of financial, technical and material assistance provided in the field of health, in order to expedite
economic and social progress;

8. REQUESTS the Director-General to transmit this resolution to the Secretary-General of the United Nations
with the request that he present it to the General Assembly, the Economic and Social Council, the Technical
Assistance Committee and the Governing Council of the Special Fund;

9. REQUESTS the Director-General to continue to co-operate with the United Nations and other agencies
in the implementation of the United Nations Development Decade.


Thirteenth plenary meeting, 25 May 1962 (section 3
of the tenth report of the Committee on Programme
and Budget)

WHA15.58 Organizational Study: Methods of Planning and Execution of Projects

The Fifteenth World Health Assembly,

Considering that the expansion in the activity of the Organization and the new tasks arising from the
increase in its membership and the need to intensify assistance to Member States make it necessary today,
more than ever, to try to find the methods of work which ensure the greatest effectiveness for the least
expenditure of resources;

Recognizing that a review of the planning methods used in the Organization might reveal opportunities
of making more effective use of its resources,

1. CONSIDERS that there is a continuing need for detailed study of methods and planning and of the
effectiveness of the measures taken by the Organization in the field; and

2. REQUESTS the Executive Board to make its next organizational study a review of this problem through
an investigation of the methods, scope and quality of execution of projects, and the effectiveness of
co-ordination of WHO activities with the governments of Member States, specialized agencies of the
United Nations and non-governmental organizations and associations.

Handb. Res., 6th ed., 7.5; 1.1

Thirteenth plenary meeting, 25 May 1962 (section 4
of the tenth report of the Committee on Programme
and Budget)

1 See p. 80.
WHA15.59 Future Organizational Studies by the Executive Board

The Fifteenth World Health Assembly,

Having considered the recommendation ¹ of the Executive Board on the subject of the next organizational study and the decision taken in resolution WHA15.58,

1. DECIDES that the next subjects of study shall be:
   (a) "Measures for providing effective assistance in medical education and training to meet priority needs of the newly-independent and emerging countries"; and
   (b) "Methods of planning and execution of projects";

2. REQUESTS the Executive Board to report on the progress of these studies to the Sixteenth World Health Assembly.


Thirteenth plenary meeting, 25 May 1962 (section 5 of the tenth report of the Committee on Programme and Budget)

WHA15.60 Reports of the Executive Board on its Twenty-eighth and Twenty-ninth Sessions

The Fifteenth World Health Assembly

1. NOTES the reports of the Executive Board on its twenty-eighth ² and twenty-ninth ³ sessions; and

2. COMMENDS the Board on the work it has performed.

Handb. Res., 6th ed., 4.2.5.2

Thirteenth plenary meeting, 25 May 1962

¹ Resolution EB29.R53.
² Off. Rec. Wld Hlth Org. 112.
PROCEDURAL DECISIONS

(i) Composition of the Committee on Credentials

The Fifteenth World Health Assembly appointed a Committee on Credentials consisting of delegates of the following twelve Members: Argentina, Austria, Belgium, Ethiopia, Honduras, Liberia, Mali, Mexico, Philippines, Romania, Saudi Arabia, Thailand.

First plenary meeting, 8 May 1962

(ii) Composition of the Committee on Nominations

The Fifteenth World Health Assembly appointed a Committee on Nominations consisting of delegates of the following twenty-four Members: Afghanistan, Brazil, Colombia, Congo (Brazzaville), Czechoslovakia, Ecuador, Finland, France, Haiti, India, Iran, Iraq, Italy, Japan, Libya, Madagascar, New Zealand, Nigeria, Sierra Leone, Sudan, Switzerland, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, United States of America.

First plenary meeting, 8 May 1962

(iii) Verification of Credentials

The Fifteenth World Health Assembly recognized the validity of the credentials of the following delegations:

Members

Afghanistan, Albania, Argentina, Australia, Austria, Belgium, Bolivia, Brazil, Bulgaria, Burma, Cambodia, Cameroon, Canada, Central African Republic, Ceylon, Chad, Chile, China, Colombia, Congo (Brazzaville),¹ Congo (Leopoldville), Cuba, Cyprus, Czechoslovakia, Dahomey, Denmark, Dominican Republic, Ecuador, El Salvador, Ethiopia, Federal Republic of Germany, Federation of Malaya, Finland, France, Gabon, Ghana, Greece, Guatemala, Guinea, Haiti, Honduras, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Ivory Coast, Japan, Jordan, Kuwait, Laos, Lebanon, Liberia, Libya, Luxembourg, Madagascar, Mali, Mauritania, Mexico, Monaco, Mongolia, Morocco, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Pakistan, Paraguay, Peru, Philippines, Poland, Portugal, Republic of Korea, Republic of Viet-Nam, Romania, Saudi Arabia, Senegal, Sierra Leone, Somalia, South Africa, Spain, Sudan, Sweden, Switzerland, Syria, Tanganyika, Thailand, Togo, Tunisia, Turkey, Union of Soviet Socialist Republics, United Arab Republic, United Kingdom of Great Britain and Northern Ireland, United States of America, Upper Volta, Venezuela, Western Samoa, Yemen, Yugoslavia.

Associate Member

Ruanda-Urundi.

First, fourth, seventh, ninth, twelfth and thirteenth plenary meetings, 8, 9, 16, 18, 24 and 25 May 1962

(iv) Election of Officers of the Fifteenth World Health Assembly

The Fifteenth World Health Assembly, after considering the recommendation of the Committee on Nominations, elected the following officers:

President: Dr S. V. Kurashov (Union of Soviet Socialist Republics);
Vice-Presidents: Dr M. K. Afridi (Pakistan), Dr D. Castillo (Venezuela), Dr P. Lambin (Upper Volta).

Second plenary meeting, 8 May 1962

¹ Credentials provisionally accepted.
(v) Election of Officers of the Main Committees

The Fifteenth World Health Assembly, after considering the recommendations of the Committee on Nominations, elected the following officers of the main committees:

**COMMITTEE ON PROGRAMME AND BUDGET**: Chairman, Dr W. D. Refshauge (Australia);

**COMMITTEE ON ADMINISTRATION, FINANCE AND LEGAL MATTERS**: Chairman, Dr M. López Herrarte (Guatemala) (until 12 May); later, Dr B. D. B. Layton (Canada).

*Second and seventh plenary meetings, 8 and 16 May 1962*

The main committees subsequently elected the following officers:

**COMMITTEE ON PROGRAMME AND BUDGET**: Vice-Chairman, Professor F. Widy-Wirski (Poland); Rapporteur, Dr J. A. Montalván (Ecuador);

**COMMITTEE ON ADMINISTRATION, FINANCE AND LEGAL MATTERS**: Vice-Chairman, Mr T. J. Brady (Ireland); Rapporteur, Dr Le Cuu Truong (Republic of Viet-Nam).

(vi) Establishment of the General Committee

The Fifteenth World Health Assembly, after considering the recommendations of the Committee on Nominations, elected the delegates of the following fourteen countries as members of the General Committee: Brazil, Cameroon, Denmark, Federal Republic of Germany, France, India, Japan, Madagascar, Nigeria, Sudan, Tunisia, Turkey, United Kingdom of Great Britain and Northern Ireland, United States of America.

*Second plenary meeting, 8 May 1962*

(vii) Adoption of the Agenda and of Supplementary Items

The Fifteenth World Health Assembly adopted the provisional agenda prepared by the Executive Board at its twenty-ninth session, with the inclusion of four supplementary items.

*Third and tenth plenary meetings, 8 and 21 May 1962*
ANNEXES
Annex 1

1. NINTH REPORT OF THE COMMITTEE ON INTERNATIONAL QUARANTINE


The following attended:

Members

Dr M. K. Afridi, Vice-Chancellor, University of Peshawar, Pakistan

Dr J. C. Azurin, Director of Quarantine, Department of Health, Manila, Philippines

Dr J. A. Bell, Chief, Epidemiological Section, Laboratory of Infectious Diseases, National Institutes of Health, Bethesda, Md., United States of America

Mr R. W. Bonhoff, Facilitation Representative, Deutsche Lufthansa A.G., Frankfurt am Main, Federal Republic of Germany

Dr W. A. Karunaratne, Director of Health Services, Colombo, Ceylon

Dr L. H. Murray, Principal Medical Officer, Ministry of Health, London, United Kingdom of Great Britain and Northern Ireland

Dr H. M. Penido, Superintendent, Special Public Health Service, Rio de Janeiro, Brazil

Dr J. N. Robertson, Principal Medical Officer, Medical Public Relations Division, Ministry of Health, Accra, Ghana

Representative of the International Civil Aviation Organization

Mr N. Detière, ICAO European and African Office, Paris

Secretariat

Dr R. I. Hood, Chief Medical Officer, International Quarantine, Division of Communicable Diseases (Secretary)

Dr W. M. Bonne, Director, Division of Communicable Diseases.

The Committee met on the morning of 6 November 1961. Dr P. M. Kaul, Assistant Director-General, opened the meeting on behalf of the Director-General. Dr J. C. Azurin was unanimously elected Chairman and Dr J. N. Robertson Vice-Chairman. The Chairman was requested to act as Rapporteur.

The draft agenda was approved.

The Committee considered the ninth annual report by the Director-General on the functioning of the International Sanitary Regulations. This report is reproduced below, the various sections being followed, where appropriate, by the comments and recommendations of the Committee (in italics).
INTRODUCTION

1. This report is prepared in accordance with the provisions of Article 13, paragraph 2, of the International Sanitary Regulations. It is the ninth annual report on the functioning of the Regulations and their effects on international traffic.

2. Previous reports\(^1\) cover the period beginning with the time of entry-into-force of the Regulations (1 October 1952).

3. This report, covering the period from 1 July 1960 to 30 June 1961, follows the same general lines as its predecessors and considers the application of the Regulations from three aspects: as seen by the Organization in its administrative role of applying the Regulations; as reported by Member States in accordance with Article 62 of the Constitution of the Organization and Article 13, paragraph 1, of the Regulations; and as reported by other organizations directly concerned with the application of the Regulations. For ease of reference the three aspects are consolidated and presented in the numerical order of the articles of the Regulations.

4. By reason either of their importance or the procedure leading to their study, other questions have necessitated the preparation of special documents, independently of this report. They are nevertheless briefly mentioned in it.

5. The eighth report of the Committee on International Quarantine was adopted by the Fourteenth World Health Assembly on 22 February 1961 (resolution WHA14.41). The report and the proceedings of the Health Assembly relating to international quarantine matters were published in Official Records Nos. 110 and 111 respectively. An offprint of the eighth report of the Committee on International Quarantine is available.

GENERAL ASPECTS

Additional Regulations of 19 May 1960

6. The Additional Regulations of 19 May 1960 (health part of the Aircraft General Declaration) entered into force on 1 January 1961 for all countries bound by the International Sanitary Regulations, 1951, except for the Federal Republic of Germany.\(^2\)

The Committee was informed that from the evidence available to the Organization the use of the amended health part of the Aircraft General Declaration had presented no difficulties.

Position of States and Territories under the International Sanitary Regulations

7. Information showing the position of States and territories under the Regulations as of 1 January 1961 was published in the Weekly Epidemiological Record No. 3, 1961, and, as of 1 May 1961, as Annex I of the second annotated edition of the International Sanitary Regulations, issued in July 1961.

Countries not bound by the Regulations

8. Australia, Burma, Chile and Singapore, although not party to the Regulations, apply their provisions in nearly all respects.

9. See also sections 83 and 118.

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\(^1\) Off. Rec. Wild Hlth Org. 56, 3; 64, 1; 72, 3; 79, 493; 87, 397; 95, 471; 102, 35; 110, 31.


\(^3\) Article 105, para. 2, of the Regulations.
means must be used for collecting epidemiological intelligence on quarantinable diseases and disseminating it to all continents. A considerable body of recommended practices to be followed in implementing the provisions of the Regulations has grown up and the number of complaints under the Regulations has diminished.

The Committee notes the decision of the Director-General as given above. This significant step in the administration of the Regulations appears to be a logical development. It especially recognizes the valuable work done by the three quarantine units in Alexandria, Singapore and Washington in assisting States in efficient international quarantine practices under the Regulations.

International Protection against Malaria

11. Information on malaria eradication is given in a separate document.\(^1\) The Director-General continued to keep health administrations informed of areas where insecticide resistance in malaria vectors has been reported, to advise health administrations on suitable insecticide formulations which can be used, and to advise health administrations on aircraft disinsection, especially with a view to its being required only when necessary.

The Committee was informed of rapidly expanding malaria eradication programmes throughout the world. It especially notes that large areas have reached or will soon reach the consolidation or maintenance phase.

The Committee recalls the opinion expressed in its fifth report "that health administrations of countries which are approaching or have already reached the phases of consolidation or maintenance of a malaria eradication programme may need to take measures to prevent the importation of malaria; and that a health administration of any country where malaria is present or could develop may need to take measures against the introduction of foreign species of dangerous vectors, as well as of insecticide-resistant species".\(^2\)

In its fifth report the Committee noted and agreed with the recommendations of the WHO Study Group on International Protection against Malaria (1956) and noted the sixth report of the Expert Committee on Malaria.\(^3\) It stressed the necessity for continuous review of the recommendations in the light of future knowledge gained from their application.\(^3\)

The Committee recommends that the World Health Assembly request the Director-General to convene at an early date an appropriate meeting of malaria and international quarantine experts to review the situation as regards international protection against malaria. It further recommends that these experts examine, inter alia, the following:

(a) the application of the recommendations made by the 1956 WHO Study Group on International Protection against Malaria and the adequacy of those recommendations under present conditions;
(b) the adequacy of present provisions of the International Sanitary Regulations, including previous interpretations and recommendations of the Committee subsequently adopted by the World Health Assembly, in respect of international protection against malaria;
(c) the adequacy of present methods for collecting and disseminating information on:

(i) the existence of malaria cases;
(ii) areas where insecticide-resistant vectors are present; and
(iii) aircraft disinsection practices.

12. Revised and consolidated information on areas where insecticide resistance in malaria vectors has been reported was published in Weekly Epidemiological Record No. 28, 1960.

Aircraft Disinsection

13. Current recommendations on the disinsection of aircraft from the seventh and eleventh reports of the Expert Committee on Insecticides were included (as Annex VII) in the second annotated edition of the Regulations.\(^4\)

14. Information on trials of the operation referred to as "blocks-away disinsection" carried out on scheduled passenger flights is reported in a separate document.\(^5\)

The Committee notes with appreciation the cooperation of the International Air Transport Association and of individual airlines in the WHO trials on aircraft disinsection of passenger cabins at the "blocks-away" period, in regular commercial flights, as requested by the Committee in its eighth report.\(^6\) It recognizes that results of trials with hand-operated single-use aerosol dispensers in six types of aircraft show that the Standard Reference Aerosol at the recommended dosage of 10 grams per 1000 cubic feet was biologically effective against susceptible mosquitoes and acceptable to passengers, crew and airlines when used at the "blocks-away" period in the temperate zone.

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\(^1\) Unpublished.

\(^2\) Off. Rec. Wld Hlth Org. 87, 413, section 85.


\(^4\) For comments of the Committee, see section 14.


The Committee notes that research is being organized on formulations that are effective against resistant mosquitos and not irritant to passengers. The Committee requests the Director-General to study the question of aircraft disinsection further, with a view to defining a recommended standard procedure for disinsection of all parts of aircraft, i.e., passenger compartments, crew compartment, baggage compartment and wheel recesses.

The Committee urges further trials on “blocks-away” disinsection in tropical areas where conditions of high humidity or extreme dryness are present. It urges health administrations to arrange further practical trials of this aircraft disinsection procedure and to report results to the Organization. It stresses the value of bilateral agreements between health administrations on the use of this method and urges them to consider making such agreements so that, when the method has been found effective and acceptable, additional disinsection on arrival can be eliminated.

15. See also sections 52 and 53.

Expert Committee on Insecticides

16. The Expert Committee on Insecticides (Toxic Hazards of Pesticides to Man) met in Geneva from 23 to 30 October 1961. Its report gives information on further development of in-the-air vapour disinsection.¹

The Committee was informed that, in disinsection of aircraft, DDVP at a concentration of 0.2-0.3 micrograms per litre for 30 minutes was effective and had shown no toxicity for passengers, and that trials were being made to ensure that it caused no adverse effect on pilots and especially did not impair visual efficiency. The Committee requests the Director-General to keep it informed of further developments in this field.

Mosquito Vectors of Diseases

17. Circular letter No. 14 of 5 May 1961 ² requested States to furnish data periodically on the extent to which their international airports are kept free from Aedes aegypti and mosquito vectors of malaria and other diseases. Information received up to 1 September 1961 is given in a separate document.³

The Committee notes the trend of rapid increase in air traffic. It recalls its previous opinion ⁴ that the strongest defence against the carriage of mosquito vectors of disease by air traffic is the rigid protection of airports by antimosquito measures, and that health administrations should take all reasonably possible steps to this end. It further notes that only a few replies were received to circular letter No. 14. It therefore urges health administrations to continue their surveys on the presence of A. aegypti and other mosquito vectors of disease at international airports and to inform the Organization. It requests the Director-General to inform the Committee at its next session on this matter and to keep all health administrations informed of the situation.

Periodicity of Meetings of the Committee on International Quarantine

18. The Twelfth World Health Assembly (in resolution WHA12.19) endorsed the opinion of the Committee contained in its sixth report and requested the Director-General to submit for review to the Committee, in 1961, the question of periodicity of its meetings and to present the report and recommendations of the Committee to the Fifteenth World Health Assembly. The Director-General's study on this question is presented in a separate document.⁵

The Committee noted the resolution of the Twelfth World Health Assembly reading as follows:

The Twelfth World Health Assembly,

Having considered the question of periodicity of meetings of the Committee on International Quarantine,

1. Endorses the opinion of the Committee that for the present annual meetings should be continued but that in the future the time interval between meetings might be increased without jeopardizing the functioning of the International Sanitary Regulations, and that the Regulations for the Committee should therefore not at present be amended; and

2. Requests the Director-General to submit for review to the Committee on International Quarantine in 1961 the question of periodicity of its meetings, and to present the report and recommendations of the Committee to the Fifteenth World Health Assembly.

In reviewing this question, the Committee noted its present functions as stated in the Regulations for the Committee.⁶ Among important subjects considered in its recent sessions which urgently require further study by the Committee at an early date are: disinsection of aircraft, redelineation of the yellow-fever endemic zones, international protection against malaria, and the problems presented by the recent reports of paracholera due to the El Tor vibrio in several countries of Asia.

² See Appendix 1.
³ Unpublished.
⁴ Off. Rec. Wld Hlth Org. 87, 413, section 85, and 110, 33, section 8 (a).
The Committee took note of the fact that the World Health Assembly has made budgetary provision for a session of the Committee in 1962.

The Committee considers that in its annual session to date it has provided health administrations with recommendations and interpretations of the Regulations covering the majority of the questions likely to be raised by States. The Committee is of the opinion that it should be in a position, on a periodic and systematic basis, to review the provisions of the Regulations in connexion with their adequacy to meet changing conditions in the occurrence of the quarantinable diseases and scientific advances in their control.

The Committee recommends that for an experimental period the Committee should be convened every second year after the 1962 session and that the Director-General be given authority to convene, when necessary, a session of the Committee at other times. The Committee draws the attention of the Health Assembly to the fact that, if these recommendations are accepted, the Regulations for the Committee will need to be amended.\(^1\)

Annual reports, under Article 62 of the Constitution and Article 13 of the International Sanitary Regulations, should continue to be sent to the Organization by Member States. The Committee recommends that the Director-General continue to prepare annually a summary, on the lines of his present reports, and make it available to the Executive Board and to the Health Assembly.

THE INTERNATIONAL SANITARY REGULATIONS

PART I. DEFINITIONS

Article 1

19. Imported Case. When the first imported cases of smallpox were notified in the Federal Republic of Germany and in the Union of Soviet Socialist Republics, the relevant notifications were included in the Geneva daily epidemiological radiotelegraphic bulletin, section 3, prefaced by the phrase “non-infected local area”. The notifications were published in the Weekly Epidemiological Record and, in the “Epidemiological Notes” of the same issue, a note was added, reading: “It is recalled that under the provisions of the International Sanitary Regulations . . . , on the basis of this imported case, may not be considered as a smallpox-infected local area.” The Organization has no evidence that any health administration took smallpox sanitary measures against these local areas solely on the basis of the first imported case.

The Committee recognizes the value to health administrations of notifications of the first imported case of a quarantinable disease and the subsequent dissemination of this information, as indicated above, by the Organization. The Committee urges all health administrations to notify the Organization by telegram within twenty-four hours of the first imported case of quarantinable disease introduced into their territory from another territory. The Committee requests the Director-General to continue to inform other health administrations by the means appropriate to the circumstances.

20. Local Area. The revision of the geographical index of the WHO Epidemiological Cable Code, CODEPID, published in July 1961, included designated local areas. The Epidemiological Cable Code, CODEPID, has been in use since 1953. An analysis of the telegrams transmitted by code has shown that for some areas of the world more details are needed, while for other areas the entries concerning administrative subdivisions, towns, ports and airports could be omitted, as they are rarely used. Therefore the 1961 edition of the geographical index gives no details for European countries, the Union of Soviet Socialist Republics, Canada, the United States of America, Australia and New Zealand. For practical reasons details concerning China (mainland) have also been omitted. The new geographical index entered into force on 1 October 1961. The Director-General continues his efforts to obtain information on local areas designated by health administrations.

21. Quarantinable Diseases — Typhus. In the Regulations typhus means louse-borne typhus. It is well known that patients with recrudescent typhus (Brill’s disease) can infect lice and probably serve as foci for new outbreaks in louse-infected communities.

The Committee has no information that this subject has raised quarantine problems.

PART II. NOTIFICATIONS AND EPIDEMIOLOGICAL INFORMATION

22. No notifications required by the Regulations (Articles 3 to 6 and Article 9) have been received from:

- the Democratic People’s Republic of Korea (since 1956);
- the Democratic Republic of Viet-Nam (since 1955);
- China (mainland) (since March 1951);
- Romania (since 1949) (an annual report is received from Romania);
- Yemen (since March 1958).

\(^1\) For decision of the Health Assembly, see resolution WHA15.36.
**Articles 3 to 6**

23. Two countries reported the occurrence of cholera or smallpox cases which had originated elsewhere in their own territories, without naming the local area of origin; the latter information was subsequently supplied, but sometimes with a delay of three weeks. The Committee may wish to consider whether, in cases where the local area of origin is not named, the list of infected areas in the *Weekly Epidemiological Record* should be changed to show the entire country as infected with the disease, or whether under those circumstances it should be left to other countries to consider the entire country as infected with the disease.

*In the situation defined above the Committee requests the Director-General to indicate in the Weekly Epidemiological Record that the local area has not been specified. It is of the opinion that the country concerned would have no reason for complaint if other countries should regard the whole territory as infected.*

24. Some confusion and difficulties in the functioning of the Regulations were occasioned by an outbreak of cholera in West Pakistan which began in May 1960 and was not officially notified to the Organization until 30 July 1960.

25. Except for the areas named in the list of infected areas in the *Weekly Epidemiological Record*, no information on smallpox is received from Brazil (for the rest of the country).

26. *(a)* The Committee at its eighth session considered a proposal that the definition of a yellow-fever infected local area be amended to permit health administrations to consider the next largest political subdivision as the yellow-fever infected local area in cases where the extent of the infected local area is not designated in the report. After discussion, the Committee was in agreement that the list of infected areas published in the *Weekly Epidemiological Record* should be changed to indicate in an appropriate manner those areas which had been designated as local areas by health administrations, and requested the Director-General to study this proposal and report to the Committee at its next session.1

*(b)* In the list of yellow-fever infected areas published in each issue of the *Weekly Epidemiological Record*, the following areas in Africa have been listed since the dates indicated:

<table>
<thead>
<tr>
<th>Country</th>
<th>Date of Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>27 May 1959</td>
</tr>
<tr>
<td>Southern Cameroons</td>
<td>1 October 1956</td>
</tr>
<tr>
<td>Congo (Leopoldville)</td>
<td>(the area north of 10° S) .</td>
</tr>
<tr>
<td>Gambia</td>
<td>1 October 1956</td>
</tr>
<tr>
<td>Ghana</td>
<td>1 October 1956</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1 October 1956</td>
</tr>
<tr>
<td>Ruanda-Urundi</td>
<td>11 December 1956</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>1 October 1956</td>
</tr>
<tr>
<td>Sudan</td>
<td>(the area south of 12° N) 17 December 1956</td>
</tr>
</tbody>
</table>

*(c)* Apart from the areas listed above, yellow fever has been reported during the year in Bolivia, Brazil, Colombia, Ethiopia, Peru and Venezuela. In Colombia the *municipio* is the designated local area. The designated local areas in Bolivia, Brazil, Ethiopia, Peru and Venezuela are not yet known. In Ethiopia the yellow-fever infected area was Gamu Goffa Province, which has an area of 15,000 square miles. The Director-General is continuing his efforts to learn what are the designated local areas in the other countries where yellow fever occurs.

*(d)* The Director-General has made available to health administrations whose territories are receptive to yellow fever information given by other health administrations during 1960 on their efforts to search for yellow-fever virus in vertebrates other than man.

The Committee notes the efforts of the Director-General to learn of designated yellow-fever infected local areas in several South American States.

*It was informed that in one State yellow-fever virus is considered to be widely and permanently present in vertebrates other than man within jungle areas.*

*It requests the Director-General to inquire of States as to the extent of the areas where the virus is present in vertebrates other than man and reminds these States that they have an obligation to notify the Organization that these are yellow-fever infected areas. This is in reference to the definition in the Regulations that a local area where activity of the yellow-fever virus is found in vertebrates other than man is an infected local area.4*

*(e)* See also section 75.

27. Notifications under Articles 4 and 5 giving the “conditions affecting the spread of the disease, and the prophylactic measures taken” and “the measures which are being applied to prevent the spread of the disease to other territories” were received more frequently. This information was published in the “Epidemiological Notes” of the *Weekly Epidemiological Record.*

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1 Off. Rec. Wld Hth Org. 110, 36, section 17 (a).
2 Western Province of Cameroon as from 3 November 1961.
3 This country was notified as a yellow-fever receptive area and consequently removed from the list of infected areas as from 21 September 1961.
4 Para. (c) of the definition of “infected local area” (second annotated edition, 1961, of the International Sanitary Regulations, p. 9).
28. Notifications under Article 6 were disseminated in the Geneva daily epidemiological radiotelegraphic bulletin only if the area concerned was a port or airport, or if it was the last infected area for that particular disease in the country. Other notifications under Article 6 were of course published in the Weekly Epidemiological Record.

Article 8

29. Although there is no provision in the Regulations for a health administration to declare a local area outside its own territory an infected local area, many health administrations continued to make such declarations and notified the Organization. These declarations have been interpreted to mean that sanitary measures would be applied against arrivals from the local area named.

The Committee recalls that there is no provision in the Regulations for a health administration to declare a local area outside its own territory an infected local area and urges States not to persist in such declarations. The Committee is in agreement with the practice of the Organization and especially notes that these declarations are not published by the Organization.

Article 11

30. In fulfilling its obligations under Article 11, the Organization continued its epidemiological intelligence reporting system and its network of weekly reports from its four quarantine offices in Geneva, Alexandria, Singapore and Washington, its daily epidemiological radiotelegraphic bulletins from Geneva and its twice-weekly radio bulletins from Alexandria and Singapore. Twelve radio stations in Asia rebroadcast free of charge the WHO epidemiological radiotelegraphic bulletins, the majority on a weekly basis.

The Committee expresses its appreciation of the services provided by the twelve stations in Asia which rebroadcast free of charge the WHO daily epidemiological radiotelegraphic bulletins.

31. The list of infected areas given in each issue of the Weekly Epidemiological Record was changed, beginning with No. 15, 1961 (14 April 1961):

(a) in the list of infected areas the names of areas infected since the last number are preceded by an asterisk;

(b) a list of "areas no longer infected" (that is, removed from the list of infected areas of the week before), in accordance with the criteria established for maintaining this list, appears immediately after the list of infected areas.

32. The Geneva Weekly Epidemiological Record, in the section "Epidemiological Notes", published a summary, including maps, of the reported occurrence of plague, cholera, yellow fever and smallpox during 1960.

This section continued to present summaries of reports on influenza.

Information on the occurrence of paracholera (El Tor vibrio) in Indonesia was also published in the "Epidemiological Notes".

33. In discussions at the Fourteenth World Health Assembly on the eighth report of the Committee, it was suggested that it might be advisable for the Weekly Epidemiological Record to contain references to each case of imported quarantinable disease, details as to the vaccination certificate, persons responsible for the absence of a valid certificate if such were the case, and steps taken to prevent recurrence in the future. The Director-General makes a continuing effort to obtain detailed information on each case of imported quarantinable disease, including whether or not the person concerned was in possession of a valid vaccination certificate, and this information is published in the "Epidemiological Notes" section of the Weekly Epidemiological Record. The circumstances relating to the absence of a valid vaccination certificate for the imported case are taken up directly with the country or countries concerned, but this information is not published.

The Committee is in agreement with this practice.

34. Beginning in Weekly Epidemiological Record No. 4, 1961, the following note on geographic areas has appeared in the Record:

The form of presentation in the Weekly Epidemiological Record does not imply official endorsement or acceptance by the World Health Organization of the status or boundaries of the territories as listed or described. It has been adopted solely for the purpose of providing a convenient geographic basis for the information herein. The same qualification applies to all notes and explanations concerning the geographic units for which data are provided. Local areas under the International Sanitary Regulations are presented as designated by health administrations.

A similar note was added to the publication Vaccination Certificate Requirements for International Travel: Situation as on 20 December 1960, and was included in the publication Yellow Fever Vaccinating Centres for International Travel: Situation as on 28 July 1961, as well as in the second annotated edition of the International Sanitary Regulations.

1 Wkly epidem. Rec., 1961, 8, 84; 10, 105.
35. Separate publications during the period under review were:

- the second annotated edition of the International Sanitary Regulations,
- the revised geographical index of the CODEPID, Vaccination Certificate Requirements for International Travel,
- Yellow-Fever Vaccination Centres for International Travel.

Amendments to the last two publications appeared as usual in the Weekly Epidemiological Record.

Article 13

36. In accordance with Article 13, paragraph 1, of the Regulations and Article 62 of the Constitution, the following 128 States and territories have submitted information concerning the occurrence of cases of quarantinable diseases due to or carried by international traffic, and/or on the functioning of the Regulations and difficulties encountered in their application:

- Aden Colony
- Afghanistan
- Albania
- American Samoa
- Angola
- Argentina
- Australia
- Austria
- Bahamas
- Basutoland
- Bechuanaland
- Belgium
- Bermuda
- British Guiana
- British Honduras
- British Solomon Islands Protectorate
- Burma
- Cambodia
- Cameroon
- Canada
- Cape Verde Islands
- Cayman Islands
- Ceylon
- Central African Republic

- Chad
- Chile
- China
- Comoros Archipelago
- Congo (Brazzaville)
- Cook Islands
- Costa Rica
- Cuba
- Cyprus
- Dahomey
- Denmark
- El Salvador
- Falkland Islands
- Faroe Islands
- Federal Republic of Germany
- Federation of Rhodesia and Nyasaland
- Fiji
- Finland
- France (including Algeria, French Guiana, Guadeloupe, Martinique and Réunion)
- French Polynesia
- French Somaliland

- Gambia
- Ghana
- Gibraltar
- Gilbert and Ellice Islands
- Greece
- Greenland
- Guam
- Guatemala
- Guinea
- Haiti
- Honduras
- Hong Kong
- Hungary
- Iceland
- India
- Indonesia
- Iraq
- Ireland
- Israel
- Italy
- Ivory Coast
- Japan
- Jordan
- Kenya
- Kuwait
- Laos
- Lebanon
- Libya
- Luxembourg
- Macao
- Madagascar
- Mali
- Mauritania
- Mauritius
- Mexico
- Monaco
- Morocco
- Mozambique
- Netherlands, Kingdom of the (including Netherlands, Surinam, Netherlands Antilles, as well as Netherlands New Guinea)
- New Caledonia
- New Zealand
- Niger
- Nigeria
- Norway
- Pacific Islands (United States Trust Territory)
- Pakistan
- Peru
- Philippines
- Poland
- Portuguese Guinea
- Portuguese India
- Portuguese Timor
- Puerto Rico
- Republic of Korea
- Republic of Viet-Nam
- Romania
- São Tomé and Príncipe
- Sarawak
- Seychelles
- Sierra Leone
- South Africa
- St Helena
- St Pierre and Miquelon
- Sudan
- Swaziland
- Sweden
- Switzerland
- Tanganyika
- Thailand
- Togo
- Tunisia
- Turkey
- Uganda
- Union of Soviet Socialist Republics
- United Arab Republic
- United Kingdom of Great Britain and Northern Ireland
- United States of America
- Venezuela
- West Indies Federation (Barbados, Grenada, Jamaica, Montserrat, St Kitts-Nevis-Anguilla, St Lucia, St Vincent, Trinidad and Tobago)
- Western Samoa
- Yugoslavia
- Zanzibar

37. Details of cases of quarantinable diseases due to or carried by international traffic are given in Part V and in Appendix 3.

PART III. SANITARY ORGANIZATION

38. United States of America. The Government reports as follows:

"Increasing time and emphasis were devoted to the inspection and improvement of general sanitation and cleanliness aboard vessels used in international travel. There is a need for development and enforcement of international standards in this area."

The Committee recalls the recommendation contained in its eighth report that the Director-General study the question of developing recommendations for sanitary construction and operation of ships. The Committee envisages the possibility of a companion report to that of the Expert Committee on Hygiene and Sanitation in Aviation.

39. Republic of Viet-Nam. The Government reports that the following improvements have been made during the year:

Seaport of Saigon. Installation and equipment of two infirmaries; installation of rat traps near ware-
houses and along the quay; periodic dispatch of rats captured alive or dead to the Saigon Pasteur Institute for examination.

**Saigon Airport.** Installation of an air-conditioned room, protected against mosquitoes, for transit passengers; installation of a temporary isolation ward with three beds reserved for sick passengers or suspect cases before transport to the Choquan hospital for communicable disease cases. This work will probably be completed towards the end of the year (1961).

**Dalat Airport.** Air traffic between Saigon/Dalat/Phnom Penh/Bangkok and return has recently been instituted. Sanitary control of this airport is the responsibility of the Chief Medical Officer of the town of Dalat, who is also the Chief Health Officer at Dalat.

### Article 14

40. The Director-General, in circular letter No. 17 of 18 May 1961, inquired of health administrations whether their international ports and airports provide pure water of the quality described in the WHO publication *International Standards for Drinking-Water*, especially as concerns bacteriological requirements (section 2), and chemical and physical requirements (sections 3.1, 3.2.1 and 3.2.2). A summary of information received by the Director-General up to 1 September 1961 is given in a separate document.

The Committee notes the action taken by the Director-General and the replies received from States. It urges States to provide this information so that it may be disseminated to all health administrations.

### Article 16

41. See sections 62 and 63.

### Article 20

42. See section 17.

### Article 21

43. Health administrations in 104 States and territories have notified the Organization that 638 ports have been approved under Article 17 for the issue of Deratting Certificates and/or Deratting Exemption Certificates; of these, 139 have been approved for the issue of Deratting Exemption Certificates only.

44. Notifications of 221 sanitary airports have been received from ninety-six health administrations. Airports with direct transit areas number twenty-seven, in twenty States and territories.

### Article 22

45. **Cameroon.** The Government reports as follows (translation from the French):

> “Crossing of the frontier between Cameroon and certain neighbouring territories, on which it is difficult to keep a check, may be the origin of the outbreak of epidemics such as the smallpox epidemic in North Cameroon which is now dying out. Supervision at the frontiers would appear to be more relevant to such cases than application of the Regulations... but we should like you to send us any general directives which you regard as useful in this matter.”

46. **Ghana.** The Government reports that the application of the Regulations at ports and airports does not present any difficulties but, as mentioned in previous reports, it has not been possible to deal effectively with road travellers, especially pedestrians who come into Ghana or leave Ghana along the many footpaths connecting this country with the neighbouring territories. Official routes at the frontiers are watched by officers of the Ministry of Health, who examine passengers and perform vaccination and disinfection.

47. **Ivory Coast.** The Government reports that the setting-up of frontier sanitary control posts is contemplated.

48. **Nigeria.** The Government reports that difficulties are encountered in the application of the Regulations at the Dahomey-Nigeria border, as many travellers from Dahomey do not carry smallpox vaccination certificates and have to be vaccinated at the border.

### PART IV. SANITARY MEASURES AND PROCEDURE

### Article 23

49. While the number of official complaints from health administrations regarding applications of sanitary measures under the Regulations has diminished in the past few years, reports of irregular practices have continued to come from airlines, shipping companies, international travellers and from newspapers. No doubt, many irregularities have not been reported. Some health administrations have persistently refused

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1 See Appendix 2.
2 Unpublished.
3 *Wkly epidem. Rec. 1959, 16, Suppl. 1, Ports approved and designated for the issue of Deratting Certificates and Deratting Exemption Certificates—as brought up to date on 30 September 1961.*
to withdraw unjustifiable measures, even when repeatedly requested to do so.

50. (a) As a result of the outbreak of cholera in West Pakistan seven countries notified the Organization that they required cholera vaccination certificates of arrivals from the whole of West Pakistan, and Iran stopped the entry of trains from West Pakistan.

(b) Six others considered Afghanistan, Burma, India and East and West Pakistan as cholera-infected areas. Afghanistan was free from cholera on 10 December 1960, Burma on 25 September 1960,\(^1\) West Pakistan on 19 January 1961, and only certain areas of India and East Pakistan were infected.

(c) At the time that cholera was reported in Afghanistan and West Pakistan a health administration imposed the following requirements on travellers from Afghanistan, India and Pakistan. The travellers were required to possess an international vaccination certificate against cholera showing two injections at an interval of one week. This certificate had a validity of not more than six months. The possession of such a vaccination certificate was a prerequisite for granting an entry visa. In addition, such travellers were authorized to enter the country only if five days had elapsed since their departure from infected areas. If they should enter the country before the five days had elapsed, then, even if they had a vaccination certificate against cholera showing two injections, they were to be detained in isolation until they had spent five days outside the cholera-infected area. Healthy ships were detained in quarantine for five days even though the ship had left a cholera-infected area more than five days previously.

(d) The requirements of two territories for cholera vaccination certificates from arrivals from China (mainland) may have been in excess of the Regulations, but, in view of the absence of any official information from the health administration of China (mainland), this question could not be brought to the attention of the two territories. These measures were designed to ensure the maximum security against the international spread of diseases with the minimum interference with world traffic.

The Committee further recalls that States were given an opportunity to reject or file reservations to the Regulations. Having voluntarily agreed to be legally bound by the Regulations, States have an obligation to all other States party to the Regulations not to exceed the provisions of the Regulations.

The Committee urges States to withdraw sanitary measures which exceed the provisions of the Regulations.

Article 24

51. In response to an inquiry, the Director-General advised that sanitary measures being applied without discrimination meant that there was nothing in the Regulations which required or implied special handling of international travellers with diplomatic passports.

The Committee is in agreement with the opinion given.

Article 25

52. France. The Government reports the following (translation from the French):

"In accordance with the recommendations of the Expert Committee on Insecticides,\(^2\) several experiments were carried out from 12 to 15 September 1960 at Marseilles-Marignane airport on aircraft of the conventional and jet type to study 'blocks-away' disinsection."

53. New Zealand. The Government reports as follows:

"...the 'blocks-away' system of dissection has now been adopted by one overseas airline operating through New Zealand. Modifications of the system have been adopted by other airlines whereby spraying is done on touchdown and five minutes are allowed to elapse before the aircraft doors are opened."

54. See also section 14.

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\(^1\) One case was reported in Akyab (town served by a port and airport) on 17 June 1961.

Article 27

55. Canada. The Government reports as follows:

"...we are continuing to experience some difficulty with regard to persons placed under surveillance as provided in Article 27 of the International Sanitary Regulations. During the past year, 22 per cent. of those placed under surveillance by the quarantine officers at the port of arrival failed to report to the medical officers of health at their destinations. We also experience great difficulty in tracing these persons in an attempt to ensure that surveillance is completed."

The Committee recalls that the method of ensuring surveillance is a matter for national legislation. In view of the few reported instances of difficulty as concerns surveillance, the Committee is of the opinion that it is not necessary at this time to recommend any changes in the Regulations in respect of surveillance.

Article 30

56. Nine States where smallpox is prevalent require of departing travellers a certificate of vaccination against smallpox.

57. Kenya. The Government reports that, during the period under review, seventeen persons from infected areas arrived at Nairobi airport without smallpox vaccination certificates. The majority of these travellers were from Bombay.

Article 34

58. The health administration of Sarawak notified the Organization that Kuching (First) Division was a cholera-infected local area as of 14 July 1961. When the Organization learned that air travellers from Brunei, in transit at Kuching airport, would be required to possess a cholera vaccination certificate on arrival in Singapore, it was suggested that the health administration of Sarawak arrange to segregate transit air travellers at Kuching, under the conditions laid down in Article 34. Segregation arrangements having been made, Singapore withdrew its requirement indicated above. This information was published in Weekly Epidemiological Record No. 30, 1961, under the heading "Sanitary Organization—Airports in infected areas, not yet provided with direct transit areas, where transit passengers are segregated under the conditions laid down in Article 34".

The Committee notes with satisfaction the special arrangement made to facilitate direct transit of passengers in international air traffic and commends this arrangement to other health administrations.

PART V. SPECIAL PROVISIONS RELATING TO EACH OF THE QUARANTINABLE DISEASES

59. The reported incidence of the quarantinable diseases in the last five years is given in a separate document. The trends of these diseases are therein discussed.

The Committee recommends that the information contained in the separate document be provided to health administrations in an appropriate manner.

Plague

60. United States of America. The Government reports as follows:

"One fatality from plague as a result of infection from wild rodents in an isolated mountainous area of New Mexico of no importance to international traffic occurred on 30 June. Because of the time required for identification of the cause of death this fatal case was reported after the close of the fiscal year. Measures were instituted for epidemiological investigation and control.

"The Hamakua District of the State of Hawaii was declared free of infection with wild rodent plague on 7 July 1960. This area had been declared infected on 14 May 1957, as a result of recovering infected fleas from wild rodents.

"Chaves County of the State of New Mexico was declared free of infection with plague on 25 November 1960. The county had been declared infected during March 1960, following occurrence of plague in two hunters who had been in contact with wild rabbits."

61. Republic of Viet-Nam. The Government reports that during the second fortnight of May 1961 seven sporadic cases of plague (with five deaths) were reported at Càm-My (Xuân-Lôc District, Longkhanh Province), 81 kilometres from Saigon. The port and airport of Saigon remained free from infection.

Article 51

62. The provisions of Article 51 oblige States, inter alia, to keep themselves constantly informed, by systematic collection and regular examination of rodents and their ectoparasites, of the conditions in any local area, especially any port or airport, infected or sus-
pected of being infected with rodent plague. States are not required to submit information on such operations to the Organization, but a number do so. Details have been furnished by fourteen States and territories concerning fifty-nine ports or airports and twenty-two towns in Asia and two ports in Africa. Except for two plague-infected rats reported from Rangoon on 1 and 16 November 1960, all reports on some 1,665,000 rats caught and 265,000 examined were negative.

63. United States of America. The Government reports as follows:

"The importance of rodent control in port areas and aboard ships was highlighted by the declaration for the first time in two years of a plague-infected international port during November. From the seaport of Rangoon, Burma, [was] reported the finding of two rats infected with plague.

"Evidence of appreciable numbers of rats was found on only a small percentage of the ships entering United States ports. This was attributed to improved sanitation, more extensive use of ratproofing construction, and wider practice of rat trapping carried on continuously at sea and in port.

"The experience in the United States with respect to comparison of rodent control and lack of rodent harbourage aboard some ships as related to others continued to support the recommendation that provision be made in the International Sanitary Regulations for a six-month extension, without complete inspection, of a valid Deratting Exemption Certificate carried by a clean ship that:

(1) has on board an adequate supply of rat traps, and is carrying on a preventive trapping programme;

(2) has demonstrated in previous inspections that it has been free of rats.

"This is a matter for general international agreement, as too few ships are maintained on such an assured two-country schedule as to make a bilateral agreement effectual."

The Committee notes a marked decline in the reported incidence of plague. It requests the Director-General to study further possibilities of bilateral agreements as stated in its seventh report, when it suggested that States consider the possibility of concluding bilateral agreements to waive or relax provisions of the Regulations, for example, in relation to the production on arrival of a Deratting Certificate or Deratting Exemption Certificate. The terms of any such agreements must, of course, pay due regard to the provisions of Articles 24 and 104.

64. France. The Government reports the following (translation from the French):

"As a result of the generalization of the permanent deratting of ships by anticoagulants, Deratting Exemption Certificates can be issued more frequently. In any case, the French health authorities issue Deratting Certificates only where gas has been used ..."

65. Haiti. The Government reports that some ships transporting different types of merchandise stop in Haitian ports only long enough — an hour or two — to unload a small part of their cargo. It often happens that these vessels have an expired Deratting Exemption Certificate and that, as the holds are full, it is impossible to make a thorough inspection. So as not to hamper international traffic, a Deratting Exemption Certificate is issued and the master of the ship is directed to take measures of hygiene and sanitation; he is advised to have fumigation carried out in the first port where the cargo is unloaded. After having unloaded its cargo, the ship returns in ballast to Haitian ports to take on fresh merchandise. The health authority may then insist on a new inspection of the holds and compartments, and proceed — if this is deemed necessary — to fumigation (Article 52, paragraph 4). In the case of chartered boats, this causes difficulties, since the charter fees are high.

The Committee recalls that Deratting Exemption Certificates may be issued only under the specific conditions laid down in Article 52, subparagraph 4 (b). It appears that, in the instances reported above, Deratting Exemption Certificates should not have been issued.

66. Ireland. The Government reports as follows:

"1. M/V Achaean. On 6 January 1960 this ship arrived at Cork from Buenos Aires ex Avonmouth, England. It held a Deratting Exemption Certificate dated 29 July 1959, issued at... Following a request for renewal of the certificate the ship was inspected, but as evidence of rat activity was found in all cargo spaces the certificate was refused.

"Early in May 1960 this ship again arrived in Cork. It held a Deratting Exemption Certificate dated 23 January 1960, issued at... The vessel was inspected and evidence of rat infestation was again found in all cargo spaces. Fumigation was recommended but the master was unwilling to have this done and the ship left for Buenos Aires towards the end of May 1960. The Deratting Exemption Certificate held by the master was valid until 22 July 1960.


2 This report was received in November 1960 — too late to be considered by the Committee at its 1960 session.
"On 12 August 1960 the ship again reached Cork from Buenos Aires ex Avonmouth. It held a Deratting Exemption Certificate dated 1 July 1960, issued at... Inspection showed evidence of widespread rat infestation. Fumigation was carried out on 17 August 1960, and 214 rats were killed. A Deratting Certificate was issued.

2. M/V Clío. On 17 August 1960 this ship arrived at Cork from Buenos Aires. It held a Deratting Certificate dated 25 January 1960, issued at... and later extended by one month. Evidence of rat infestation was found in cargo spaces and provisions storerooms; two rats were trapped and it was stated that during the voyage 12 had been trapped in the provisions storerooms. As the vessel was proceeding to Dublin (prior to sailing for Oslo where fumigation was to be carried out) for further part discharge of cargo, the Dublin Port Medical Officer was informed of the position.

"Inspection of the vessel at Dublin confirmed the Cork Port Medical Officer's findings. The following is an extract from the Dublin Port Medical Officer's report:

'On inquiry it was established that the extension of the validity of the Deratting Certificate had been granted at... on 21 July 1960. As this was the ship's first port of loading, her holds were presumably empty at this time. For this reason I consider that the granting of the month's extension in this case was not in accordance with the provisions of Article 52.2 of the Regulations.

'Incidentally, we noted here that it was a Deratting Certificate (and not an "Exemption") which had been issued at... This certificate indicated that deratting had been carried out by poisoning, but no specific details were given and the number of dead rats recovered was not recorded.'"

Cholera

67. Following the requests made by the Committee in its eighth report,¹ the Director-General is scheduling a scientific group on cholera especially to advise him on studies on the epidemiology of cholera and on standardization of cholera vaccine.

The Committee recalls the opinion expressed at its fifth session that the quarantinable disease cholera does not include paracholera due to the El Tor vibrio.² The Committee notes the recent occurrence of paracholera due to the El Tor vibrio in several countries of Asia. The Committee realizes that the means of spread and other epidemiological aspects of this disease are not clear, and is of the opinion that investigations are urgently needed to determine the characteristics of this disease and measures for its control. The Committee notes with appreciation that the Director-General has scheduled a scientific group on cholera research to meet early in 1962 to study outstanding questions on cholera and parachoela, including the value of vaccines. The Committee requests the Director-General to submit to it at its next session the results of investigations and the recommendations of the scientific group.³

68. Afghanistan. The first cases of cholera in Kandahar, including cases imported from Quetta, West Pakistan, were reported in the week ending 20 August 1960. Afghanistan was again free from cholera by 21 December 1960.

69. Hong Kong. The first two cases of cholera were reported on 17 August 1961. The last previous case, an imported one, was in 1947.

70. Macao. One case of cholera occurred on 11 August 1961 and was confirmed by laboratory examination on 14 August. The last previous case was reported in 1946.

71. Sarawak. After being absent since 1902, cholera was first notified in two divisions of Sarawak on 14 July 1961. Special segregation arrangements were made at Kuching Airport, as outlined in section 58, so that there was a minimum interference with international traffic.

72. Pakistan. Cholera was reported in West Pakistan on 30 July 1960. West Pakistan became free from cholera on 19 January 1961.

Yellow Fever

73. Ethiopia. An exceptionally large outbreak of yellow fever was reported to have occurred in Gamu Goffa Province in south-western Ethiopia during the latter part of 1960 and the early months of 1961. It was estimated that at least 3000 deaths had occurred. Mass yellow-fever vaccination has been carried out in this province, using 17D vaccine—both the approved injectable vaccine and a 17D scratch vaccine manufactured in Nigeria—and the approved Dakar strain scratch vaccine. With the assistance of the Organization, the health administration of Ethiopia plans extensive studies of yellow fever in this area later in 1961.

³ See tenth report of the Committee, p. 61.
74. France. The Government reports as follows (translation from the French):

“Many travellers coming directly from Réunion by air are obliged by the Egyptian sanitary authorities at Cairo airport to produce a yellow-fever vaccination certificate or are put in quarantine when they are in transit at Cairo or their aircraft touches there. However, according to the requirements in regard to vaccination certificates notified to the Organization by the United Arab Republic, the Department of Réunion is not considered as an endemic or infected area. Thus, passengers coming directly from Réunion who have merely been in transit through Nairobi airport (Kenya) under the conditions laid down in Articles 34 and 75 of the Regulations should not be required to produce a certificate.”

The Committee notes that the Department of Réunion is not a yellow-fever infected area, that the airport local area of Nairobi (Embakasi) has been removed from the endemic zone under the provisions of Article 70, paragraph 2, unamended, and that this airport is provided with a direct transit area.

Consequently the Committee is of the opinion that the measures taken at Cairo are in excess of the provisions of the Regulations.

75. United Arab Republic. The Government reports as follows:

“No notification had been made during 1960 with regard to incidence of yellow fever in all the African countries, with the exception of the Congo (Epidemiological and Vital Statistics Report No. 4, 1961). Even in the previous years, there were very few countries which used to notify occurrence of cases. Then we were surprised by the outbreak of a severe epidemic (112 cases) in El-Fong area (Blue Nile Province, Sudan). It was announced on 27 November 1959. Another epidemic occurred also, in February 1961, in Gamu Goffa Province (Ethiopia), adjacent to Sudan and Kenya.

“Therefore, as regards our country, which is a yellow-fever receptive area, we think that subordinating the measures provided for in the International Sanitary Regulations on the detection of yellow-fever cases by the countries included in the yellow-fever endemic areas does not afford security and, in our opinion, it is considered as one of the difficulties which face us in applying the International Sanitary Regulations.”

Article 70

76. Notifications of areas considered as receptive under Article 70 were published in the Weekly Epidemiological Record. Full lists of these areas were published as follows: list as of 1 December 1960 — in the 1961 edition of Vaccination Certificate Requirements for International Travel; as of 20 January 1961 — in Weekly Epidemiological Record No. 3, 1961; as of 1 May 1961 — as Annex V of the second annotated edition of the International Sanitary Regulations.

Article 70 (unamended)

77. In accordance with the request of the Committee,¹ the Director-General gives in a separate document² information on the redelineation of the yellow-fever endemic zones.

(a) The Committee recognizes that it is the duty of the Director-General to keep up to date the delineation of the yellow-fever endemic zones as defined in the 1951 Regulations for the purposes of the application of the yellow-fever clauses of those Regulations.

In determining the presence or absence of Aëdes aegypti for the delineation of yellow-fever endemic zones in accordance with Article 70, paragraph 1, of the 1951 Regulations, the Committee recommends that the principles of the practice in force in the Pan American Sanitary Bureau for establishing eradication of Aëdes aegypti³ be adopted, in agreement with the States concerned.

The Committee, however, recognizes that at present a new delineation may not be accepted for practical application by those States whose reservations were based on disagreement over the criteria for delineation. The Committee, however, hopes that a new delineation may in course of time be accepted by them.

To this end, the Committee recommends that the Director-General arrange on-the-spot discussions between the States concerned in order to determine whether present differences can be completely or partially resolved and thereby facilitate the acceptance of a new delineation and the withdrawal, in whole or part, of the reservations which now exist.

The Committee therefore recommends that the Director-General should inquire of those States in order to obtain their opinion on this view of the Committee.

(b) The Committee also recognizes that it is the duty of the Director-General to keep up to date the list of yellow-fever infected areas based on the criteria in the 1955 Additional Regulations for the purposes of the application of the yellow-fever clauses of these Regulations by States whose reservations tend to preserve the yellow-fever endemic zone concept.

¹ Off. Rec. Wld Hlth Org. 110, 43, section 52.
² Unpublished.
The Committee accordingly recommends that the Director-General continue to make available, for the benefit of those States having reservations to the yellow-fever clauses of the 1955 Additional Regulations, the information given by other health administrations relating to the search for yellow-fever virus in vertebrates other than man, to enable them to base their action on this information.

(c) For the purposes of the application of the yellow-fever clauses of the present Regulations by those countries bound without reservation to those clauses, the Committee recommends that:

(i) in so far as the presence of yellow-fever virus in vertebrates other than man is concerned, the Director-General encourage Member States to fulfil their obligations under the Regulations by notifying the extent of such infected areas within their territories and to keep this information up to date as the position changes, and that he publish the information;

(ii) in so far as the presence of human cases of yellow fever is concerned, the Director-General continue to publish the notifications as they are received.

78. Information, including maps, on the yellow-fever endemic zones in Africa and America was published in Vaccination Certificate Requirements for International Travel, 1961. Quarterly reports on the Aedes aegypti index of local areas excluded from the previously existing yellow-fever endemic zones are published in the Weekly Epidemiological Record.

Article 73

79. See section 17.

80. Haiti. The Government reports some difficulties caused by the ignorance or negligence of pilots in command of small carriers or private aircraft, arriving without known schedule. Since these aircraft do not have the necessary equipment for disinsecting on arrival and departure, they might carry Aedes aegypti.

The Government of Haiti suggests the dissemination by the Organization of sanitary requirements, through the press, aeronautical clubs, etc., for the instruction of aeronautical personnel.

The Committee considers that the problem raised should be solved locally or between the health administrations concerned. The Committee considers that it is the duty of aircraft operators to inform themselves of the sanitary requirements of foreign airports.

81. Philippines. The Government reports as follows:

"Inspection of aircraft on arrival reveals insect infestation up to this time. It shows that the disinsection procedures employed by airlines are still inadequate."

Article 75

82. The Organization was informed by the Governments concerned, on 19 May, 23 July and 8 August 1960 respectively, that the arrangements concluded between India and the Philippines, and between India and Sarawak, have been terminated.

83. The following arrangement is still in force: between the Government of Burma and the Governments of India and Pakistan.

Article 76

84. Indonesia. Article 76, paragraph 2, reads as follows:

2. On arrival, an aircraft shall be regarded as infected if it has a case of yellow fever on board. It shall be regarded as suspected if the health authority is not satisfied with a disinsecting carried out in accordance with paragraph 2 of Article 73 and it finds live mosquitos on board the aircraft. Any other aircraft shall be regarded as healthy.

The Government of Indonesia asks whether the two conditions mentioned are necessary or whether an aircraft shall be regarded as suspected if only one of these two conditions exists.

The Committee is of the opinion that the two conditions indicated are concurrent requirements — that is, both conditions must be fulfilled before a health authority may consider an aircraft as suspected.

Smallpox

85. In a separate document,1 the Director-General gives information as to the age at which vaccination can be administered safely, together with information on possible attendant complications, as requested by the Committee in its eighth report.2

The Committee notes the report and requests the Director-General to study this question further and report to a later session of the Committee.

86. See also sections 118 to 120.

87. In a separate document,1 the Director-General reports a study on the incubation period of smallpox.

The Committee notes the report and information provided by one State. It is of the opinion that sufficient evidence is not available to warrant amendment of Article 82 which states: "For the purposes of these Regulations the incubation period of smallpox is fourteen days."

1 Unpublished.
88. In a separate document,¹ the Director-General reports on the progress of smallpox eradication.

The Committee notes the encouraging progress of smallpox eradication in the three continents concerned.

89. Aden Colony. The Government reports that one case of smallpox landed at Aden from the ship Saudi on 18 February 1961.²

90. Basutoland. The Government reports that an outbreak of smallpox occurred during March to June 1961; the source of the infection could not be traced.

91. Federal Republic of Germany. The Government reports as follows:

Four cases of smallpox occurred in the Federal Republic of Germany, which were due to international traffic.

On 11 March 1961, a 28-year-old photographer arrived, after a prolonged stay in India, at the airport Frankfurt am Main.² He showed no signs of disease and could produce a valid certificate of vaccination against smallpox. At Frankfurt am Main he and his friend, who had worked together with him in India, were met by an acquaintance from Ansbach by car. First they drove to Bensheim (Bergstrasse), where the friend has his permanent residence. In the evening of 11 March the photographer, who fell sick later, arrived at Ansbach.

On 18 March the first symptoms appeared. Two days later the sick man went to see a doctor who, on 25 March 1961, sent him to the department for infectious diseases of the municipal hospital at Ansbach, where the disease was considered to be a case of varicella. From hospital the patient wrote to his friend at Bensheim that he was suffering from some sort of skin trouble, probably varicella. This friend, knowing the senior physician of the hygiene institute of a neighbouring university, informed him that his travel companion was suffering from some skin disease. The senior physician became suspicious and informed the medical officer at the Frankfurt am Main airport, who advised the competent public health officer at Ansbach of his suspicions. Laboratory tests were immediately carried out and the diagnosis of smallpox was confirmed on 29 March 1961 at 9 a.m. Without delay, measures necessary for the control of this outbreak were undertaken.

The mother of the patient fell sick on 4 April 1961 and his father on 7 April 1961. The mother died of smallpox on 10 April 1961. On 22 April 1961 the doctor, who treated the victims of smallpox and lived with them under quarantine, also fell sick.

This case of smallpox is of particular interest in so far as the patient entered the Federal Republic obviously in perfect health. He had been properly vaccinated in 1958 and was in possession of a valid vaccination certificate. Details as to whether the vaccination had been successful could no longer be obtained. On his arrival at Frankfurt am Main he had been duly checked regarding his vaccination certificate. Thus, all pertinent regulations for the prevention of importation of smallpox had been strictly observed.

92. Ghana. The Government reports that during the year the following four cases of smallpox due to international traffic were introduced into Ghana:

(1) A Ghanaian boy, aged 8 months, resident in the Ivory Coast, where he developed smallpox on 8 April 1960. He travelled by road to Sefwi District, Ghana, on 13 April and died on 17 April.

(2) A Dahoman, aged 17 years. He travelled by road from Dahomey to Anlo District, Ghana, on 7 August 1960, developed smallpox on 9 August and was isolated the next day.

(3) A Togolese, aged 17 years, who left Togo by road on 3 October 1960 for Akwapim New Juabeng District, Ghana. He developed smallpox and was isolated on 12 October.

(4) A Togolese, aged 18 years, who travelled by road from Togo to Accra on 6 January 1961. He developed smallpox on 11 January and was isolated on 21 January.

All cases, except the first one, recovered and were discharged.

93. South Africa. The Government reports that the only cases of quarantinable diseases due to international traffic were the smallpox cases reported on 19 December 1960. The source of the disease was traced to a Bantu mine recruit from Nyasaland who developed the disease some seven days after leaving Nyasaland.

94. Spain. The Government reports as follows with regard to the epidemic of smallpox in Madrid in February and March 1961:

The imported case possessed a smallpox vaccination certificate issued by the Spanish Health Services on 16 February 1959.

The secondary cases which occurred were: two cases in Madrid, who were direct contacts of the imported case; they were isolated in the Hospital del Rey on 18 and 23 February. The remaining thirteen cases occurred within the Hospital del Rey.

¹ Unpublished.
² See Appendix 3.
Among those secondary cases occurring in the hospital, one was a nurse, another a laboratory assistant and a third a subordinate employee.

The last secondary case reported in the hospital was isolated on 5 March.

Measures taken: Sanitary surveillance of passengers of the flight who had travelled with the one imported case. Communication to embassies of information on transit passengers who had travelled with the imported case. All contacts of the imported case and of the secondary cases in the city of Madrid were placed under surveillance. In the Hospital del Rey, all the staff were vaccinated. Visits were prohibited; certificates of discharge from hospital were suspended. All contacts between the hospital staff and the outside were prohibited. The diagnosis of all smallpox cases was established by laboratory identification of the virus.

Vaccination campaign: An intensive vaccination campaign was undertaken in the city of Madrid: 82 per cent. of the population was vaccinated. An important vaccination campaign was also undertaken, at the same time, in the rest of Spain: official health services performed five million vaccinations against smallpox; thus, with vaccinations performed by private practitioners, nearly two-thirds of the population have been vaccinated against the disease.

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95. Sudan. The Government reports that a case of smallpox was discovered among pilgrims at Geneina on 25 March 1961. This case, a woman aged 38, entered Geneina through an unofficial route. She came from Bamko Town, Mauritania. She had no health or passport document and had never been vaccinated. Another case was detected on 7 April 1961 in the scabbing stage. The patient was a child of two years who came from Mali. All necessary measures were applied and no secondary cases occurred.

96. Togo. The Government reports that 292 cases of smallpox (with eighteen deaths) occurred in Togo during the period indicated. In this connexion it gives the following information:

As the Atakpamé epidemic broke out in a region where vaccination had been carried out, it gave rise to an inquiry. The main difficulties encountered were:

(a) difficulty of diagnosis in the case of certain atypical eruptions;
(b) difficulty of carrying out systematic vaccination campaigns by reason of the ignorance of the inhabitants, who do not always collaborate;
(c) for the same reason, difficulty of a rapid vaccination campaign in the event of recrudescence of an epidemic.

To overcome these difficulties the Government endeavours, whenever possible, to base vaccination campaigns on the census; it is considering creating a mobile vaccination group and mass education campaigns.

The Government reports that there have been no cases of quarantinable diseases in connexion with international traffic proper (ships, aircraft), but points out that Togo is a fairly narrow territory and that it is crossed by many persons coming from Ghana, Dahomey, etc.

97. See also sections 45 to 48.

98. Union of Soviet Socialist Republics. The Government reports that a few hours after the arrival in Moscow of flight SU 054 from Delhi, India, on 6 April 1961, one of the passengers was discovered to have smallpox.\(^1\) The aircraft was therefore considered as infected; except for three passengers who had already left Moscow, all others were isolated in Moscow for fourteen days. The Organization was notified of this case by cable on 8 April 1961, and informed, by letter dated 26 May, of the measures taken. No secondary cases were reported.

99. United Arab Republic. The Government reports that two cases of modified smallpox were imported by ship.\(^1\)

100. United Kingdom. The Government reports as follows:

"In October [1960] one case of modified smallpox was diagnosed in a businessman two days after his return from the Far East by air.\(^3\) The patient was admitted to isolation the same day. Appropriate notifications were sent to health authorities in the other countries concerned. No secondary cases occurred."

101. United States of America. The Government reports as follows:

"An inquiry was made among sample groups of travellers arriving by air in the United States concerning the countries which they had visited, in addition to the country of emplaning, during fourteen days before arrival. The results of the study are being published. It was found that many travellers from a variety of lands, including areas where quarantinable diseases were present at the time of the visit, arrive in the United States within the incubation period of smallpox, aboard airplanes that have touched only at uninfected ports."

\(^1\) See Appendix 3.
PART VI. SANITARY DOCUMENTS

Article 96

102. Haiti. The Government reports some difficulties in connexion with the issue of the Maritime Declaration of Health. Some masters of ships declare either that they do not have the form or that they do not know how it should be completed.

Article 97

103. France. The Government reports that difficulties are still encountered in connexion with the aircraft general declarations; they are not always completed, or there is a delay in handing them in after arrival.

104. Philippines. The Government reports that the health part of the Aircraft General Declaration is, in many instances, not properly completed.

Article 100

105. Haiti. The Government reports that some captains still request, on leaving, a bill of health or a health certificate from the port authority.

PART VII. SANITARY CHARGES

Article 101

106. Repeated complaints were received from both governments and international shipowners' associations that charges not permissible under the Regulations continue to be made for quarantine procedure in ports.

Some complaints refer to charges not conforming with the Regulations, including those made for clearance outside regular duty hours; others refer to special requirements or services not clearly falling under the Regulations. The Director-General has attempted to clarify the substance of these complaints and, when there was evidence of non-conformity with the provisions of the Regulations, governments were urged to withdraw non-permissible practices.

PART VIII. VARIOUS PROVISIONS

Article 103

107. The question of applying additional sanitary measures to air crews transporting persons to Saudi Arabia for the Mecca Pilgrimage was raised by a health administration. In reply, as indicated below, the Director-General took up the general question of agreements under Article 103. The Director-General is of the opinion that the same principles apply to laws and regulations of States made under Article 103.

(a) At the time that the Additional Regulations relating to the sanitary control of pilgrim traffic were adopted in 1956 (resolution WHA9.48), Article 103 was amended and “persons taking part in periodic mass congregations” were added to the other classes of persons, namely migrants and seasonal workers. The intent of the added phrase, as the minutes of the Ninth World Health Assembly clearly indicate, was to mean “Mecca pilgrims”.

(b) A Mecca pilgrim was defined in Article 1, unamended, as “a person making the Pilgrimage, and, in the case of passengers on board a pilgrim ship, includes every person accompanying or travelling with persons making the Pilgrimage”. It is to be noted that nowhere in the unamended Regulations were persons accompanying or travelling with persons making the Pilgrimage and travelling by air to be considered also as pilgrims. Thus, air crews of aircraft carrying pilgrims were not to be considered as pilgrims and hence the provisions of the unamended Regulations relating to pilgrims did not apply to such air crews.

(c) The Pilgrimage meant the pilgrimage to the Holy Places in the Hedjaz. Thus ordinary international travellers not making the Pilgrimage, or not accompanying or travelling with persons (pilgrims) on a ship, were not covered by the provisions of the unamended Regulations relating to pilgrims; consequently the provisions of Article 103 as amended clearly do not apply to such international travellers.

(d) It follows that any agreement or regulation made pursuant to the provisions of Article 103, as amended, may apply only to the following types of persons: migrants, seasonal workers and persons making the Pilgrimage to the Holy Places in the Hedjaz and, if these latter persons travel by ship, then also to those persons accompanying or travelling with them.

(e) Therefore if the health administration of Saudi Arabia should submit for consideration an agreement (no such agreement has been submitted) under the provisions of Article 103, to apply additional sanitary measures to air crews of... Airways, such agreement would not be in conformity with the Regulations. It is understood, of course, that such air crews are not themselves pilgrims.
The Committee is in agreement with the opinion expressed by the Director-General.

The Committee was informed of a recent arrangement between the health administrations of Saudi Arabia and Pakistan relating primarily to "Mecca pilgrims". It is of the opinion that this arrangement is an agreement under the provisions of Article 103 and that, if the provisions relating to international travellers other than "Mecca pilgrims" were removed from this agreement, the agreement would be in conformity with the provisions of the Regulations. The Committee recognizes the advantage for States to complete such agreements and expresses the hope that the agreement in question will be revised in the light of its comments above.

108. The Mecca Pilgrimage for 1961 (the year of the Hegira 1380) was free from quarantinable diseases. Some 1,185,950 persons took part. The following vaccination requirements of Saudi Arabia during the period 19 December 1960 to 13 June 1961 (season of periodic mass congregations) were announced on 23 January 1961 and consistently followed during this period:

**Smallpox.** All arrivals are required to possess a vaccination certificate.

**Cholera.** All arrivals are required to possess a vaccination certificate showing two injections at one week's interval. Arrivals from infected areas must further possess a certificate showing that prior to arrival they have spent five days in an area free from cholera (time spent on board a vessel may be considered as a period spent in a cholera-free area).

**Yellow Fever.** Vaccination certificates are required from arrivals from infected local areas and from endemic zones. Certificates are also required of those coming from a country when only part of that country is included in the endemic zone.

For the period 14 June 1961 to 8 December 1961, vaccination certificate requirements for international travellers reverted to those which were in conformity with the provisions of the Regulations.¹

109. It is recalled that Article I, paragraph 2, of the Additional Regulations of 23 May 1956 (sanitary control of pilgrim traffic) reads as follows:

> Each State bound by these Additional Regulations undertakes to require adequate standards of hygiene and accommodation on ships and aircraft carrying persons taking part in periodic mass congregations, and such standards shall be no less effective than those in effect under the International Sanitary Regulations prior to the entry-into-force of these Additional Regulations.

**United Arab Republic.** The Government reports as follows:

> "We have noted that, during 1960, there were some pilgrims using sailing boats deprived of the previous sanitary levels. Such sailing boats had never been allowed to transport pilgrims. Among these boats we cite:

(a) Al Bashir, which arrived at El-Tor Quarantine Station on 9 July 1961 with 10 pilgrims;

(b) Dar-El-Salam, which arrived at El-Tor Quarantine Station on 9 July 1961 with 20 pilgrims."

**Article 104**

110. The following arrangements are in force:

(a) arrangement between the Congo (Leopoldville) and Uganda, in force since 1 February 1954;

(b) arrangement between the Governments of Denmark, Norway and Sweden, concluded on 19 March 1955; this arrangement became applicable to Finland on 1 December 1959 and to the Faroe Islands on 1 December 1960;

(c) arrangement between Italy and Yugoslavia, concluded on 20 August 1955 and amended on 22 April 1959;

(d) arrangement between the Member States of the Western European Union and Ireland in force since 15 June 1956;

(e) arrangement between Bulgaria, Greece and Yugoslavia of 12 June 1957.

111. See also section 83.

**APPENDICES**

**Appendix 1**

112. Indonesia. The Government reports that a Deratting Exemption Certificate was sent by air from a foreign country to a ship which had not left the Indonesian territorial waters for seven months. The certificate stated that the inspection had been carried out at sea. The Indonesian Port Health Officer did not recognize the validity of this certificate.

> The Committee is in agreement with the action taken by the Port Health Officer. The issue of a Deratting Exemption Certificate under the conditions described above is clearly not in accordance with the Regulations.

¹ See comments of the Committee under section 107.
Appendix 2

113. The Committee was informed that one State requires that arrivals from another State must be in possession of a certificate showing two injections of cholera vaccine at an interval of one week.

The Committee realizes that the note in Appendix 2: "The validity of this certificate shall extend for a period of six months, beginning six days after the first injection of the vaccine ..." may have given rise to some misunderstanding. The Committee draws attention to the provisions of Article 61, paragraph 2 which states: "Any standard for anticholera vaccines in force in the territory where the vaccination is performed shall be accepted by all health administrations."

The Committee recognizes the right of a territory where cholera vaccination is performed to decide whether two injections of vaccine shall be given or whether one injection is sufficient. However, it is not within the provisions of the Regulations for any territory to require that the standard for anticholera vaccination in another territory shall be two injections of vaccine.

Appendices 2, 3 and 4

114. France. The Government mentions in its report that a number of travellers do not possess the vaccination certificates they should carry.

115. Philippines. The Government reports that there are still passengers arriving without vaccination certificates. Arriving travellers who do not possess the required certificates claim that they were not informed of such requirements or were informed that there were no such requirements, by the travel agency, airline or shipping company concerned. Travellers still use vaccination certificates issued on prescription papers of private medical practitioners instead of an international form. The dates on the certificates are very often illegibly hand-written and not recorded in the sequence of day, month, and year. Confusion arises whenever the certificate is about to expire and the month is written in figures and not in letters. Some certificates of vaccination (international form) do not carry the approved stamp prescribed by the health authority of the territory in which the vaccination is performed.

The Committee recalls its previous opinions as follows:

(i) The date on certificates of vaccination should be recorded in the following sequence: day, month, year—the month to be written in letters and not in figures.

(ii) Health administrations should take all reasonable steps to ensure that the certificates issued in their territories are in conformity with the provisions of the Regulations and the interpretations thereon of the Health Assembly, and to ensure, in particular, that certificates are fully completed and that all entries on them are legible.

(iii) No departure should be made from the models of the certificates in Appendices 2, 3 and 4 of the Regulations, and no photograph should be included.

(iv) A certificate not printed in the proper form or not completed in the English or French language is not a valid certificate under the Regulations.

Appendices 2 and 3

116. As requested by the Committee, the Director-General continued his inquiries concerning the exemption of infants from cholera and yellow-fever vaccination requirements.

(a) 108 States or territories require a cholera vaccination certificate from arrivals from infected local areas; seventy-four exempt infants under one year of age from this requirement; ten others exempt infants under six months of age (77.7 per cent. exemptions).

(b) Of 106 States or territories requiring a yellow-fever vaccination certificate, sixty-eight exempt infants under one year from the requirement, and three exempt infants under six months (67 per cent. exemptions).

Appendix 3

117. Information on yellow-fever vaccination of monkeys carried in international traffic is given in a separate document.

The Committee takes note of the communication from the Government of the United States of America on the question of yellow-fever vaccination of monkeys carried in international traffic, and is of the opinion that this problem could best be resolved by bilateral agreements between States concerned, outside the provisions of the Regulations.

Appendix 4

118. Australia. The Government reports as follows:

"In general the International Sanitary Regulations have not caused any difficulties in their implementation with the exception of the requirements by various countries in regard to vaccination against smallpox.

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1 Second annotated edition, 1961, of the International Sanitary Regulations, footnotes a (2), (4), (5) and (6), pp. 42-43.

"This matter has already been drawn to your attention but during the current year has become even more complicated.

"It would appear that countries in Southern Europe maintain the attitude that vaccination against smallpox is not desirable under the age of twelve months and that recently countries in Central Europe have adopted the attitude of preventing vaccination after the age of three years.

"For international travellers these variations create great confusion and embarrassment, and it is essential that the World Health Organization publish in the immediate future an authoritative statement on requirements so that a lead can be given to all authorities concerned with international travel."

119. Republic of Viet-Nam. The Government reports the following (translation from the French):

"A woman passenger ... coming from Japan on the S/S CAMBODE arrived at Saigon on 21 September 1960 without an international vaccination certificate. On embarking in Japan, the person concerned was asked by the ship's doctor to have herself vaccinated against smallpox but refused to comply with this formality, claiming to belong to a religious sect which forbids the use of medicines and any human medical intervention. On her arrival at Saigon, on 21 September 1960 the Chief Health Officer and Medical Boarding Officer of the port of Saigon again asked this passenger to comply with the Regulations, but this request too was in vain, despite all urging and persuasion."

120. Intergovernmental Committee for European Migration. ICEM sends the following communication:

"Although Article 103 of the International Sanitary Regulations makes a specific reference to migrants, all countries to which ICEM sends migrants have the same requirements for smallpox (cholera and yellow-fever) vaccination certificates as for international travellers who are not migrants. Therefore, ICEM routinely uses the ... Vaccination Certificate Requirements for International Travel as part of an internal ICEM General Instruction No. 208.2 'Migrant Movements: Vaccination Requirements and Medical Restrictions'.

"Unfortunately, there are divergent views in certain countries with respect to the dangers of primary smallpox vaccinations at various ages.

"As mentioned in the foreword of Vaccination Certificate Requirements for International Travel, under the heading 'Exemption from vaccination' two comments are made, repeated hereunder:

1. On account of age: Some countries do not require vaccination certificates in the case of infants.
2. On medical grounds: If the vaccinator is of the opinion that vaccination is contra-indicated on medical grounds, he should provide the person with written reasons underlying that opinion, which the health authority of arrival may take into account.

"As it is the health authority of the country of arrival which decides the validity of any certificate, as well as whether it should accept any medical contra-indication to vaccination, it is the regulations of the respective countries of arrival which are paramount. Incoming travellers may be faced with charges associated with isolation, time waste, etc., if difference of opinion exists between the country of origin and the country of arrival.

"No generally accepted authoritative publication has appeared outlining the pros and cons of primary vaccination at any particular age.

"It would assist ICEM and its member governments if WHO could issue an authoritative statement as to ages at which smallpox vaccination can be administered safely, together with information on possible attendant complications.

"Any study aimed at a clarification and simplification of international travel would be beneficial to ICEM."

121. See sections 85 and 87.

Appendix 6

122. Denmark. The Government reports that the abolishment of passenger lists is not a procedure which is likely to facilitate tracing passengers in international traffic who are suspected of being infected with smallpox.

The Committee was informed that, when situations arise in relation to the occurrence of a quarantinable disease where it is necessary to trace passengers after arrival, names of passengers concerned are readily available from airlines.

The Committee acknowledges the special contributions made by the following staff members of the Organization:

Dr J. M. Barns, Consultant, Vector Control, Division of Environmental Health; Chairman of the Expert Committee on Insecticides, 1961

Mr F. Gutteridge, Chief, Legal Office

Dr A. Lysenko, Division of Malaria Eradication

Mr J. W. Wright, Chief, Vector Control, Division of Environmental Health.
INTERNATIONAL AIRPORTS: CONTROL OF MOSQUITO VECTORS OF DISEASE

Circular Letter C.L.14, dated 5 May 1961, to Governments from the Director-General of the World Health Organization

I have the honour to invite your attention to the eleventh report of the Expert Committee on Insecticides (Aircraft Disinsection), which is published in the Technical Report Series No. 206, 1961. In particular, I wish to refer to those recommendations related to the protection of international airports from vectors and procedures used for the disinsection of aircraft.

In section 2.1, the Committee emphasized:

(a) that too many international airports, while satisfactory from the standpoint of yellow-fever hazard, cannot be so regarded as far as other mosquito vectors of diseases of man are concerned, and

(b) that as long as this situation persists, the transporting of dangerous mosquitoes to receptive areas will continue to be a constant and serious danger.

I would, therefore, like to give emphasis to the recommendations appearing on page 6, that:

(i) Member governments be urged to initiate measures to correct the unsatisfactory situation prevailing at present, and

(ii) every effort be made by health authorities, not only to implement the International Sanitary Regulations which call for freedom from A. aegypti within the precincts of the airports, but also to make that zone mosquito-free.

The Committee has described measures that might be adopted to achieve these objectives on pages 6 and 7 (a-d) and I would be prepared to consider the provision of technical advice on the planning and implementation of vector control programmes at international airports on request, and within the budgetary limitations of the Organization.

You will be interested to know the WHO Committee on International Quarantine considered the above-mentioned report, and in its eighth report, adopted by the Fourteenth World Health Assembly and to be published in Official Records No. 110 as Annex 1, requested the Director-General to inquire of governments on the extent to which their international airports are kept free of Aedes aegypti mosquitoes and mosquito vectors of malaria and other diseases. It further requested the Director-General to keep all health administrations informed of the situation and to advise it of developments. Consequently, and with a view to facilitating international air travel, I should appreciate receiving quarterly information indicated in the attached form. [reproduced on the following page]

Furthermore the Committee on International Quarantine in the same report noted and endorsed the view contained in the eleventh report of the Expert Committee on Insecticides that in-the-air disinsection of aircraft with aerosols as presently practised is not biologically effective. It went further and stated that disinsection in the air should not be accepted as complying with all the objectives of the International Sanitary Regulations in the sense that adequate disinsecting will cause more than a minimum of discomfort to passengers and crew.

The Committee on International Quarantine noted that the operation referred to as "blocks-away" disinsection in section 2.2 of the eleventh report of the Expert Committee on Insecticides is recommended as an interim measure pending the possible introduction of improved procedures. It regarded "blocks-away" disinsection as a technically acceptable alternative method for disinsection of the passenger cabin with aerosols which might be further examined in practice by health authorities and airline operators, as it helps materially to lessen transit time.

As far as the aerosol formulation itself is concerned the attention of governments is invited to the recommended specifications for aerosols described in section 2.3 of the eleventh report of the Expert Committee on Insecticides, as well as a procedure for determining the biological effectiveness of aerosol formulations (Annex 2). The recommendations of the Expert Committee on Insecticides contained in its seventh report as concerns the rate of dispensing the standard aerosol remain unchanged. This rate is 35 g of the formulation per 100 m³ (10 g per 1000 cubic feet) of enclosed space. Here again the Organization is now able to assist any Member government wishing to undertake the evaluation of the formulation currently in use in its territory for the disinsection of aircraft by providing the standard reference aerosol and standard strains of flies referred to in the Committee's report.
# INSPECTION FOR MOSQUITO VECTORS OF DISEASE AT INTERNATIONAL AIRPORTS:
# QUARTERLY REPORT

<table>
<thead>
<tr>
<th>Name of Airport</th>
<th>City</th>
<th>Province</th>
<th>Country</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Period Covered</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
</table>

## 1. Perimeter area (the area within a line [perimeter] enclosing the airport buildings and any land or water used or intended to be used for the parking of aircraft)

<table>
<thead>
<tr>
<th>A. Larval breeding</th>
<th>Check if present</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(State method and frequency of inspection)</td>
<td>Aiëdes aegypti</td>
<td>Anophelines</td>
</tr>
<tr>
<td>(a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Adults</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(See explanation above)</td>
<td>(If mosquitos present, describe locality and extent)</td>
</tr>
<tr>
<td>(d)</td>
<td></td>
</tr>
<tr>
<td>(e)</td>
<td></td>
</tr>
<tr>
<td>(f)</td>
<td></td>
</tr>
</tbody>
</table>

## 2. Protection area (an area extending for a distance of at least 400 metres around the perimeter)

<table>
<thead>
<tr>
<th>A. Larval breeding</th>
<th>Check if present</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(See explanation above)</td>
<td>Aiëdes aegypti</td>
<td>Anophelines</td>
</tr>
<tr>
<td>(g)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(h)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Adults</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(See explanation above)</td>
<td></td>
</tr>
<tr>
<td>(j)</td>
<td></td>
</tr>
<tr>
<td>(k)</td>
<td></td>
</tr>
<tr>
<td>(l)</td>
<td></td>
</tr>
</tbody>
</table>

**REPORTING OFFICIAL:** ............................................................  
**DATE:** .............................................................
FIFTEENTH WORLD HEALTH ASSEMBLY, PART I

Appendix 2

DRINKING-WATER SUPPLIED AT INTERNATIONAL PORTS AND AIRPORTS

Circular Letter C.L.17, dated 18 May 1961, to Governments from the Director-General of the World Health Organization

I have the honour to invite your attention to paragraph 30 of the eighth report of the Committee on International Quarantine. It is recalled that this report was adopted by the Fourteenth World Health Assembly in resolution WHA14.41.

An extract of paragraph 30 is quoted below for easy reference:

The Committee was informed of several instances when bacteriologically contaminated water had been obtained from ports. It recalls its previous opinion that pure drinking-water should be of a quality not less than that described in the WHO publication International Standards for Drinking-Water, especially as concerns bacteriological requirements (section 2) and also as regards chemical and physical requirements (sections 3.1, 3.2.1 and 3.2.2).

It recommends that the World Health Assembly request the Director-General to inquire of health administrations whether their international ports and airports provide pure water of the quality indicated above.

In appraising the quality of drinking-water, you may find the attached questionnaire form and criteria for interpretation helpful. Copies of these could be sent to each international port and airport and the data obtained therefrom would be definitive in assessing the quality of the water supplied. It is sufficient that you convey to me a list of all international ports and airports indicating for each that, based on a review of laboratory examinations, the water quality is either satisfactory or unsatisfactory, or that you have insufficient data.

SUGGESTED GUIDE FOR REPORTS ON QUALITY OF DRINKING-WATER SUPPLIED AT INTERNATIONAL PORTS AND AIRPORTS

The following information is desired on samples of water collected at each port or airport from outlets commonly used or accessible as sources of drinking-water for vessels or aircraft, transient crews and passengers. Information should be reported only on samples of water collected either by the Port Health Authority or by an official public health agency, and examined in an officially recognized laboratory. A separate report should be rendered for each international port or airport, and information collected from different installations comprising the same port or airport area served by a common water supply system should be included in the single report.

If water is supplied through multiple, i.e. separate, systems to different parts of a port or airport area, a separate report should be rendered for each such separate system. If water from both treated and untreated sources is combined in one common system, the entire system should be considered as providing untreated water. The term "treatment" is defined in section 1.6 of the WHO International Standards for Drinking-Water.

Item

1. Name and location of port or airport and identification of the water system covered by this report
2. Number of employees regularly present
3. Number of transients (crew and passengers) using the installation during the past 12-month period
4. Average population (Item 2 + Item 3 / 365)
5. Maximum interval between successive samplings for bacteriological examination during the past 12-month period
6. Minimum number of samples collected for bacteriological examination in any one month during the past 12-month period
7. Number of samples collected for bacteriological examination during the past 12-month period
8. Number of samples negative for coliform organisms or with an MPN Index* of coliform organisms less than 1.0
9. Percentage of samples satisfactory (100 x Item 8 / Item 7)
10. Number of samples yielding an MPN Index* of coliform organisms exceeding 10
11. Number of times two consecutive samples yielded an MPN Index* of coliform organisms between 8 and 10

* MPN Index — Most probable number per 100 ml of water.
### ANNEX 1

#### For untreated water

<table>
<thead>
<tr>
<th>Item</th>
<th>Population served</th>
<th>Maximum interval between successive samplings</th>
<th>Minimum number of samples per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Number of samples negative for coliform organisms or with an MPN Index * of coliform organisms less than 10</td>
<td>Up to 20 000</td>
<td>One month</td>
<td>One sample per 5 000 population</td>
</tr>
<tr>
<td>13. Percentage of samples satisfactory ( \frac{100 \times \text{Item 12}}{\text{Item 7}} )</td>
<td>20 001 to 50 000</td>
<td>Two weeks</td>
<td>One sample per 5 000 population</td>
</tr>
<tr>
<td>14. Number of samples yielding an MPN Index * of coliform organisms exceeding 20</td>
<td>50 001 to 100 000</td>
<td>Four days</td>
<td>One sample per 5 000 population</td>
</tr>
<tr>
<td>15. Number of times two consecutive samples yielded an MPN Index * of coliform organisms between 15 and 20</td>
<td>More than 100 000</td>
<td>One day</td>
<td>One sample per 10 000 population</td>
</tr>
</tbody>
</table>

#### CHEMICAL QUALITY

16. Maximum interval between successive samplings for chemical examination during the past 12-month period

<table>
<thead>
<tr>
<th>Population served</th>
<th>Maximum interval between successive samplings</th>
<th>Minimum number of samples per month</th>
</tr>
</thead>
</table>
| Up to 50 000 population | 6 months | \begin{align*}
	ext{Item 17 - Lead (as Pb)} & - 0.1 \text{ mg/l} \\
	ext{Item 18 - Selenium (as Se)} & - 0.05 \text{ mg/l} \\
	ext{Item 19 - Arsenic (as As)} & - 0.2 \text{ mg/l} \\
	ext{Item 20 - Chromium (as Cr hexavalent)} & - 0.05 \text{ mg/l} \\
	ext{Item 21 - Cyanide (as CN)} & - 0.01 \text{ mg/l}
\end{align*}|
| Over 50 000 population | 3 months | \begin{align*}
\end{align*}|

#### INTERPRETATION


1. For samples collected for bacteriological examination from the distribution system the following maximum intervals between successive samplings (Item 5) and minimum numbers of samples examined in each month (Item 6) should be related to the average population (Item 4) according to the following: (Para. 2.2.6).

2. The percentage (Item 9) of samples negative for coliform organisms or with an MPN Index * of coliform organisms less than 1.0 should not be less than 90 (Para. 2.3.2.1).

3. No sample (Item 10) should yield an MPN Index * of coliform organisms exceeding 10 (Para. 2.3.2.1).

4. No two consecutive samples (Item 11) should yield MPN Indices * of coliform organisms between 8.0 and 10.0 (Para. 2.3.2.1).

5. The percentage (Item 13) of samples negative for coliform organisms or with an MPN Index * of coliform organisms less than 10 should not be less than 90 (Para. 2.3.2.2).

6. No sample (Item 14) should yield an MPN Index * of coliform organisms exceeding 10 (Para. 2.3.2.2).

7. No two consecutive samples (Item 15) should yield MPN Indices * of coliform organisms between 15 and 20 (Para. 2.3.2.2).

8. For samples collected for chemical examination of either treated or untreated water from the distribution system, the maximum interval between successive samplings (Item 16) should be related to the average population (Item 4) according to the following: (Para 3.1.3).

9. The maximum concentrations of toxic substances should not exceed the following, expressed as milligrams per litre: (Para. 3.2.1).

- Item 17 — Lead (as Pb) — 0.1 mg/l
- Item 18 — Selenium (as Se) — 0.05 mg/l
- Item 19 — Arsenic (as As) — 0.2 mg/l
- Item 20 — Chromium (as Cr hexavalent) — 0.05 mg/l
- Item 21 — Cyanide (as CN) — 0.01 mg/l

* MPN Index — Most probable number per 100 ml of water.
Appendix 3

CASES OF QUARANTINABLE DISEASES (SMALLPOX) IMPORTED BY SHIP AND AIRCRAFT
from 1 July 1960 to 30 June 1961

<table>
<thead>
<tr>
<th>Ship or aircraft</th>
<th>Date of arrival</th>
<th>Port of arrival</th>
<th>From</th>
<th>Number of cases and probable source of infection</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft</td>
<td>3 Oct.</td>
<td>Kuala Lumpur,</td>
<td>London (United Kingdom)</td>
<td>1 case</td>
<td>Modified smallpox (clinical diagnosis); admitted to hospital on 5 Oct.</td>
</tr>
<tr>
<td>GANA</td>
<td>8 Oct.</td>
<td>Makassar,</td>
<td>Tandjungpriok (Indonesia)</td>
<td>1 case ²</td>
<td>Migrant aged 28, embarked at Makassar on 28 Sept.; case reported in Tandjungpriok on 21 Oct., hospitalized in Djakarta, died on 26 Oct.; was in possession of an invalid vaccination certificate.</td>
</tr>
<tr>
<td>1961</td>
<td></td>
<td>Surabaja</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Brooklyn</td>
<td>20 Jan.</td>
<td>Calcutta,</td>
<td>Cochin (India)</td>
<td>1 case ³</td>
<td>Member of crew; onset of disease 18 Jan.; no record available as to the patient's vaccination.</td>
</tr>
<tr>
<td>Saudi</td>
<td>18 Feb.</td>
<td>Bombay</td>
<td>Aden</td>
<td>1 case —</td>
<td>Deck passenger aged two and a half years; onset of disease 17 Feb. (fever); diagnosed as smallpox on 21 Feb.; primary successful vaccination in Aden on 21 Jan. 1959.</td>
</tr>
<tr>
<td>Aircraft</td>
<td>11 March</td>
<td>Calcutta,</td>
<td>Frankfurt am Main (Germany, Fed. Rep.)</td>
<td>1 case —</td>
<td>Onset of disease 18 March; hospitalized in Ansbach on 25 March; case diagnosed on 29 March; had been revaccinated in Ansbach in 1958.</td>
</tr>
<tr>
<td>Strathtnaveer</td>
<td>24 March</td>
<td>Bombay, Aden</td>
<td>Suez (United Arab Republic)</td>
<td>1 case —</td>
<td>Modified smallpox in member of crew aged 44; embarked at Bombay on 17 March; onset of disease 22 March; vaccination certificate issued in Bombay on 14 March 1961.</td>
</tr>
<tr>
<td>Aircraft</td>
<td>6 April</td>
<td>Delhi</td>
<td>Moscow (USSR)</td>
<td>1 case —</td>
<td>Revaccination certificate issued in 1960.</td>
</tr>
</tbody>
</table>

¹ See also under “Smallpox”, pp. 49-51.
² Although not imported, this case is included in the table in view of the importance of sea traffic in the area involved.
The Committee on International Quarantine held its tenth session in the Palais des Nations, Geneva, on 3 May 1962. This was a special meeting convened by the Director-General to consider an emergency problem with a view to making recommendations to the Fifteenth World Health Assembly.

The Director-General decided to invite the experts who had participated in the ninth session of the Committee, in view of the fact that the problem to be considered had already been examined in a preliminary way at that session. The following attended:

Members
Dr M. K. Afridi, Honorary Consultant (Malariology), Health Division, Ministry of Health, Labour and Social Welfare, Pakistan
Dr J. C. Azurin, Director of Quarantine, Department of Health, Manila, Philippines
Dr J. A. Bell, Chief, Epidemiological Section, Laboratory of Infectious Diseases, National Institutes of Health, Bethesda, Md., United States of America
Mr R. W. Bonhoff, Facilitation Representative, Deutsche Lufthansa A.G., Cologne, Federal Republic of Germany
Dr L. H. Murray, Principal Medical Officer, Ministry of Health, London, United Kingdom of Great Britain and Northern Ireland
Dr J. N. Robertson, Principal Medical Officer, Medical Public Relations Division, Ministry of Health, Accra, Ghana

Dr W. A. Karunaratne and Dr H. M. Penido were unable to attend.

Secretariat
Dr R. I. Hood, Chief Medical Officer, International Quarantine, Division of Communicable Diseases (Secretary)
Mr F. Gutteridge, Chief, Legal Office
Dr B. Cvjetanović, Bacterial Diseases

The Committee met on the morning of 3 May 1962. Dr P. Dorolle, Deputy Director-General, opened the meeting. Dr J. C. Azurin was unanimously elected Chairman and Dr J. N. Robertson Vice-Chairman. The Chairman was requested to act as Rapporteur.

The draft agenda — Consideration of El Tor infection and its relationship to the International Sanitary Regulations: recommendations to the Fifteenth World Health Assembly — was approved.

The Committee recalls that in 1957, at the time of its fifth session and for some decades before that time, all reported cases of the disease due to El Tor vibrios had been limited to the Celebes. It was on this basis that the Committee was of the opinion that this disease should not be included in the term cholera, a quarantinable disease under the International Sanitary Regulations. The Eleventh World Health Assembly endorsed this opinion.

The Committee recalls that in November 1961 at the time of its ninth session it had expressed the view that the means of spread and other epidemiological aspects of cholera El Tor were not clear and that investigations were urgently needed to determine the characteristics of this disease and measures for its control. The Committee noted with appreciation that the Director-General had scheduled a scientific group on cholera research to meet early in 1962 to study outstanding questions on cholera and paracholera, including the value of vaccines. The Committee requested the Director-General to submit to it at its next session the results of investigations and the recommendations of the scientific group.

The Committee notes that the Director-General convened the Scientific Group on Cholera Research in Geneva from 2 to 6 April 1962 and that he also convened, at the Regional Office for the Western Pacific, in mid-April 1962, a meeting for exchange of information on El Tor vibrio infection. The Committee congratulates the Director-General on the commendable speed with which action has been taken to convene the above meetings to study this problem and to present the information and recommendations to a special meeting of this committee.

The Committee studied the detailed reports of the several outbreaks of El Tor infection (in Indonesia, in Sarawak (July 1961), in Macao (August 1962), in Hong Kong (August 1961), in the Philippines (September 1961) and in North Borneo (January 1962)) and considered the views of the experts on these outbreaks, including the conclusions and recommendations of the Scientific Group on Cholera Research and the findings of the meeting in Manila referred to above.

1 See resolution WHA15.38.
2 Off. Rec. Wld Hlth Org. 87, 400.
3 Resolution WHA11.44.
4 See ninth report of the Committee, section 67, p. 47.
The Committee, noting that the Scientific Group on Cholera Research "having given very careful consideration to all the available evidence about the epidemiology and clinical features of El Tor infection, recommends that this disease be regarded as essentially identical with classical cholera, and ... dealt with as such ", is of the opinion that, in the light of the best information and knowledge available, cholera El Tor does not differ from classical cholera in its epidemiological, clinical and pathological aspects and in measures of treatment. The Committee endorses the recommendation of the Scientific Group on Cholera Research that: "In regard to the use of prophylactic vaccines ... classical cholera vaccines be used until such time as evidence is produced from experimental or field vaccine studies of the absence of cross-protection between classical cholera and El Tor vaccines." Microbiologically, the cholera El Tor vibrio differs in only minor aspects from the classical cholera vibrios. The Committee is of the opinion that urgent action is required to provide adequate safeguards to countries exposed to the risk of importation of cholera El Tor.

The Committee is therefore now of the opinion that cholera, under the definition of quarantinable diseases in Article 1 of the Regulations, should include cholera due to the El Tor vibrio, and recommends that its opinion given at its fifth session and endorsed by the Eleventh World Health Assembly should be amended accordingly.

The Committee recognizes that there are several gaps in fundamental knowledge, both in relation to El Tor and classical cholera, and that the World Health Organization is engaged in studies of cholera and cholera El Tor, including standards for and efficacy of the vaccine, which will, it is hoped, supply the necessary information to enable the Committee to keep under review its opinion stated above.
Annex 2

DECISIONS OF THE UNITED NATIONS, SPECIALIZED AGENCIES
AND THE INTERNATIONAL ATOMIC ENERGY AGENCY
AFFECTING WHO'S ACTIVITIES ON PROGRAMME MATTERS

REPORT BY THE DIRECTOR-GENERAL

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</tr>
</tbody>
</table>

INTRODUCTION

1. This report of the Director-General relates to programme matters, the decisions of the General Assembly relating to administrative and financial matters being reported on separately. The report is divided into four parts. The first deals with decentralization and strengthening of United Nations activities; the second with WHO’s participation in the Expanded Programme of Technical Assistance; the third with inter-agency programmes, including concerted action; and the fourth with other decisions affecting the world of the World Health Organization. Reference is also made to the main agreements reached by the Administrative Committee on Co-ordination (ACC).

2. A few of the more important resolutions adopted by the General Assembly and the Economic and Social Council of interest to WHO are reproduced as annexes.2

3. Two addenda to this document deal respectively with the decisions of the General Assembly of the United Nations and the Conference of the Food and Agriculture Organization of the United Nations, concerning the World Food Programme,3 and with the resolution of the General Assembly, 1710 (XVI) establishing a United Nations Development Decade.3

I. DECENTRALIZATION AND STRENGTHENING OF UNITED NATIONS ACTIVITIES

A. Regional Economic Commissions

4. The General Assembly of the United Nations, in resolution 1709 (XVI), on decentralization of the economic and social activities of the United Nations and strengthening of the regional economic commissions, endorsed the action taken and proposed by the Secretary-General for this purpose. As a result the regional economic commissions, in addition to implementing programmes approved by the central directing organs, are assuming greater responsibility for planning and co-ordination. Their staff is being

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increased and the resident technical assistance repre-
sentatives are being brought into closer association
with them. The role of the resident representatives
is discussed in paragraph 26.

5. Paragraph 8 of the General Assembly's resolution
"invites the executive heads of the specialized agencies
concerned... to adjust co-operative arrangements to
the extent required by decentralization." After
considering the Director-General's report on this
subject, the Executive Board, in resolution EB29.R45,
recalled the functional decentralization embodied in
the United Nations Charter by the provisions relating
to specialized agencies, as well as the effective
decentralization of WHO through which planning, imple-
mentation and evaluation of country and regional
projects have been decentralized to the regional
organizations. It requested the Director-General to
report to the thirtieth session of the Board on the
ways and means for continuing co-ordination between
WHO and the regional economic commissions of the
United Nations with a view to the further elucidation
of the interrelationship of health and economic de-
tertainment, taking into account the constitutional and
technical requirements of the Organization.

6. As reported to the Executive Board, the Admin-
istrative Committee on Co-ordination reaffirmed in
May 1961 the principle that the Agreements between
the members of the United Nations family apply to
relations at the regional, no less than at the head-
quar ters, level. These Agreements, the network of
understandings which has been built on them, and
the resulting distribution of responsibilities among
members of the United Nations family, should in no
way be affected by the measures in the direction of
decentralization which the United Nations itself may
undertake. ¹

B. Regional Development Institutes

7. The United Nations General Assembly, in reso-
olution 1708 (XVI) on planning for economic develop-
ment, endorsed the creation of regional develop-
ment and planning institutes for Africa, Asia, Latin
America, and for groups of States not members of a
regional economic commission. It decided that the
institutes should be established at the request of
governments, with assistance from the United Nations
Special Fund, and should be closely associated with
the regional economic commissions.

8. The new institutes are designed to intensify the
existing United Nations programmes of theoretical
and practical training for government officials con-
cerned with the formation of national development

¹ ECOSOC document E/3495, para. 123.

programmes and to carry on the work of the advisory
groups which have undertaken fairly long-term mis-
sions of assistance to governments for this purpose.
They will be concerned both with techniques for
economic programming and with subjects basic to
development planning — such as statistics, public
administration, social aspects of economic develop-
ment and balanced economic and social development ²
— in relation to which specialized agencies have
specific responsibilities.

9. In April 1962, the Economic and Social Council
unanimously endorsed the creation by the Economic
Commission for Latin America of a Latin American
Institute for Economic and Social Planning in San-
tiago de Chile. ³ The Governing Council of the In-
stitute is composed of members from eight Latin
American States, the Economic Commission for Latin
America, the Inter-American Development Bank and
the Organization of American States. The Pan
American Sanitary Bureau/WHO Regional Office for
the Americas, which is represented indirectly on this
Council through the member representing the Orga-

isation of American States, was associated with the
planning of the Institute. In July 1961, the Economic
and Social Council noted the reports of the Economic
Commissions for Africa and for Asia and the Far
East, which proposed to establish similar institutes: ⁴
in resolution 1718 (XVI) on economic development
of Africa, the General Assembly urged the establish-
ment of the development institute there.

10. Consultations have proceeded through the Admin-
istrative Committee on Co-ordination regarding par-
ticipation by the specialized agencies in the Latin
American Institute as well as in the African Devel-
opment and Planning Institute, to be established in
Dakar (Senegal) in 1962, and the Asian Institute for
Economic Development for which arrangements are
to be made in 1962 by an ad hoc committee of the
Economic Commission for Asia and the Far East.
In response to an invitation to the specialized agencies
to co-operate in the latter institute, ILO, FAO and
UNESCO have offered to assist in developing sectors
within their competence, and WHO has expressed
interest.

C. Strengthening the Work of the United Nations in
the Social Field

11. The General Assembly (in resolution 1675 (XVI))
noted with satisfaction a series of decisions taken by

² General Assembly resolution 1674 (XVI) and ECOSOC
resolution 830 H (XXXII).
³ ECOSOC resolution 867 (XXXIII).
⁴ ECOSOC resolutions 822 B (XXXII) and 822 D (XXXII).
the Economic and Social Council with a view to
strengthening the work of the United Nations in the
social field. The Council had endorsed 1 in August
1961 "the decision of the Social Commission that it
should, in accordance with its terms of reference and
taking account of the activities of other organs of the
United Nations and the specialized agencies:

(a) Advise the Council on social policies of a
general character and give particular attention to
policies designed to promote social progress, to the
establishment of social objectives and programme
priorities and social research in areas affecting
social and economic development;
(b) Advise the Council on practical measures that
may be needed in the social field, including questions
of social welfare, community development, urban-
ization, housing and social defence;"

It had also agreed that the Social Commission's
biennial meetings should be changed to annual meet-
ings, and expressed the hope that the necessary
provision would be made to enable the United Nations
to carry out its increased social programmes.

12. It will be recalled that the Social Commission
makes recommendations to the Council on a number
of questions in relation to which co-operative working
arrangements have been established between the
United Nations and the specialized agencies concerned.
These include questions of social policy such as
balanced economic and social development, definition
of statistical indicators of levels of living, and other
aspects of social development covered by the Reports
on the World Social Situation, in the preparation of
which ILO, FAO, UNESCO and WHO collaborate.
In its resolution 830 A (XXXII) on the 1961 Report,
the Council drew the attention of governments,

inter alia, to the availability and great value of
assistance, through the United Nations and the
specialized agencies, to developing countries in carrying
out social surveys basic to determining their develop-
ment needs and in training personnel for national
development programmes.

13. The Social Commission also makes recommenda-
tions to the Council on a number of programmes in
which WHO takes part. Some, like rehabilitation
of the handicapped and studies on juvenile delin-
quency, require a relatively small contribution from
WHO. However, the programmes of concerted and
parallel action in the fields of rural and community
development, urbanization, and housing and related
community facilities have as their health component
substantial activities carried out under WHO's pro-
gramme. The Social Commission is also concerned
with the policies for, and United Nations assistance
to, national social service programmes for family and
child welfare. Among these are the UNICEF-assisted
national surveys of services for children, in which the
United Nations and the interested specialized agencies
co-operate; these were heartily endorsed by the
General Assembly and the Economic and Social
Council in 1961 in their resolutions on UNICEF.2

14. The number and scope of these co-operative
activities reflect the extent to which the United
Nations and certain specialized agencies, including
WHO, share responsibility for social development.
The strengthening of the United Nations activities
in this field adds to the importance of the relevant
deliberations of the Council, in which the heads of
the specialized agencies take part — namely, those
on social problems and on the development and
co-ordination of the economic and social activities
of the United Nations and the specialized agencies.

II. MATTERS RELATING TO WHO PARTICIPATION IN THE EXPANDED PROGRAMME
OF TECHNICAL ASSISTANCE

A. Study of Central Integration

15. In resolution 851 (XXXII) the Economic and
Social Council decided to establish an ad hoc com-
mittee to report on co-ordination of technical assist-
ance activities. The committee is composed of repre-
sentatives of eight Member governments 3 from among

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1 ECOSOC resolution 830 J (XXXII).
2 General Assembly resolution 1678 (XVI) and ECOSOC
resolution 827 (XXXII).
3 Brazil, Ethiopia, France, Japan, Union of Soviet Socialist
Republics, United Arab Republic, United Kingdom of Great
Britain and Northern Ireland, and United States of America.
the resident representatives, the resolution referred to the closer relationship in the United Nations family of agencies rather than to the technical preparation of projects and programmes which are the responsibility of the United Nations and the various agencies.

16. It was expected that the main question to be considered by this ad hoc committee would be the closer co-ordination and possible unification of the Expanded Programme of Technical Assistance and the United Nations Special Fund. The Director-General considered it essential to consult the Executive Board on this important aspect and for that reason informed the Technical Assistance Committee that he would be unable to comment by the date requested.

17. The considerations that arise can be summarized as follows: the Expanded Programme of Technical Assistance has a longer existence, a broader scope, a financially more modest type of project, and more elasticity and versatility than the younger Special Fund, which finances relatively large undertakings in the field of pre-investment and training activities. The mechanism of the two is also different, in that the Expanded Programme of Technical Assistance is co-ordinated by the Technical Assistance Board, consisting of the executive heads of the participating organizations, or their representatives, which reports to the Technical Assistance Committee, whereas the Special Fund is governed directly by a governing council, consisting of Member States, without the specialized agencies having any policy or planning functions.

18. The Executive Board considered whether or not in principle it is advisable at this stage, or at some future date, to merge the two programmes or whether, while maintaining the separate identities of the two programmes, it would be sufficient to seek ways and means for closer co-ordination between them, with a view to simplifying and making more effective and economical the central management of the two main sources of financing the technical co-operation and pre-investment activities within the United Nations family.

19. The Executive Board took into account a second aspect of this question. Should it be thought that a merger is justified, then it would be desirable that consideration be given to whether the eventual machinery should be the one used for the Expanded Programme of Technical Assistance — namely the co-ordination of activities by an inter-secretariat body — or of the type adopted by the Special Fund — namely a governing council of Member States. In a pragmatic way, the question seems to be whether those responsible for international assistance to governments in the various fields of socio-economic development should co-ordinate their own activities among themselves, reporting thereon to their respective governing bodies as well as to a central governing body, analogous to the Technical Assistance Committee, or whether co-ordination should be effected by an exterior governing agency directly.

20. In the ultimate analysis the solution to the problem in its two aspects — namely, whether there should be a merger or not, and, if so, what mechanism it should have — lies in seeking what is best for the assisted countries, what is likely to be conducive to effective technical help, rapid action and harmonization of activities in the delivery of the technical co-operation programme by the various agencies.

21. In the opinion of the Director-General, there are certain fundamental differences between the Special Fund and the Expanded Programme of Technical Assistance, both in their concept and in their management. Certainly, every possible means should be studied of achieving simpler and more effective and economical ways of assisting countries and their programmes, through the use of these two sources of funds as a part of the total resources available for international co-operation. However, the experience thus far does not seem to warrant undertaking at this premature stage the complex task of integrating two mechanisms which are so different in concept, in scope, in management and in operation.

22. The Administrative Committee on Co-ordination, at its thirty-third session held in October 1961, stated that “it would, in the opinion of members of the ACC, be difficult at this stage for the agencies to reach firm and definitive conclusions regarding the major problem before the ad hoc committee, namely, that of the possible unification of the Special Fund and technical assistance operations”.1 However, members of the Administrative Committee on Co-ordination were agreed that “any immediate unification of the operations of the Expanded Programme of Technical Assistance and the Special Fund would not be desirable”.1 The Administrative Committee on Co-ordination was in favour of closer integration and, as a first step, recommended a careful study of the ways in which closer links between the two operations could lead to more effective international action. The Administrative Committee on Co-ordination confirmed these views at its May 1962 session and expressed the hope that its members would be afforded an opportunity to comment on the findings of the committee before the Economic and Social Council took action on them.

1 ECOSOC document E/3625, para. 27.
23. WHO participation in the Expanded Programme of Technical Assistance has provided benefits to countries and has clearly demonstrated the usefulness of this source of financing. The inter-agency exchanges of views which the Technical Assistance Board (TAB) has facilitated have been invaluable. Experience has shown that much benefit can be derived from the general support that WHO can receive from and, at the planning and operating field level, give to the resident representative. However, co-ordination should not require cumbersome central machinery and integration would certainly create problems of unmanageable dimensions. The essential requirement for central co-ordination is the provision for joint action by mutual consent which can ensure regular consultation among the specialized agencies on all questions bearing on functions and activities within their competence. Central co-ordination has been most effective when those ultimately responsible for the activities involved recognized the need for and sought the most effective way of utilizing the rather scanty resources they have available to face the enormous and complex tasks assigned to them.

24. The conclusions of the Executive Board in this matter are expressed in its resolutions EB29.R47 (entitled Study of Central Integration: Economic and Social Council Resolution 851 (XXXII)) and EB29.R52 — Organizational Study on Co-ordination with the United Nations and Specialized Agencies. These were communicated to the ad hoc committee immediately after the twenty-ninth session of the Board with the reservation that the conclusions of the Board's organizational study are subject to the decision of the World Health Assembly.

B. Co-ordination in the Field

25. In resolution 856 (XXXII) the Economic and Social Council urged the Administrative Committee on Co-ordination, in consultation with the executive heads of the Technical Assistance Board and the United Nations Special Fund, to ensure that a high standard of representation was maintained in all countries served by resident representatives, and that adequate support, both substantive and administrative, was made available to them. In paragraph 4, it requested the Administrative Committee on Co-ordination “to submit to the Council at its thirty-fourth session proposals by which resident representatives may, for purposes of co-ordination, be kept informed about and, as appropriate, associated with inquiries and negotiations concerning programmes of technical co-operation undertaken or contemplated by the United Nations, the specialized agencies and the International Atomic Energy Agency, whether financed from voluntary funds, including the Expanded Programme of Technical Assistance, the United Nations Special Fund and UNICEF, or from the regular budgets of their respective organizations.” It requested the Administrative Committee on Co-ordination to transmit its proposals to the ad hoc committee referred to above. The sponsors of the resolution had explained that paragraph 4 covered “technical co-operation” activities carried out under the Expanded Programme, the Special Fund and the regular programmes of the organizations as well as the United Nations Children's Fund. It was not intended to include the activities of the International Bank and the International Monetary Fund, except for technical assistance projects. As regards the recommendations in paragraph 4 that the resident representatives “may, for purposes of co-ordination, be kept informed about and, as appropriate, associated with inquiries and negotiations concerning programmes of technical co-operation”, the sponsors had asked that the report of the Committee make it clear that it was not intended to interfere with negotiations of a technical nature which only professionally qualified staff members of the organizations should carry out. The use of the words “as appropriate” indicated that the governments and the organizations could associate resident representatives in the negotiations when the latter were in a position to help, and did not constitute an obligation imposed on them, nor a service of which they had to make use.2

26. The Administrative Committee on Co-ordination, at its thirty-third session held in New York in October 1961, approved the following proposals for communication at the appropriate time to the various organizations concerned:

The members of the ACC participating in EPTA have agreed that it is the policy of their respective organizations to apply the following principles and take the necessary steps to ensure that these principles are fully implemented:

(a) All EPTA programming discussions between officials of the participating organizations and officials of the government concerned should be held with the advance knowledge of the resident representatives, and, as appropriate, with their participation.

(b) No request for a change in the approved EPTA programme for a given country should

2 Report of the Technical Assistance Committee to the Economic and Social Council, ECOSOC document E/3547, para. 156.
be forwarded by a participating organization to TAB headquarters without prior consultation with the resident representative and through him with the co-ordinating unit of the government concerned.

(c) All chiefs of mission or country representatives should be briefed by their headquarters on the new co-ordinating role of the resident representative, and be told to work closely with him, keeping him fully informed of any major proposals or developments in so far as EPTA programming is concerned.

(d) Resident representatives should be directed by the Executive Chairman of TAB to keep each agency fully informed of matters of interest to that agency and, in particular, of all discussions of such matters which they may have with governmental authorities.

(e) Resident representatives and chiefs of mission should act in closest co-operation with each other, and mission chiefs should serve as technical advisers to the resident representatives in their respective fields, appropriate governmental authorities being informed of this arrangement.

(f) The Executive Chairman of TAB and resident representatives concerned should be informed promptly of the appointment of chiefs of mission. Newly appointed chiefs of mission in countries where there is a resident representative should be instructed to call on him at the outset. Appropriate use should also be made of his help in establishing contact with the central government.

(g) Resident representatives should be fully informed, beginning with the "request" stage, of all comparable programmes of technical assistance carried out by a participating organization, and their co-operation sought in ensuring full co-ordination between these programmes and programmes under EPTA.

(h) Resident representatives and all chiefs of mission should hold periodic meetings under the chairmanship of the resident representative, to increase mutual understanding and co-ordination at the country level.

(i) Participating organizations should keep resident representatives fully informed as regional projects in which their countries might participate are being developed and carried out.

(j) Resident representatives should be given advance notice of all visits of headquarters officials of the participating organizations concerned with technical assistance, and kept fully informed of the purpose and results of discussions at the country level.\(^1\)

27. WHO country representatives are assigned to a country in agreement with the health and other authorities of the government concerned. Their role varies according to the needs of the countries to which they are assigned and to the authority delegated to them by the regional directors. Their duties include *inter alia* the following:

(a) assisting and advising the health authorities of the government in assessing problem areas and in recommending projects which may help to define or resolve these problems;

(b) collaborating in project planning and development, including advice and assistance in determining the nature, scope, duration and cost of projects, and in drafting the plans of operations which contain the objectives, plan of action, commitments of signatories, evaluation, and continuation of activities by the government, after international assistance is withdrawn;

(c) assisting health authorities in preparing project submissions sent to the national co-ordinating or planning committee, wherever there is one, as justification for inclusion of projects in the country programme financed under the Expanded Programme of Technical Assistance;

(d) stimulating and participating in the periodic assessment of the projects with the government and, as appropriate, with the resident representative of the Technical Assistance Board, with a view to ensuring that specific attainment of objectives is realized;

(e) acting as technical adviser to the resident representative of the Technical Assistance Board and the United Nations Special Fund in the latter's performance of his overall functions concerning programme planning and negotiations, advising on and keeping him informed of all aspects related to health activities in the country of his assignment;

(f) assisting and advising health authorities to co-ordinate all assistance available in the field of health, irrespective of its financial source, governmental, intergovernmental, bilateral and non-governmental;

(g) in matters related to health, co-operating with the representatives of the international agencies, and, if so requested by the government, with non-governmental organizations and bilateral forms of assistance;

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\(^1\) ECOSOC document E/3625, para. 31.
(h) providing leadership and co-ordination of WHO-assisted activities in the country of his assignment.

28. The fundamental objective of co-ordination is to improve the assistance given to governments and, for this reason, co-ordination is most effective when implemented at the country level. There it should seek not only to avoid duplication, but more positively to unite all efforts in the common pursuit of interdependent or related goals.

29. Among the general principles that guide the Expanded Programme of Technical Assistance for Economic Development, one of the most important states that such assistance “shall be rendered by the participating organizations only in agreement with the governments concerned and on the basis of requests received from them”. The Constitution of the World Health Organization in Article 2 indicates that, in order to achieve its objective, the functions of the Organization shall be inter alia “to assist governments, upon request, in strengthening health services” and “to furnish appropriate technical assistance and, in emergencies, necessary aid upon the request or acceptance of governments”. The programmes of the Organization reflect the priorities established by each government and are in every sense country-centred.

30. Co-ordination of activities which have so basic a national orientation must be achieved, if it is to be effective, at the country level. None of the international agencies are supra-national in character or in functions and they exist solely as instruments for cooperation among nations. They can best serve that purpose if at the point of delivery, the national level, their actions can be co-ordinated while they, at the same time, preserve their own channel of communications with governments on matters within their competence. The experience of the Organization over the years has shown that WHO country or area representatives have an important role to play both in technical co-ordination of health activities at the national level, and at the same time in acting as technical advisers to the resident technical assistance representatives.

31. The co-ordination that the resident technical assistance representatives and the representatives of the agencies can ensure is fundamentally an external one, intended to harmonize and facilitate the assistance given to a particular country from outside sources. It is vital that governments themselves provide the internal co-ordination which is indispensable for the planning, execution and evaluation of activities that receive international support. This internal co-ordination can best be supported from the outside if, at the level of the country, the representatives of the international agencies help each ministry to co-ordinate its work within its sphere of competence and with that of related ministries. The experience of the Organization shows that, in this direction also, the services of the WHO country or area representatives can be invaluable.

32. The resident representative has undoubtedly an important role to play in co-ordinating the work of the international agencies which he serves in the manner outlined by the Administrative Committee on Co-ordination. It is also clear that the WHO representative has a co-ordinating role to play in the way outlined in paragraph 27 of this report. The functions of the resident representative of the Technical Assistance Board and those of the WHO country representative, far from being mutually exclusive, are indeed mutually supporting and complementary in that, while the general aspects of co-ordination are assigned to the resident technical assistance representative, the WHO representative is fully responsible for co-ordination of technical activities in the health field. This distinction between the responsibilities for the general aspects and the technical aspects of co-ordination is relevant in considering the relationships which must be developed at the national level.

33. The sponsors of resolution 851 (XXXII) had initially used the words “closer integration” in paragraph 1 (b) of the resolution but had eventually replaced the word “integration” with the word “co-ordination”. The Director-General considers that this change was important since, in his opinion, it is co-ordination at the country level that is so eminently desirable and effective. Any distant central integration and/or direction of development planning which may be attempted is doomed to dismal failure, since the activities concerned vary so widely and have each to be implemented in countries whose conditions can and do vary so fundamentally. In fact, adaptation of principles and methods to the needs and resources, as well as circumstances, of each individual country is an indispensable part of co-ordination and can only be achieved realistically at the country level.

1 The paragraph in question reads:
1. Decides to establish an ad hoc committee… to undertake … a study of the further steps which may be needed to:

(b) Bring about a closer co-ordination, whenever possible, of the technical co-operation and pre-investment activities of the United Nations, the specialized agencies, the International Atomic Energy Agency and the Special Fund, with the object of advancing the achievement of country development objectives;
In this, as in many other aspects of co-ordination, the resident technical assistance representative has undoubtedly his role to play through general assistance and support of the technical country-programme activities.

34. It is the belief of the Director-General that co-ordination at the country level is a fundamental prerequisite for efficient use by the government of all international and bilateral assistance available to it. In this respect, the external general co-ordination of the resident technical assistance representatives, eminently essential though it be, must have a counterpart in the recipient government’s internal co-ordination of the various ministries or departments concerned with technical assistance activities.

35. In this respect, each agency, through its field staff or representatives, should be in a position to give direct technical assistance to ministries or departments in identifying both those areas for which the internal co-ordination referred to here is indicated and also the methods by which it can best be achieved.

36. Co-ordination has thus a technical and an administrative aspect, as well as an external and an internal component. The resident technical assistance representative must receive every support in dealing with the external co-ordination, but the government and the agencies must work directly and very closely in seeking technical and internal co-ordination for the most balanced, effective and economic planning and execution of the overall programme for economic and social development in recipient countries.

37. After considering the Director-General’s report on this matter, the Executive Board adopted resolution EB29.R48 — Co-ordination in the Field: Economic and Social Council Resolution 856 (XXXII).

C. Volunteer Workers

38. In resolution 849 (XXXII) the Economic and Social Council, recognizing that volunteer technical personnel can play an important role in the economic and social development of assisted countries, approved, subject to the agreement of the recipient government, the consideration of the use of volunteer technical personnel in the technical assistance activities of the United Nations and invited the United Nations related agencies to give consideration to the use of such volunteers, not only in their technical co-operation programmes financed from the United Nations resources but also in those financed from their assessed budgets. In an annex to its resolution, the Economic and Social Council outlined certain principles which should govern the use and assignment of volunteer technical personnel.

39. The Administrative Committee on Co-ordination examined some of the implications which this resolution might have for the international agencies. With a view to avoiding any major discrepancies of practice among the organizations that decide to use volunteer workers, it agreed in May 1962 on certain preliminary understandings as to the implementation of certain of the principles laid down by the Council and decided to examine the question further.

40. The Director-General believes that, while volunteer workers can be used in certain circumstances to assist in the development of health projects, particularly to strengthen the national counterpart team but also as international civil servants, there should be a uniformity of practice in the recruitment and use of such volunteers by the agencies. The Director-General reported on this matter to the Executive Board, whose views are set out in resolution EB29.R49 — Use of Volunteer Workers.

41. The sixteenth session (1961) of the United Nations General Assembly, to which resolution 849 (XXXII) was referred, deferred its consideration of this matter until the seventeenth session of the General Assembly.

III. INTER-AGENCY PROGRAMMES INCLUDING CONCERTED ACTION

A. Education and Training

42. The United Nations General Assembly adopted a series of resolutions concerning education. In resolution 1677 (XVI) it called on UNESCO, as the agency responsible for the literacy campaign and for assistance in all fields of education, to present recommendations for co-operation in the eradication of illiteracy throughout the world. Both the General Assembly (resolution 1717 (XVI)) and the Economic and Social Council (resolution 837 (XXXII)) invited governments and the international agencies concerned to carry out the recommendations and decisions of the Conference of African States on the Development of Education in Africa organized in 1961 by UNESCO and the Economic Commission for Africa, and to increase their educational assistance to that continent. In resolution 1697 (XVI), the General Assembly requested a special report in 1962 on the training of indigenous civil and technical cadres in the non-self-
governing territories, which is relevant to Executive Board resolution EB27.R21 on administrative and technical training. It also established, in resolution 1705 (XVI), a special training programme for indigenous people of South-West Africa, particularly those who are outside the territory, and invited the specialized agencies to co-operate in this programme. Co-operation by WHO was recommended by the Executive Board in its resolution EB29.R46.

43. The Economic and Social Council, in August 1961, adopted resolution 838 (XXXII), in which it welcomed the action taken by the Administrative Committee on Co-ordination to harmonize the policies of the organizations concerned with education and training and to work towards an integrated programme, first in Africa and later in other parts of the world. In May 1961 the ACC reinforced its mechanism for dealing with these questions by creating a sub-committee on education and training. At the request of the Council, it prepared in May 1962 a report on the progress of the integrated programme in Africa and Latin America and on practical measures for co-ordinating educational assistance, including that given by regional organizations outside the United Nations system and by bilateral agencies.

B. Industrial Development

44. In resolution 1712 (XVI), on the activities of the United Nations in industrial development, the General Assembly endorsed the conclusions of the Economic and Social Council (expressed in resolution 839 (XXXII)) on ways of intensifying programmes in this field. While emphasizing the co-ordinating functions of the United Nations Industrial Development Centre, it called for a report on the advisability of establishing a specialized agency or any other appropriate body for industrial development.

45. In April 1962 the Economic and Social Council approved an expansion of the United Nations programme and staff in this field, the appointment of a Commissioner for Industrial Development and the terms of reference of the United Nations Centre, which will facilitate co-ordination through the exchange of information on the work of the United Nations family and represent all the organizations in contacts with outside institutions. The Council requested the Secretary-General to appoint an advisory committee of ten experts to examine, in the light of the present activities of the United Nations family, what further organizational changes might be necessary to intensify, concentrate and expedite the United Nations effort for industrial development. The ACC noted that the specialized agencies concerned will be consulted in this regard.

C. Water Resources

46. After examining the second report of the United Nations Water Resources Development Centre, the Economic and Social Council (in resolution 876 (XXXIII)) requested the Centre, in co-operation with the organs concerned, to draw up proposals for a priority programme in the United Nations Development Decade. In response to the same resolution of the Council the ACC agreed, in May 1962, that the Centre, while remaining located at United Nations headquarters under the supervision of the Secretary-General — represented by the Under-Secretary for Economic and Social Affairs — should be an independent office with its own head and its own staff provided by the United Nations and the specialized agencies concerned. In addition to the head of the Centre and secretarial staff, the United Nations will provide officers in its technical fields. From the autumn of 1962, FAO and WHO will each second a professional officer having well-rounded experience in water problems in addition to particular competence; such staff will be made available thereafter as necessary by all the agencies concerned. These officers will assist in drafting the programme for the Development Decade as well as in the regular co-ordinating work of the Centre, and will take part in consultations on the work of the Special Fund and with all the participating organizations.

D. Rural Development

47. In resolution 840 (XXXII) on rural development the Economic and Social Council requested the ACC to work towards the fullest integration of activities in this field, including community development, cooperatives and land reform, and to report on the possibility of extending regional training and research programmes designed to raise the standard of living of rural populations. It noted with satisfaction the proposal of ACC, which became effective in October 1961, to expand the terms of reference of its working group on community development so that all rural and community development programmes which require co-operative action are considered jointly at secretariat level.

E. Public Administration

48. In resolution 796 (XXX) on public administration programmes, the Economic and Social Council requested a report on measures to improve the effec-

1 ECOSOC resolutions 872 and 873 (XXXIII).
tiveness of international action in this field, including the desirability of concerted action. The Administrative Committee on Co-ordination reviewed in May 1962 the report on this subject prepared by the Secretary-General in consultation with the specialized agencies. It agreed with the conclusion of the report that concerted action under the ACC would be required only for selected aspects of public administration in which many agencies are interested. The report also contains the recommendation that the Secretary-General should convene periodically a group of experts to review and evaluate the work that is being done by the United Nations family in the field of public administration.

49. The ACC recognized that each specialized agency and the IAEA, in its own sector, has specific responsibility in the field of public administration, but that all are dependent to a considerable extent upon the general stimulus towards higher standards which the United Nations family as a whole can provide. It agreed on topics requiring special study, including several with which WHO is concerned. The members of ACC expressed their confidence that the United Nations group of experts, if established, will work in close consultation with the specialized agencies.

50. The ACC decided also to call the earnest attention of the Economic and Social Council to the marked increase in the number of requests for operational and executive personnel at different levels in many developing countries, particularly in Africa; the fulfilment of these requests would require a significant increase in the financial resources now available for this purpose to the United Nations and the specialized agencies, in particular for the OPEX programme.1

IV. OTHER MATTERS AFFECTING WHO'S ACTIVITIES

54. In resolutions 1721 C (XVI) and 1721 D (XVI) the General Assembly requested the Committee on the Peaceful Uses of Outer Space (established by its resolution 1472 (XIV)) to report to the Economic and Social Council and the General Assembly on studies of meteorological and telecommunications aspects which the interested specialized agencies were requested to prepare in 1962.

55. In resolution 1629 (XVI), on the report of the United Nations Scientific Committee on the Effects of Atomic Radiation, the General Assembly invited

F. Urbanization

51. The proposals for concerted action in the field of urbanization, of which the Executive Board took cognizance in its resolution EB27.R22, were approved by the General Assembly in resolution 1676 (XVI) and by the Economic and Social Council in resolution 830 B (XXXII). The Council's resolution invited the United Nations and the specialized agencies concerned to strengthen their work on various aspects of urbanization and recommended governments to consider formulating a national policy on urbanization, within the context of overall development plans along the lines proposed by the Administrative Committee on Co-ordination.2

G. Other Concerted Action Programmes

52. The Economic and Social Council reviewed in August 1961 the progress of concerted action made in the fields of community development3 and of housing and urban development.4 In this connexion it authorized the United Nations to convene ad hoc groups of experts to advise the Social Commission on specific problems within the two fields. It will be recalled that the report on public administration contains a proposal for a similar group. To some extent these expert groups, like the Standing Committee on Social Welfare and Community Development of the Economic Commission for Africa and the proposed advisory committee on industrial development, have an intergovernmental character and are concerned with co-ordination as well as technical matters.

53. The increasing use by the United Nations of various expert groups makes it important that the specialized agencies concerned should participate fully in the relevant arrangements. This they have been able to do with regard to the expert groups which have met to date.

1 Programme for the provision of operational, executive and administrative personnel.

3 ECOSOC resolution 830 F (XXXII).
4 ECOSOC resolution 830 C (XXXII).
Advisory Committee and in co-operation with the interested United Nations specialized agencies and the International Atomic Energy Agency (resolution 834 (XXXIII)). The conference is to be convened in Geneva in March/April 1963. The ACC agreed on the arrangements for co-operation, in accordance with which WHO has assumed technical responsibility for the health section of the Conference.

57. During its debate on South-West Africa the General Assembly was informed of the action taken by WHO in response to the resolution 1566 (XV) on assistance of the specialized agencies and UNICEF in the economic, social and educational development of South-West Africa. In resolution 1702 (XVI) it solemnly proclaimed the inalienable right of the people of South-West Africa to independence and national sovereignty, and decided to establish a United Nations Special Committee for South-West Africa. The Special Committee will continue the work of the committee established in 1953 by General Assembly resolution 749 A (VIII), and, in consultation with the Mandatory Power, will take a series of actions with a view to preparing the territory for independence. The Special Committee is authorized inter alia to co-ordinate “the economic and social assistance with which the specialized agencies will provide the people [of South-West Africa] in order to promote their moral and material welfare”.

58. The issue of the General Assembly’s debate on the question of the renewal of the Committee on Information from Non-Self-Governing Territories was a decision (resolution 1700 (XVI)) to continue the Committee on the same basis as hitherto until the General Assembly decides that the principles embodied in Chapter XI of the Charter and the Declaration on the granting of independence to colonial countries and peoples have been fully implemented. The General Assembly, by resolution 1654 (XVI), established a special committee to study the implementation of this declaration and report to the General Assembly at its seventeenth session.

59. The Director-General invited the views of the Executive Board concerning the request addressed to the World Health Organization by the Economic and Social Council of the United Nations in resolution 821 (XXXII), entitled “Operations based on Customs”, which was adopted on 19 July 1961. The resolution is as follows:

_The Economic and Social Council_

1. Draws the attention of the World Health Organization to the report of the 1960 Seminar on the Participation of Women in Public Life and particularly to paragraphs 60, 61 and 62;

2. Requests the World Health Organization to inform the Council whether it deems it possible to meet the wishes clearly expressed by African women by undertaking a study of the medical aspects of operations based on customs to which many women are still being subjected.

60. At the conclusion of its debate on this subject, the Executive Board adopted resolution EB29.R50 — Operations based on Customs: Economic and Social Council Resolution 821 (XXXII).

61. The Report of the Council to the General Assembly of the United Nations contains the following account of the deliberations on this subject:

628. The report of the 1960 Seminar on the Participation of Women in Public Life (ST/TAO/HR.9) held at Addis Ababa, Ethiopia, indicated that the participants were most outspoken in their condemnation of certain operations based on customs. The Council considered a recommendation of the Commission (E/3464, para. 47, resolution 2 (XV)) to the effect that the Council should request WHO to inform it whether WHO could undertake a study of the medical aspects of such practices. The Council recalled that a similar request had been made by the Commission at its fourteenth session (E/3360, para. 18, resolution 5 (XIV)) and that the Council had decided (resolution 771 D (XXX)) to express its support for the efforts of governments to abolish such practices. Some members felt that the Council should not address itself once more to WHO. Most of them were of the opinion, however, that the attitude of the African women gathered at Addis Ababa constituted a new factor and that the attention of WHO should be drawn to the part of the report of the Addis Ababa seminar dealing with the subject of operations based on customs. Pursuant to the Commission’s recommendation, the Council adopted a resolution (821 II (XXXII)), under the title “Operations based on Customs”, in which it requested WHO to inform it whether it could undertake a study of the medical aspects of operations based on customs to which many women were still being subjected.

62. The deliberations of the Commission on the Status of Women on this question are set out in its report to the Economic and Social Council as follows:

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1 UN document ST/TAO/HR.9.
2 UN document A/4820.
39. During the debate, several members referred to the wish, clearly and firmly expressed by the African women who had participated in the Addis Ababa seminar, for the abolition of the practice of the ritual operations based on customs which were performed on girls and women in their countries. They considered that the unanimity of these views bore witness to the urgency and importance of this question, and that some step should be taken by the Commission to help African women put an end to these practices. They noted with regret the absence of a representative of WHO at this seminar and it was felt that this specialized agency, which has been asked before by the United Nations to undertake a study of these practices, should be invited to take cognizance of the seminar's report (ST/TAO/HR.9).

40. The representative of WHO referred to resolution WHA12.53, adopted by the Twelfth World Health Assembly in May 1959, in which the Assembly had declared that ritual operations (now referred to as “operations based on customs”) were based on social and cultural factors which were outside the competence of WHO. She also referred to Economic and Social Council resolution 771 D (XXX) and indicated that WHO was ready, in keeping with this resolution, to assist any government at its request by providing services within its sphere of competence, but that so far no such request had been received.

43. The representative of the Netherlands submitted an oral amendment to operative paragraph 2 of the draft resolution for action by the Council: she proposed that the words “what action it intends to take” should be replaced by the words “whether it deems possible”, and the words “regarding measures to combat” by the words “by undertaking a study of”. The co-sponsors of the draft resolution accepted the amendment.

44. Many members of the Commission expressed support for the draft resolution as amended. They were of the opinion that the Commission should help the African women who had unanimously and very clearly expressed their desire for the abolition of the practices in question.

45. Other members thought, however, that this question should be considered only when the Commission’s members included representatives of African countries, because the question was of direct concern to them. They referred to the views they had expressed at the Commission’s fourteenth session and also recalled that at the thirtieth session of the Economic and Social Council a representative of an African country had asked the Council to take no action in this matter. They noted with satisfaction that the report of the Addis Ababa seminar indicated that African women would take action themselves in the near future, and thought that this was probably the best solution.
1. Introduction

1.1 In its resolution 1710 (XVI) the General Assembly of the United Nations, considering that economic and social development of the economically less developed countries is of primary importance to them as well as basic to the attainment of international peace and security, designated the current decade as the United Nations Development Decade, in which Member States would intensify their efforts to accelerate progress in the growth of the economy and in their social advancement. The General Assembly also passed resolution 1715 (XVI) regarding the United Nations Development Decade, but it dealt with a programme for international economic cooperation which is only of indirect interest to the Organization.

1.2 The Director-General drew the attention of the Executive Board, at its twenty-ninth session, to these resolutions, and particularly to the first because of its importance to the work of the Organization. In particular it should be noted that, in paragraph 4 of that resolution, the Secretary-General of the United Nations was asked to consult, as appropriate, with the heads of the international agencies with responsibilities in the financial, economic and social fields, to develop proposals for the intensification of international action for economic and social development. These proposals will be transmitted by the Economic and Social Council to the General Assembly at its seventeenth session.

2. Action taken by the Executive Board

The Executive Board, at its twenty-ninth session, having considered the report of the Director-General on this subject, passed resolution EB29.R44, requesting him to co-operate with the Secretary-General of the United Nations in developing the proposals for the intensification of action in the fields of economic and social development, as envisaged in General Assembly resolution 1710 (XVI), and recommended that, in so far as the health aspects of accelerated economic and social development are concerned, governments participate in these programmes, with the assistance of the World Health Organization if they so wish, by undertaking a ten-year public health programme with certain specific objectives to raise the standards of the health of the peoples.

3. On 29 January 1962, the Secretary-General of the United Nations, in compliance with paragraph 4 of the General Assembly resolution 1710 (XVI), requested the World Health Organization to make proposals or suggestions for an intensification of action in the fields of economic and social development, with particular reference to a number of specific approaches and measures designed to further the objectives in view, of direct interest or concern to the Organization. He also requested suggestions of a more general character regarding the proposals he was called upon to make.

4. In compliance with this request, the Director-General sent proposals for a health programme for the Development Decade to the United Nations. This reply forms Part I of the present report: Outline of a health programme for the Development Decade.

5. Subsequently, on 9 March 1962, the United Nations requested the Director-General to set goals for the Decade, based on certain assumptions as to the financial support which would be available.

6. The Director-General's reply to this request forms Part II of this report: Quantitative targets for the health programme for the Development Decade.

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1 See resolution WHA15.57.
A HEALTH PROGRAMME FOR THE DEVELOPMENT DECADE

PART I. OUTLINE OF A HEALTH PROGRAMME

Preamble

The resolution of the United Nations on the Development Decade heralds an era of accelerated and augmented national socio-economic development, of which health forms an integral, significant part. The patterns of health throughout the world vary so much that no single standard can be set for all peoples, or even for the people of the same country. Standards apart, however, each community has a level of living which fluctuates in accordance with changes in social and economic conditions which are affected by and, in turn, affect health standards considerably.

This fact is indeed given recognition by the Committee of Experts, convened by the United Nations in New York in June 1953, under the provisions of General Assembly resolution 527 (VI) and resolution 434 B (XIV) of the Economic and Social Council, to consider the subject "International Definition and Measurement of Standards of Levels of Living". It recommended that twelve components be taken into consideration in any such task and put health, including demographic conditions, as first on this list.

While health was thus given pride of place in any measurement of levels of living, bearing in mind the definition of health adopted by WHO ("Health is a state of complete physical, mental and social well-being..."), it is clear that other components of socio-economic development all have, to a greater or lesser degree, a health element. It is because of considerations such as these that the Development Decade should imply so much for the health and welfare of many millions the world over.

There follows an outline of a health programme for the Development Decade, based on sound planning, giving due importance to the education and training of personnel, specifying targets to be aimed at in its implementation and adequately financed and supported by international resources.

1. Introduction

1.1 Views of the WHO Executive Board. The Executive Board of the World Health Organization, at its twenty-ninth session in January 1962, considered United Nations resolution 1710 (XVI), adopted by the General Assembly, to which the Director-General of the World Health Organization had drawn its attention in his report on decisions of the United Nations, specialized agencies and the International Atomic Energy Agency affecting WHO’s activities. The Executive Board of WHO has repeatedly drawn attention to the "inseparability of social, economic and health factors" and to the fact that "the human factor is fundamental to social and economic development, and that the protection and improvement of health must underlie any programme to raise the standard of living".1

1.2 Views of the World Health Assembly. Similarly, the Fifth World Health Assembly, "aware of the intimate interrelationship between the economic value of health services and the wider economic and social fields covered by the family of the United Nations organizations, of which the World Health Organization is a part," had called upon the Economic and Social Council to consider setting up studies "so that the principles of social and economic architecture may be more fully understood and available to policy-making bodies, national and international".2 Again, the Eighth World Health Assembly, in May 1955, pointed to "the direct relationship between economic, social and health factors in the economic development of the under-developed countries".3 More recently, the Board recalled the "programme of WHO for non-self-governing territories in Africa and elsewhere prior to and since their independence, and its impact on the health conditions of these territories, within the general socio-economic development".4

1.3 Health Aspects of the Development Decade. The Executive Board of the World Health Organization expressed its appreciation that the resolution of the General Assembly on the United Nations Development Decade had included among the approaches and measures designed to accelerate progress in the growth of the social and economic advancement of Member States those which "accelerate the elimination of illiteracy, hunger and disease, which seriously affect the productivity of the people of the less developed countries", and also those "for further promoting education in general and vocational and technical training in the developing countries ... in the fields of ... health", as well as the intensification of research and the development of statistical facilities.

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1 Resolution EB11.R57.6.
2 Resolution WHA5.78.
3 Resolution WHA8.33.
1.4 The Policy of WHO. The spirit and aim of the resolution of the General Assembly, particularly the passages referred to in the preceding paragraph, are of direct and immediate interest to the World Health Organization. They reflect a policy consistently followed by the Executive Board and the World Health Assembly and fall well within the scope of its Third General Programme of Work covering a Specific Period, adopted by the Thirteenth World Health Assembly, wherein health is seen in its proper socio-economic context.

1.5 The Resolution of the Executive Board. Following its consideration, the Executive Board adopted resolution EB29.R44 of 25 January 1962, in which it requested the Director-General to co-operate with the Secretary-General in developing proposals for the United Nations Development Decade while, at the same time, it recommended to governments that they undertake, with the assistance of WHO if they so wish, a ten-year public health programme with certain specific objectives to raise the standards of the health of people, such as:

(1) the preparation of national plans for the development of public health programmes for the Decade, co-ordinating these programmes with other related plans in the social and economic fields;
(2) to concentrate on the education and training of professional and auxiliary staff for strengthening their health services with specific measurable targets for expanding each category of staff, depending on pre-determined needs for each;
(3) to establish as baselines certain indices of their current health situation wherefrom to gauge the degree of realization of certain goals, pre-determined as target figures for the Decade;
(4) to devote increased national resources to the control of disease and the improvement of health.

It also urged agencies and governments to increase the level of assistance provided in the field of health with a view to expediting socio-economic progress.

2. National Health Plan

2.1 The Object. The first of four broad fundamental components of the programme of public health development, recommended by the Executive Board for the Decade, which governments might consider with the object of raising the standards of life of their people, is the preparation of a national public health plan, co-ordinated with related plans in the social and economic fields.

2.2 The Purpose. Such a plan would involve the study and investigation of health needs and the available personnel, equipment and building facilities with a view to determining the priorities for action and the most economic and efficient ways for accomplishing them. The main purpose of a national health plan, of course, is to utilize resources as efficiently as possible for solving the most pressing health problems of the people. The plan serves as a guide for developing or strengthening the necessary health services, for making the required adjustments in its implementation and for eventually assessing achievements. It will also provide the necessary information, not only for the personnel concerned in its execution, but also for the government and the communities involved. Moreover, it would help international and other outside agencies to concentrate their assistance on nationally established priorities, thus ensuring that the meagre resources available have a maximal benefit.

2.3 Essential Data. Few countries have at hand all the necessary information and statistical data on which to base a realistic ten-year health development plan. In some countries, such information has to be collated from existing scattered resources; in most it will have to be obtained through surveys undertaken specifically for the purpose.

It is envisaged that such surveys will be necessary in fields other than health and that, therefore, whenever possible they should be carried out simultaneously by a team of specialists in major sectors, contributing to socio-economic development, rather than by individual specialists visiting the country on separate occasions. Furthermore, such teams would enable the government to formulate sound plans for each technical sector, which could be fitted into a well-balanced over-all plan for their national socio-economic development. The World Health Organization would participate in these team surveys whenever appropriate.

2.4 Organizational Levels. Although the levels involved in such a national health plan vary with the different cultural, socio-economic and organizational patterns, broadly speaking, these levels will be the central, the provincial and the local. The main function of central authorities is policy-making and that of local health administrations is essentially operational. Provincial health authorities have intermediate functions of both types. Co-ordination of these three is essential to ensure a homogeneous plan and its harmonious execution.

2.5 **Decentralization.** Historically, organized health work originated in urban centres and has always tended to be slow in moving towards rural areas. Concentration on accelerating this desirable centrifugal expansion should be a fundamental approach, though its implementation will have to take into account the varying priorities established by different countries, which themselves are a composite of biological, social and economic elements, involving consideration of many variables — not least, what the people themselves want. Effective decentralization must be based on the strengthening of health administrations at the local level to enable them to carry out their operational functions effectively. The active co-operation and participation of the people in health activities must be solicited if success and economy in local health services is to be ensured. This can best be achieved through health education in programmes of a "community development" nature, which involve all technical departments in the government with or without international advice and assistance. The World Health Organization attaches the highest significance to its participation in such programmes.

2.6 **Technical, Economic and Social Considerations.** A technically sound, realistic, well-conceived and well-based health plan would, in itself, represent the best argument for convincing government authorities to provide the facilities required for the attainment of established objectives. For such a plan would take into account not only the technical aspects, such as the epidemiological and other, but also economic considerations, such as resources and costs, as well as the degree of benefit that may be expected, no less than social considerations, such as the attitude and wishes of the communities concerned.

2.7 **WHO Assistance.** In the last analysis, the responsibility for such planning lies fully with governments. However, there are many countries of the world which today lack the material or technical requirements for sound national health planning. The World Health Organization will, therefore, continue to take the necessary steps to strengthen its services for meeting requests in this urgent and important field. Experienced public health advisers are being increasingly assigned to countries to help develop such a plan through surveys and the collection of the essential data on which to establish priorities, coordinate the services involved and link the development of health services with socio-economic development generally.

2.8 **Co-ordination.** In May 1951, the Fourth World Health Assembly, recognizing that a major function of the World Health Organization is to act as a coordinating authority on international health work, urged upon Members the desirability of promoting such co-ordination by encouraging agencies furnishing technical assistance to co-operate with the World Health Organization when planning their activities.\(^1\)

3. **Education and Training**

3.1 **The Object.** The second component of the recommended programme of public health development for the Decade is a concentrated effort in the field of education and training of professional and auxiliary medical staff for strengthening the health services, establishing definite targets for expanding each category of staff, based on estimated needs.

3.2 **The Need.** The efficiency of health services depends fundamentally on the quality of suitably trained personnel. Throughout most of the countries of the world today, there is a very urgent need for trained personnel to undertake public health responsibilities and to extend public health services to the whole population of the country. It is for this reason that the education and training of personnel is a constant basic feature of all technical assistance given by the World Health Organization to assisted countries.

3.3 **Key Staff.** The key personnel in any well-planned and well-organized health programme are the physician, the public health nurse, the public health engineer, the sanitarian, the dentist, the pharmacist and the laboratory specialist. In order that these highly-trained individuals may serve most effectively, it is necessary to train auxiliary personnel to assist them in providing an adequate service for the greatest number of people.

3.4 **Staff Categories.** The WHO Expert Committee on Public Health Administration, which met in December 1951,\(^4\) gave a list of the following categories of health personnel needed to carry out a comprehensive health programme:

1. **Medical and health personnel:** Physicians — medical specialists, public health officers and specialists, general physicians and practitioners; nurses — public health nurses, general nurses, nurse-assistants; pharmacists; nutritionists; health statisticians; nurse-midwives; midwives; physiotherapists; dieticians.

2. **Sanitation personnel:** Health engineers; sanitary inspectors (sanitarians); dairy and food technologists; veterinarians.

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\(^{1}\) Resolution WHA4.23.

3. **Dental personnel**: Dentists; dental nurses; dental technicians.

4. **Laboratory personnel**: Laboratory specialists — pathologists, microbiologists, bacteriologists, parasitologists, entomologists, chemists, physicists; laboratory technicians; X-ray technicians.

5. **Other personnel**: Health educators; social workers; administrative assistants — hospital, general.

3.5 **Auxiliaries.** In considering the staffing of health services, it is necessary to give increasing attention to the training of the auxiliary worker. This is partly due to the enlarged scope of a modern health service — its extension into the fields of nutrition, mental health, pharmacy and veterinary science and the broadened outlook on environmental sanitation methods which can be applied for the benefit of man in society; and it is to some extent the inevitable result of increasing specialization within the health and social services. Also, in many countries, it is still imperative that use be made of some trained workers who, when properly supervised, can make an invaluable contribution to public health. Although the fully trained professional health worker is indeed the most desirable, in many areas services can be rendered only by auxiliary personnel, both at present and in the foreseeable future during the Decade.

3.6 **Two Levels.** The programme of education and training has, therefore, to be conceived at two levels, one for the professional and technical medical staff and one for auxiliary medical personnel. In view of the fact that several countries do not have sufficient facilities for developing their own training programmes, the programme of education and training that is developed locally has, at least in the initial phase, to be supplemented with fellowships for studies abroad.

3.7 **Staffing Patterns.** As countries complete the basic surveys on which to formulate a national health plan, referred to under section 2 above, it will become possible to determine the organizational pattern of health services that is best adapted to the needs of the country and, then, to estimate the number of each type of staff required. On this basis, countries can proceed to develop long-term educational plans commensurate with their economic resources and social development.

3.8 **Targets.** To stimulate and maintain interest in the development of an adequate staffing of health services, precise numerical staff targets might be envisaged for training and utilization. However, such plans must take into account and be geared to the rate of development of general education.

3.9 **Financing.** Urgent problems must be given first priority in terms not of preconceived notions, but in the realistic context of the country's actual health problems, its needs and resources. A realistic education and training plan of this kind, proposing reasonable targets for staffing essential health services, would constitute the best argument for securing the necessary financing.

3.10 **WHO Assistance.** International assistance can supplement the efforts of countries in realizing their targets, through action at the regional and interregional level and through regional co-operation and inter-agency collaboration. The World Health Organization would continue to assist countries in surveying their education and training needs, their staffing resources, actual and potential, and the most efficient and economic patterns for establishing and upgrading medical schools and facilities for training of professional, paramedical and auxiliary staff through courses adapted to the needs of the countries concerned. Fellowships will also be used to promote the training of key personnel and potential teachers. For those with common cultural, socio-economic patterns and language, regional facilities may accelerate progress in staffing national health services with competent national staff. The World Health Organization has a role to play in organizing appropriate intercountry seminars and workshops for the exchange of experience between health workers from different countries facing similar health problems.

In this fundamental field of education, the World Health Organization will continue to collaborate with UNESCO, ILO and FAO with a view to enabling countries to formulate their medical education planning and targets within the realistic context of other needs in the socio-economic field.

4. **Health Targets for Development**

The third component of a possible programme of public health development would be the establishment as baselines of certain indices of the current health situation of countries wherefrom they could gauge the degree of realization of certain health goals, predetermined as target figures for the Decade, in, for example, the fields listed below, and use these objectives to raise the standards of life of people, the progress achieved being related to the improvement brought about in the expectation of life if this is at all possible:
(a) Infant mortality — establishing its present level and seeking to lower it by an adequate percentage figure which will vary from country to country.

(b) Communicable diseases — ascertaining the incidence of diseases like malaria, smallpox or other prevalent communicable diseases, and endeavouring to eradicate them, at least reducing their incidence to the point where they cease to be public health problems.

(c) Nutrition — ascertaining, through sample surveys, the current nutrition standards of their population and, if indicated, implementing a programme for their improvement, the progress achieved being gauged against the baselines thus established.

(d) Sanitation — making available basic facilities, such as the supply of potable water and the means for private or public sewage disposal to a determined percentage of their urban and of their rural populations.

5. Financial Support for Health Development

The last consideration in the four-point programme, outlined by the Executive Board in its recommendations to governments, concerns the financial aspect. Governments were recommended to devote increased national resources to the control of disease and the improvement of health. The significance that health has in the life of the individual, in the welfare of the community and in the prosperity of the nation is a fundamental consideration.

Much of the poverty and ignorance that exist in many areas of the world today are directly or indirectly the outcome of disease, itself the result of an inimical biological environment, low standards of environmental sanitation, poor incomes and low standards of living generally. Any effort that promotes the living standards of communities may be expected in general to raise their standard of health, but it is essential that governments devote sufficient resources to make possible a sustained effort in developing the public health services of the community. If, during the Decade, infant mortality is to be reduced, nutrition improved, the spread of disease curtailed and the people given more sanitary facilities for healthier living, it is essential that a commensurate financial outlay be earmarked for the purpose. A realistic target to ensure adequate financial support for the development of health during the Decade would be around a 10 to 15 per cent. annual increase in the funds allocated by governments for national health services, instead of the "normal" 5 to 7 per cent. In some countries with undeveloped economies, other nations will have to provide increasing assistance, directly or through international agencies, to enable the countries to catch up with the developments of modern science sufficiently to benefit thereby, particularly in the field of health, where much misery, suffering and crippling could be averted if sufficient funds were available. To this end, the World Health Organization must increasingly play a co-ordinating role for multilateral and bilateral assistance given to countries in the field of health so as to ensure that, in total, it is applied to the best effect. The World Health Organization's assistance must increasingly include advice to governments on the co-ordination of all activities in the public health field, irrespective of their financial source, and on the best ways of co-ordinating the health effort with that of other national agencies seeking socio-economic advancement.

6. Conclusions

This short communication has concentrated attention on a four-point health programme which could be implemented by nations in their overall programme for the Development Decade. For anyone familiar with the state of the world today, the importance and appositeness of this health programme will be self-evident and its actual and potential contribution to the welfare and happiness of nations will not need to be stressed. Looking at the work assisted by the United Nations and international agencies as a whole, there are indications that the significance of health to nations and to national and socio-economic development is not always given due weight. If the Development Decade is to witness a balanced development, health must have a high place in the list of targets which nations will establish for the improvement of the lot of their peoples.

PART II. QUANTITATIVE TARGETS FOR THE HEALTH PROGRAMME

1. Introduction

Part I of the Health Programme for the Development Decade, submitted by the World Health Organization, outlined a four-point plan. In the following paragraphs, certain quantitative targets are given for each of the four points of the plan.

It must be made clear that, in view of the intrinsic nature of health work and the scarcity of data from
large areas of the world, the targets set in this paper must be seen more as rough approximations of desirable situations than as mathematically worked out goals. This notwithstanding, they should prove useful indicators to what the nations should, by and large, endeavour to achieve in health, as part of the special effort to accelerate socio-economic progress they contemplate making during the Development Decade.

2. National Health Planning

The WHO Programme for the Development Decade envisages the establishment by 1965 of a basic health plan related to the socio-economic development of each country taking part in the Development Decade.

The steps leading to such a plan would be:

(a) surveying the existing health facilities and the prevailing epidemiological situation;
(b) determining the pattern for the development of public health services and facilities and resources for the organization of medical care in relation to the present and projected patterns for agricultural and/or industrial development;
(c) estimating needs for health staff of all categories and the planning of an education and training programme for meeting these needs;
(d) drawing up of the plan which is to be co-ordinated with the general socio-economic development plans (or trends) for the country.

Note with regard to Africa

In many parts of the world, but particularly in Africa and especially with regard to the newly independent African States and those on their way to independence, successful development of natural resources rests ultimately on the ability of the people of these countries to realize their individual capacities, and these cannot be realized as long as there persist the present major barriers of disease and inadequate health and sanitation facilities.

Traditionally in Africa, the biological and environmental health hazards have had to be tackled first, even by private industry wishing to expand in that continent. It is imperative that a realistic appraisal of the situation be made and that the planning and development of a network of minimum basic health services be regarded by those planning socio-economic development in Africa as an essential pre-investment operation. In that continent, without this essential safeguard, the rate of socio-economic progress will of necessity be slow and agricultural and industrial development both hazardous and uneconomic.

3. Education and Training

In this programme of technical co-operation with countries, WHO already gives a very high priority to educational and training activities through the provision of advisory services to governments, training institutions, universities, through the financing of temporary or permanent teaching staff, the granting of fellowships, the organization of training programmes on a country or inter-country basis, and through visiting teams of high academic standing, practical training and demonstration projects, in-service training at various levels. The highest priority within the Decade should be given to the establishment in each country of:

(a) a basic cadre of health personnel at the national level;
(b) adequate medical supervisory services at an intermediate level (region, district);
(c) minimal curative and preventive services accessible to the whole population of the country;
(d) educational facilities for medical nursing, sanitary, technical and auxiliary personnel.

In the field of education and training, the proposed targets for the underdeveloped countries are to have, by 1970, a minimum of:

1 physician per 10 000 population;
1 nurse per 5000 population;
1 technician (laboratory, X-ray, etc.) per 5000 population;
1 health auxiliary per 1000 population;
1 sanitarian per 15 000 population;
1 sanitary engineer per 250 000 population.

The difficulties in achieving such a goal in the developing countries will vary, for example, according to the proportion of physicians graduating in different areas of the world. Thus, according to estimates based on 1955-1956 figures, while in Europe an average of six or seven physicians graduate every year per 100 000 population, in the Americas and Oceania the proportion varies between 3.5 and 5 per 100 000 population, and in Asia and in Africa it is 0.8 and 0.5 per 100 000 respectively.

An important consideration is the fact that the rate of output of medical and other professionals must ultimately depend upon the turnover of secondary school graduates with sufficient educational background to take up university studies. Another factor is the limitation imposed by financial considerations. Several other factors play an important part, not the least of which is the need to distribute more evenly health staff, who tend to concentrate unduly in urban...
areas and should, in varying degrees, be decentralized.

Note with regard to Africa

For economic purposes, it is necessary to envisage, in Africa, inter-country facilities for training staff, since it is not reasonable to expect all the young African nations to have their own universities; for years to come, one of the best services that can be rendered by international organizations is to organize training centres on a language and/or geographical regional basis, to accelerate the education and training programme for professional Africans, so badly needed for guiding the destinies of their countries.

4. Health Goals

Quantitatively, the targets which may be established would be the following:

4.1 Communicable Diseases. Improving social and environmental conditions, better training and other factors have led to remarkable reductions in the mortality rates of some common communicable diseases, e.g., tuberculosis, scarlet fever, etc. However, it would be misleading to deduce from these rapidly falling mortality rates that there has been a corresponding decrease in the incidence of these infections.

In many of the under-developed countries of the world today, the high prevalence of certain communicable diseases militates against socio-economic progress and this biological hazard is responsible, in the main, in several areas, for the continued lowered standards of productivity and living.

The experience of the Organization provides ample proof that the vicious circle of disease/low productivity/poverty can most successfully be broken by a concentrated, well-planned attack on its biological components, through sustained mass campaigns against the most prevalent communicable diseases.

As targets for the Decade, the World Health Organization would wish to see the establishment of prevalence baselines for diseases like malaria and/or smallpox and/or a number of other most prevalent communicable diseases in a country, with a view to achieving their eradication, at least reducing their incidence to the point where they cease to be of serious public health and economic importance.

4.2 Infant Mortality. The economic value of preventing premature death does not need to be stressed as it is obvious everywhere. Success attained in achieving a more favourable age composition of the more rapidly growing population groups will create an additional factor in development and in improved social well-being, provided co-ordinated efforts are simultaneously directed to agricultural and economic development generally.

In this respect, one of the main goals of the Decade is the reduction of infant mortality by 25 to 50 per cent., the prevailing rate in a particular country where baseline data are not known having first been determined.

4.3 Nutrition. A global analysis of the food intake of the world's population, in terms of average daily supply of calories, showed a dramatic deterioration in the situation between 1938 and 1953. The actual estimates for the two years can be seen in the two comparative columns of the following table:

<table>
<thead>
<tr>
<th>Estimates</th>
<th>1938</th>
<th>1953</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Less than 2200 calories per day</td>
<td>49</td>
<td>66</td>
</tr>
<tr>
<td>II. 2200-2700 calories per day</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>III. More than 2700 calories per day</td>
<td>27</td>
<td>12</td>
</tr>
</tbody>
</table>

The World Health Organization believes that, in the first and second groups, there is much scope for the elimination of severe malnutrition in children, for example, kwashiorkor and nutritional deficiency generally, as well as for the control of anaemia, particularly in pregnant women. During the Decade, the World Health Organization will assist nations to ascertain, through sample surveys, the current nutrition standards of their people and, if indicated, to implement a programme for their improvement, the progress achieved being gauged against the baselines thus established. In a world in which more than half of its population is undernourished or malnourished, the medical aspects of the situation must be considered. The Organization looks forward to an intimate and effective collaboration with the United Nations and the Food and Agriculture Organization in their implementation of the World Food Programme.

4.4 Environmental Health. Accurate figures on the water supply position in all countries and all urban population centres throughout the world are not available. Water is important, not only for health, but for industrial development as well.

In round numbers, it is estimated that the population of urban communities not served by piped water systems, in the world as a whole, excluding North America and Europe, amounts to 100 million.

In addition, living in cities which are partially supplied with piped water supply systems, there are an estimated 150 million persons who are not served by the piped system, giving a total of some 250 million persons in urban communities of the world deriving their water from sources other than from piped water systems.

It is estimated that, if enough resources could be devoted to solving the problem, it would be possible to attain a satisfactory position within a period of fifteen years. To do this would require construction to serve an estimated 20 million new consumers each year, at an estimated cost of $400 million per year.

<table>
<thead>
<tr>
<th>Geographical area</th>
<th>Annual new consumers served (millions)</th>
<th>Annual construction cost ($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America</td>
<td>5</td>
<td>150</td>
</tr>
<tr>
<td>Asia</td>
<td>12</td>
<td>220</td>
</tr>
<tr>
<td>Africa</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Extension of areas</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Totals</td>
<td>20</td>
<td>400</td>
</tr>
</tbody>
</table>

These estimates do not include North America and Europe, where the water supply situation is generally satisfactory and where, on the whole, provisions exist already for the maintenance and extension of urban water supplies.

Capital investment of this order would lead to a satisfactory improvement of water supply conditions which, if supported by proper management, could be operated and maintained from water revenues, with provision for replacement and extension.

The global progress which might be made in any particular decade is difficult to forecast. If every country were to embark simultaneously on a fifteen-year programme, it might be expected that from 50 to 60 per cent. of the needed work would be accomplished in the first ten years. The controlling factor, however, is the "degree of readiness" existing in individual countries, and a substantial number of populous countries are at present in a low state of readiness, in terms of technical, managerial, financial and material resources.

With relation to sewerage, statistics are available in only a limited number of countries, and no figures have been compiled on a global basis. In most areas of the world, a higher proportion of the population is supplied with water than with sewers.

Rural water supply and excreta disposal have been studied in some countries, but global figures are not yet available, though WHO is studying the problem and some of the more fundamental data should be available in the near future.

5. National Financial Target for Supporting Health Programme

It is difficult to identify the total of individual and collective expenditure on the maintenance of health and the prevention and cure of disease in a country. It will be obvious that such expenditure varies with various systems of administration, with different cultural backgrounds and with the varying financial and other resources at the disposal of a country, which are a major factor in determining the extent of national expenditure on health.

The cost of national health services to public funds is affected by several factors, including (1) the extent of their development; (2) the degree to which they include medical care; (3) the size of the area of the country such services cover and, therefore, the proportion of the population making use of such services, and (4) the population increase and changes in its age composition.

For these reasons, it is difficult to give a single financial target figure for health which would be applicable to all countries taking part in the Development Decade. The most convenient way of expressing such a financial target would be as a percentage of the total general government consumption expenditure. The recommended percentage for the Decade would be in the range of 10 to 20 per cent. of total general government consumption expenditure.

1 This term is used in the sense that the expenditure includes all levels of government administration, national, provincial and local, and excludes subsidies, grants and other financial support by the government, indicating exclusively expenditure on services.
## INTRODUCTION

Although this report refers to newly independent States, it has taken into account the needs of the emerging nations as well. Most of these States are in Africa and this fact is reflected in the text of the present report. It should be emphasized, however, that similar plans are envisaged for all newly independent and emerging States, irrespective of their geographical locality.

The present report consists of five parts. Part 1 contains the report which the Director-General submitted to the Executive Board at its twenty-ninth session and which the Executive Board, in resolution EB29.R32, decided to transmit to the Fifteenth World Health Assembly.

The Executive Board also decided to transmit to the Assembly the record of its discussion on continued assistance to newly independent States.²

Furthermore, the Executive Board requested the Director-General to provide information on the ways in which the planning and development of health programmes — with emphasis on education and training — of newly independent States could be brought into line with the aims and scope of the resolutions of the United Nations General Assembly.²

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² The record of that discussion, which was contained in Part 2 of this document, is not reproduced here but will be found in the minutes of the twenty-ninth session of the Board (EB29/Min/5 Rev. 1, section 3; EB29/Min/7 Rev. 1, sections 5 and 7; EB29/Min/12 Rev. 1, section 1).
on the United Nations Development Decade,\(^1\) on the Economic Development of Africa,\(^2\) and on African Educational Development,\(^3\) indicating as appropriate the technical and financial resources that need to be made available for the purpose. In compliance with this request, the Director-General submits, in Part 3, the gist of a WHO programme for assisting newly independent countries and other States in Africa with national health planning, and, in Part 4, an outline of an expanded and accelerated education and training programme for newly independent States.

**PART 1. REPORT OF THE DIRECTOR-GENERAL TO THE EXECUTIVE BOARD AT ITS TWENTY-NINTH SESSION**

### 1. Preamble

The Fourteenth World Health Assembly, in resolution WHA14.37, requested the Director-General "to continue to give ... speedy assistance to all newly independent States which become Members of WHO" and "to report on these matters to the twenty-eighth session of the Executive Board and to the Fifteenth World Health Assembly". Furthermore, the Fourteenth World Health Assembly, in resolution WHA14.58, also requested the Director-General "to make all possible efforts to provide ... assistance to Member States having newly attained independence and to co-operate with them in the training of local medical personnel technically qualified to undertake the responsibility of combating infectious and parasitic diseases and of improving national health services".

The Director-General reported on this matter to the Board at its twenty-eighth session and the Executive Board, having considered his report, adopted resolution EB28.R22 in which it requested the Director-General to report again at its twenty-ninth session on the development of the programmes of the Organization in these new States. The present report is pursuant thereto.

Preponderantly, most of the newly independent States are in the continent of Africa, though the group also includes Cyprus, Kuwait and Western Samoa. In this report attention is focused on those in Africa. It will be clear, however, that the needs of the rest of the group are receiving equal attention.

### 2. Introduction

The active part which WHO has played in the evolution of the public health programmes in newly independent States, since long before their independence, has given the Organization very valuable insight into their problems, and more specifically into those that were likely to arise when these countries acquired full responsibility for and control over their own affairs. Throughout this period, now reaching its thirteenth year, the assistance given by the Organization has concentrated on the triple objective of controlling the communicable diseases, strengthening the countries’ health services and preparing national staff through programmes of education and training.

The current WHO programme in newly independent States is, in many ways, like that which the Organization is carrying out in other countries; the difference is in the special consideration given to their special needs on acquiring independence. The way this is being given was described in the Director-General’s interim report, submitted to the Board at its twenty-eighth session in May 1961. In essence, it consists in helping countries to maintain their national preventive and curative health services, in planning the expansion of those services through surveys for establishing priorities, in co-ordinating all the technical assistance in the field of health the countries receive, and in accelerating the education and training programmes, both locally and abroad, to make available the national staff required.

### 3. Malaria Eradication

In most of what are now newly independent States, malaria control before the Second World War was restricted to the protection of townships and industrial enterprises. However, with the introduction of the new residual insecticides, the possibilities of controlling rural malaria were soon realized; but, by 1955, technical difficulties appeared that could not be easily surmounted. The intense transmission of malaria in some West African States, the development of resist-
ance in Anopheles gambiae to dieldrin in Northern Nigeria, the exophilic behaviour of this vector and other difficulties, showed that effective malaria control would not be so easy to obtain in the rural areas of most of these States.

By 1959, experience in field projects had led to the conviction that these technical problems did not prevent eradication in the tropical countries of Africa; they did, however, make it more difficult. Some important problems were therefore selected for intensive study, such as the significance of the symptomless parasite carrier, the value of fever as a criterion of case detection in immune Africans, the longevity of African Plasmodium falciparum in the human host in the absence of fresh transmission, the establishment of an effective single dose treatment for immigrants entering protected areas, and a variety of entomological problems.

The solution of these problems would greatly assist in the achievement of the goal which is sought; but the most technically perfect programme would fail if not supported by sound financial and administrative management. The organization of malaria projects in these newly independent States had in the past been geared to the needs of control. The concept of eradication introduced much more stringent requirements for the necessary administrative, budgetary, transport, equipment and staff arrangements.

The most characteristic feature of African holoendemic malaria is the remarkable degree of immunity developed by the individual at a very early age. This immunity has been considered enough justification to relegate malaria to a second place in any priority for public health development schemes. However, experience has shown that these newly independent countries, bent on the economic development and utilization of their own resources, find in the existence of malaria a serious bar to progress, affecting the health and living standards of their people. In addition, the widespread organization required by programmes for malaria eradication, touching as it does every aspect of the life of the population, is acknowledged and sought to help to form the basis of an expansion of public health activities into other fields.

There is no reason, therefore, to doubt the advisability of seeking the eradication of malaria from most of these newly independent States and elsewhere in Africa, and it is encouraging to note that the recent results from projects continue to justify the optimistic view about its technical feasibility. The trends for the future malaria programme of the Organization for these newly independent countries can be summarized as follows:

(a) Pre-eradication Programmes. A pre-eradication programme is an operation undertaken by a country with the principal objective of building up the national technical, operational and administrative foundations and facilities, where these do not already exist or are inadequate, to the level essential for ensuring the effective implementation in due time of every phase of a malaria eradication programme, including the maintenance of achieved eradication. To this end WHO will assist governments in building up their antimalaria organization and the rural public health infrastructure required to support malaria eradication operations, through the provision of advisory services, fellowships, some transport and supplies, and a certain amount of partial payment of local salaries for some professional staff engaged in these projects.

(b) Malaria Eradication Training Centres. Plans are being made to have at the beginning of 1962 two regional malaria eradication training centres, one for English-speaking and the other for French-speaking Africans, established in Nigeria and Togo respectively. Apart from these two regional centres, any country with a pre-eradication programme should have a training scheme for field personnel. It is also foreseen to train African professionals and sanitarians in other international training centres working under the aegis of WHO (Kingston, Jamaica; Cairo, United Arab Republic; Belgrade, Yugoslavia). In 1962, courses in English and French on malaria eradication techniques will take place in Moscow, Union of Soviet Socialist Republics.

4. Communicable Disease Control

Most of the newly independent States are in tropical and sub-tropical Africa, where specific disease problems acquire such urgency and gravity that these countries have had to concentrate a substantial part of their resources on their solution. From a public health point of view, the African Region is still largely in the stage where control and eventual eradication of major communicable diseases must be regarded as a main priority in any well-balanced public health programme. The WHO-assisted activities in this direction have been characterized by a search for methods for the application of the recent scientific discoveries. The use on a mass scale of immunization, chemophylaxis, insecticides and similar means have cleared vast areas of tropical Africa of diseases which had rendered them almost uninhabitable. All this has required a detailed knowledge of the epidemiology of the diseases concerned, to ensure the best possible use of the
relatively meagre resources available to meet the problems, often of very considerable magnitude.

Yellow fever has practically ceased to be a menace and very few cases are now encountered in regions where formerly the disease was one of the greatest dangers to health. Smallpox is still present and outbreaks still occur, especially in the western part of Africa, but for the most part it is kept well in check.

Trypanosomiasis remains an important health problem — particularly animal trypanosomiasis which, by attacking animals, deprives African countries of meat and milk, and militates against physical and economic development. However, the human type of trypanosomiasis has been largely brought under control. Bilharziasis also constitutes a problem, the extent of which is being surveyed while intensive research is carried on in an endeavour to establish effective methods of control. The epidemiology of onchocerciasis is being increasingly studied and the *Simulium* vector has already been completely eradicated from many areas.

Tuberculosis surveys have been carried out to collect the indispensable epidemiological data on which to base control programmes, which have subsequently been organized in some of these newly independent States. The rate of progress in combating leprosy is very encouraging; the new liberal policies of leprosy control and the effectiveness of treatment with sulfones should allow of rapid progress in its control.

The treponematoses such as endemic syphilis and yaws have been widely surveyed and treated on a mass scale. The indications are that yaws is one of the diseases which it may be possible to eradicate from most areas in the near future.

There are other diseases — bacterial, protozoal, viral and helminthic — which constitute problems of public health importance. As resources permit and the situation warrants, increasing attention will be devoted to the more important of them.

It is possible, then, to summarize the present position as follows: though much remains to be done, the total cumulative effect of the numerous WHO-assisted national campaigns against malaria, yellow fever, yaws, smallpox, onchocerciasis, bilharziasis, leprosy and tuberculosis can be seen in the considerable attenuation in incidence of most of these diseases in many African urban and suburban areas. The rural areas require greater resources and present problems which require solution and are currently under investigation.

Future programme trends can be summarized as follows:

(1) In assisting newly independent States in the control of communicable diseases, the main emphasis is laid on strengthening existing public health services in such a way that they will be able to direct and conduct programmes and decide on priorities. This involves the further development of epidemiological services, coupled wherever possible with the strengthening of the necessary laboratory and statistical services.

Existing research institutes will be assisted in maintaining their activities and in training relevant national counterpart personnel.

(2) WHO will continue to give assistance to already existing communicable disease projects and these will be given priority over new programmes. Inter-country co-ordination of such programmes needs constant encouragement and international assistance. The starting of new communicable disease projects will have to be carefully balanced against other health priorities and will have to depend on the availability of trained personnel and equipment. Training of the necessary national personnel, able to take over from international personnel, should be undertaken before new projects are initiated.

(3) Prevention of outbreaks of epidemics of such communicable diseases as smallpox, yellow fever, plague and trypanosomiasis needs constant vigilance, and where preventive services are on the verge of breaking down the Organization will have to give rapid assistance in the form of personnel and equipment and supplies to prevent widespread epidemics.

5. Education and Training

In view of the rapid changes in many newly independent countries, their acute need for trained health personnel at all levels and the scarcity of available data necessary for reasonable planning of training programmes, it has become necessary to assess their educational requirements and potentialities. Surveys of this kind have been undertaken in twelve States; it is expected that the reports, with their recommendations, will point out ways of developing long-term plans.

The World Health Organization participated in the Sub-Committee on Education and Training of the Administrative Committee on Co-ordination. For the Conference of African States on the Development of Education in Africa, organized by UNESCO and the Economic Commission for Africa in Addis Ababa in May 1961, the Organization prepared a working paper on the prerequisites in general education for specialized technical and educational training, and another on the education and training of health
personnel in Africa, 1960-1970. This conference outlined a general plan for the preparation of professional education and training, including the training of health personnel in Africa. WHO is also preparing to participate in joint inter-agency comprehensive pilot surveys of manpower needs. These are currently being planned by an inter-agency group.

As Morocco and Tunisia have been helped quite successfully with the planning and establishment of their medical schools through the assignment of groups of consultants, it is hoped that this method may also provide a pattern of effective assistance to newly independent States, to supplement that currently being given by regional and project staff for planning specific training institutions in many of these newly independent countries.

Certain activities of WHO are intended to provide guidance for the development of the education and training programme of newly independent and other States. These include the study group convened to recommend internationally acceptable minimum standards of medical education, and the Inter-regional Conference on the Training of Health Auxiliary Personnel which was held in Khartoum in December 1961. Provision was made for participants from newly independent countries to attend this conference, which endeavoured to adapt to the varying situation in different countries the recommendations made by the Expert Committee which had considered the same subject in September 1960.1

Fellowships already awarded to newly independent States number 213, and there are 228 under negotiation. Probably, more than 300 fellowships will have been awarded in 1961 to countries of Africa, including those awarded under the special programme for the Republic of the Congo (Leopoldville). Of these, the majority are for basic studies abroad, mainly in medicine, nursing and sanitation, as facilities for such studies are not yet available in the countries themselves. Tutors are provided to help tide over difficulties whenever it is felt that the fellows will face too abruptly too new a situation during their studies abroad. Such assistance is being given to groups of fellows studying in Israel and in France.

In 1961, most of the projects aiming at strengthening national teaching institutions were still being planned. The impact of this planning should become evident in the programmes for the two following years. The following projects have been selected with the object of giving an idea of the type of activities for which personnel and often equipment are being provided. In some cases fellowships for the teaching staff are awarded.

The above comments will indicate how the assistance being given to newly independent States is aimed at accelerating the education and training programme they require for staffing national health services. In essence, while urgent needs are being met as resources permit through fellowships for basic studies abroad, assistance is being rendered in establishing or strengthening local facilities for training auxiliaries for medical, nursing, laboratory, sanitation and statistical work. It is highly desirable that through increased international assistance emerging States develop in the shortest possible time their own training facilities for those categories of personnel who ought to be trained in large numbers and preferably in their national environment.

This twofold long-term plan is based on needs determined by recent fact-finding surveys. It is hoped that, as more and more fellows return home after advanced studies abroad, the increased local resources in teachers will lead to a further expansion of these training programmes.

6. Public Health Administration

Whenever budgetary considerations allow, public health administrators are being assigned to the various newly independent States to help them survey needs and resources and thereby establish priorities based on the analysis of the data collected. These health administrators are helping countries to link the development of health services with social and economic development generally, and advising them on the essential co-ordination of all international aid made available to them for the development of health services, irrespective of source, whether this be international, bilateral, governmental or non-governmental.

Twelve of the newly independent African States have requested WHO assistance in the field of public health administration. In the case of those countries

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in which the appointment of a WHO public health administrator has not been feasible, the advice and assistance in the public health field is being rendered through regular visits paid by the staff of the WHO Regional Office in Brazzaville. It should also be mentioned that at present there are three area representatives, located in Dakar, Lagos and Nairobi, who are assisting the majority of these new countries. Public health administration posts have been created in Ghana, the Central African Republic, Niger, Mauritania, the Congo (Brazzaville), Madagascar, the Ivory Coast, Gabon and Cameroon, Togo, Mali and Upper Volta. Furthermore, WHO is supporting ministries of health through visits of short-term consultants to help them organize their national health administrations. This programme is supplemented by fellowships awarded to African doctors for studies of public health administration in various countries abroad.

7. Environmental Health

One of the fields in which, judging from recent developments, rapid progress may be expected, is that of environmental health. There have been in fact numerous requests from the emerging countries for technical assistance in this field and there is widespread awareness that the raising of environmental health standards is fundamental in the improvement of health conditions.

Two sanitary engineers assigned to the Regional Office for Africa are endeavouring, through frequent visits to countries, to follow up developments. However, it has also been necessary for legal, financial and administrative experts, as well as engineers, to help plan and organize water supply programmes. Consultants in this field have visited Ghana, Madagascar and Nigeria, and it is expected that other teams will visit several other countries in 1962.

It is expected that this work will lead to a rapid development of water supply schemes. Much of it has been supported from the funds of the Special Account for Community Water Supply, and it is making a fundamental contribution to the raising of health standards in many of the new States. Supply of pure water and sewage disposal have been traditional problems in many African countries and the recent rapid urbanization and growth of population have made these problems even more acute. National health administrations, as well as WHO, have a wide scope for radical remedial measures, and a good example of what can be achieved is in Ghana, where an environmental health survey has led to the establishment of a department of environmental health in the Ministry of Health and to the elaboration of a detailed water supply and sewage disposal plan for the city of Accra.

These brief remarks on sanitation would be incomplete if stress were not laid on the importance that WHO attaches to the training programmes for sanitation personnel now being developed or strengthened as rapidly as possible. The scope for development of environmental health services in the newly independent States is indeed vast; however, training of sanitary personnel must at this stage be given precedence over development of services, to which it will eventually lead and for which it is a prerequisite. The scarcity of engineers generally is in itself a fundamental limiting factor, and for the time being, as resources permit, WHO's assistance must be concentrated on the training of auxiliary sanitation staff.

8. Health Promotion and Protection

The rapid industrialization referred to above, with its concurrent movement of population from the rural areas, has resulted in several health problems which are being resolved through schemes of the community development type, wherein government efforts are supplemented and supported by local endeavour and initiative. Health education is being incorporated in these co-operative efforts, which aim at simultaneous solution of certain basic problems facing communities in the new African States, particularly in the semi-urban and rural areas.

Mother and child health programmes are also being developed and permanent services are increasingly taking over responsibilities from the earlier mobile services. A typical project is that existing in Senegal, where maternal and child health services are being extended from Dakar to its suburbs as well as to other highly populated centres throughout the country. Personnel are being trained with the Government's own resources, UNICEF provides equipment, and WHO technical guidance and advice. Another example is Nigeria's mother and child health service, in which particular emphasis has been laid on the development of rural health services. Again, UNICEF has been providing equipment and skimmed milk, and WHO, advisory technical staff.

A modest beginning has been made in providing consultant services in the field of mental health to some of the newly independent States. A short-term consultant visited Niger to advise the Government on the organization of a new neuro-psychiatric hospital in Niamey and on the organization of mental health services in general. An eighteen-month fellowship is being awarded for the study of the organization of mental health services and a plan of studies abroad has been worked out for the fellow concerned. Another
example is the proposed assignment in 1962 of a consultant to advise the Government of the Ivory Coast, at its request, on the organization of mental health services.

It is only recently that nutritional pathology has been clearly differentiated from that of the parasitic and infectious diseases with which it is most often associated. The implication of protein deficiency alone or in association with other forms of illness, and the significance of various anaemias, notably those due to iron deficiency, are now fully appreciated.

African governments are being assisted through nutrition surveys in tracing nutritional diseases, their distribution, degree of seriousness and clinical manifestations. Studies are being undertaken of the inter-relationships between malnutrition and infectious and parasitic diseases in various countries. Advice is also being made available on the therapeutic, prophylactic and dietary aspects. Other activities in this field include the clinical verification of the efficacy of supplementary foods and the collaboration with FAO and UNICEF in training courses for nutritionists and nutrition education of auxiliary personnel.

Interest in dental health is being stimulated and the following three projects will indicate the way in which assistance in this field is currently being given to newly independent States. Sudan has a population of over ten million, but only thirty dentists and no dental school. The Government, therefore, decided to establish a school for dental assistants and a WHO dental health adviser has helped to organize a course of training, for which dental equipment was also provided. The services of the WHO adviser will be continued until his national counterpart has been trained sufficiently to take over from him the responsibilities entailed. The second project referred to is the one in Ghana, where a WHO dental health consultant visited the country to advise the Government on the development of its dental services. The third project is taking place in Nigeria, where a short-term consultant is investigating the prevalence of dental health problems, especially periodontal disease.

Increasingly, requests are being received from newly independent States for assistance to meet needs created by such a sequence of events and all indications are that such requests will increase both in number and type.

It is important to point out that these requests differ in nature from those normally received by the Organization for advisory services or from those now accepted by the United Nations for assistance under the OPEX scheme. The requests from newly independent States referred to here are in fact neither for advisers nor for executives: they are for doctors to ensure the continuation of essential health services — curative and preventive.

The United Nations, even if it disposed of the necessary funds, would be unable to meet requests of this kind, since the policy under which OPEX is now operating limits appointments to administrative key posts only. WHO, for its part, is faced with a problem because under its present policy the Organization provides advisory rather than operational assistance.

The more or less sudden depletion of the health services staff of some of the newly independent States and the consequent need for foreign practising doctors creates difficulties of an administrative and financial character. Administratively, problems of recruitment arise in employing adequately trained staff. Financially, most of these young countries are faced with a lack of foreign exchange wherewith to pay the salaries that would attract the right kind of staff.

In view of the urgent need to avoid setting the clock back by a crippling of the existing health service, the Executive Board may wish to consider whether, from a policy point of view, the assistance given by the World Health Organization should not be broadened to include operational as well as advisory assistance when so requested by governments.

Should the Board believe that the current needs of a substantial number of Member States justify the broadening of the scope of WHO's assistance to include the assignment of physicians and surgeons to perform clinical and preventive services, perhaps it might want to define the circumstances under which this is indicated and to consider the administrative and financial arrangements which would be appropriate.

The Director-General believes that there would seem to be enough justification for accommodating requests from governments for operational staff, provided that such requests are considered in the light of pre-existing services, of the potential benefits of

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1 Programme for the provision of operational, executive and administrative personnel.
their being maintained and the deleterious effects of their being abolished.

10. Conclusions

The assistance now being given by WHO to newly independent States, whether it represents a collaboration antedating their independence or a partnership of more recent origin, is, in essence, nothing more than a modest beginning.

Discussions with the governments concerned, observations on the spot and analysis of data collected in recent surveys all point to the same conclusion: the problems of newly independent States in general and of those in Africa in particular are of rather formidable proportions.

The promotion of health services essential for the economic and social development of these new States must take into account both quantitative and qualitative needs, and the latter must in turn be assessed in the light of overall development needs and the rather scanty resources available to meet them.

The indications are that all these new Member States are turning increasingly to WHO for assistance in assessing resources and needs; for establishing priorities and making projections for widening the scope of existing health services and creating badly-needed new ones; for making estimates of staff and facilities required, and for computing capital and recurring expenditure involved.

The plans that are now being developed, adapted to African environmental and cultural conditions, as well as to social aspirations, and to the new outlook and trends that follow in the wake of independence, are of a long-range nature. Fundamentally, they seek to set each of these young States “on its feet”—enabling it to establish its own priorities and goals and to develop its own staff to work for their achievement. In short, progressively they seek to ensure technical independence.

Such plans must be developed over a period of ten to twenty years and should concentrate on strengthening four main areas of activity: the education and training of national staff; the creation and strengthening of sound national and local health administrations; the development of essential health services, and the maintenance and expansion of medical care facilities.

It is fundamental for WHO to recognize that the current heavy demands being made on it by the accelerated tempo of development of so many newly independent States are likely to increase even further in future. The Director-General, conscious of the significance of WHO’s technical assistance for the present and the future of the peoples of these new States, is making every endeavour to meet these requests for assistance as adequately as possible.

However, it is equally essential to ensure that this policy shall not have any adverse effect on the type, quality and quantity of assistance that has been and should continue to be made available to developing countries in general. The additional demands of new countries, if they are to be met successfully and in good time, must be financially provided for as early and as adequately as possible. Foresight, imagination, fact-finding and objective planning must be supported by adequate international resources if the Organization is to be allowed to make adjustments in its work programme so as to devote maximum attention to the important issues raised by the needs of newly independent States while still maintaining a proper balance in its total programme.

PART 3. WHO PROGRAMME FOR ASSISTING NEWLY INDEPENDENT AND EMERGING STATES, IN AFRICA AND ELSEWHERE, IN NATIONAL HEALTH PLANNING

1. WHO Programme for National Health Planning

The programme of the World Health Organization envisages the elaboration of a national health plan in each of the newly independent and emerging States, related to the current and projected socio-economic development of each country. This planned development of basic health services acquires even more fundamental significance in Africa than elsewhere since, in that continent, the biological and other environmental factors affecting health have been traditionally so inimical to the well-being of the African people and have considerably hampered their agricultural and economic development.

Such a plan involves the study and investigation of health needs in terms of building facilities, equipment and personnel, with a view to determining the priorities for action and the most economic and efficient ways for implementing it. The main purpose of a national health plan, of course, is to utilize resources as efficiently as possible for solving the most pressing health problems of the people. The plan serves as a guide for developing or strengthening the necessary health services, for making the required adjustments in its implementation and for eventually assessing achievements. It will also provide the necessary information, not only for the personnel concerned
in its execution, but also for the government and the communities involved. Moreover, it will help international and other outside agencies to concentrate their assistance on nationally established priorities, thus ensuring that the resources available have a maximal benefit.

The method necessary for national health planning will undoubtedly have to be adapted to the needs and conditions of each country. It is envisaged that a twelve-month period of planning is necessary and this will be devoted to a detailed survey to determine the needs, the pattern of development and health services that best suit each country.

The costs of this national health planning would include that of assigning personnel at the country level, both full time and part time; the expenses involved in providing them with suitable equipment and transport, the neglect of which might hamper operations considerably and increase costs proportionately; the costs of supporting regional action and the necessary administrative costs. To be realistic, such planning must be combined with a modicum of local training and, for this purpose, financial provision must be made for giving stipends and for organizing courses at the country level, for facilitating the provision of equipment, and for within-country travel.

In global figures, it is estimated that the national health planning for a medium-sized country in Africa would cost around $50,000 and the related training another $40,000, bringing the total cost of a national health plan year to about $90,000. Assuming that this scheme is extended to some thirty countries, as soon as funds and the appropriate personnel are available, the total cost involved would be approximately $2,700,000.

When the tremendous significance of national health planning in Africa is taken into account and its impact is assessed, not only in terms of human well-being and welfare, but also economically, it will be realized that such expenditure should pay tremendous dividends in making possible an accelerated socio-economic growth of the African people, to which the world today rightly attaches such great importance.

2. Unit for Costing National Health Planning in African Countries

<table>
<thead>
<tr>
<th>Costs</th>
<th>US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>National health survey and planning:</td>
<td></td>
</tr>
<tr>
<td>Public health adviser — assigned to the country for 12 months</td>
<td>17,500</td>
</tr>
<tr>
<td>Secretary — assigned to the country for 12 months</td>
<td>4,500</td>
</tr>
<tr>
<td>Part-time staff assignments of public health nurse, sanitary engineer, epidemiologist, etc.</td>
<td>15,000</td>
</tr>
<tr>
<td>Supporting regional action (mostly travel)</td>
<td>3,500</td>
</tr>
<tr>
<td>Equipment and supplies, including one car</td>
<td>5,000</td>
</tr>
<tr>
<td>Total operational costs</td>
<td>45,500</td>
</tr>
<tr>
<td>Administrative costs (about 10 per cent.)</td>
<td>4,500</td>
</tr>
<tr>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td>Education and training activities related to national health survey and planning:</td>
<td></td>
</tr>
<tr>
<td>Teaching staff for 12 months</td>
<td>17,500</td>
</tr>
<tr>
<td>Visiting staff</td>
<td>10,000</td>
</tr>
<tr>
<td>Local stipends and salary supplements to local trainees for in-service training during survey and planning</td>
<td>3,000</td>
</tr>
<tr>
<td>Inter-country exchange of personnel for administrative and training purposes</td>
<td>6,000</td>
</tr>
<tr>
<td>Total cost of education activities</td>
<td>36,500</td>
</tr>
<tr>
<td>Administrative costs (about 10 per cent.)</td>
<td>3,500</td>
</tr>
<tr>
<td></td>
<td>40,000</td>
</tr>
<tr>
<td>Total Aggregate Costs per Country per Year</td>
<td>90,000</td>
</tr>
</tbody>
</table>

PART 4. AN OUTLINE OF THE WHO EDUCATION AND TRAINING PROGRAMME FOR NEWLY INDEPENDENT AND EMERGING STATES

1. An Expanded and Accelerated Education and Training Programme

Until recently, with very few exceptions, the nations south of the Sahara have largely depended on expatriate medical personnel, especially at the higher level. With independence such personnel is no longer provided from the same sources and the need for education and training of local personnel at all levels has become one of the most urgent problems.

In view of the current medical manpower situation in most of the newly independent and other States of Africa, the remedy for the situation must ultimately lie in the training of nationals of each of these countries, at home and abroad, in order to enable them
to meet their own staff needs. Any assignment of foreign staff must be regarded as a stop-gap, expensive procedure, warranted only for tiding over emergencies.

2. The Problem

The newly independent and emerging countries present education and training problems which vary considerably from country to country owing to the different stage of development of the education programme as a whole and of health services in particular. It is necessary to base education and training programmes on a national health plan which has determined the number of hospitals and other institutions that will be required to cover the country concerned with the barest network of essential health services for the population. It is only on this basis that an estimate of personnel needs of all categories can be realistically determined and it is therefore proposed that the World Health Organization combine the planning of the education and training programme of the individual countries with their national planning of health services.

It has been estimated that the newly independent and emerging States in Africa alone will require something like 1100 physicians every year for twenty years in order to meet their needs at the minimum level of one physician per 10,000 population. However, when the situation is viewed in the context of the relatively small number of secondary school graduates that, itself, determines the number of undergraduates that can be recruited yearly for medical studies, it will be seen that such an annual target is hard to achieve, apart from the consideration of the lack of facilities for university training.

In the next ten to fifteen years, the programme of education and training has, therefore, to be considered at two levels, one for the professional and technical medical staff and another one for the auxiliary medical personnel of all types. Also, the training programme must concentrate on priority types of personnel, namely physicians, nurses, midwives and sanitarians, while, at the same time, not neglecting the need for dentists, sanitary engineers, pharmacists, health statisticians, veterinarians, entomologists, laboratory technicians, etc., again with corresponding auxiliary categories.

3. Training of Physicians

The Director-General believes that there is an urgent need for an analysis of the task ahead of the African physician, and for an emphasis on various subjects that is somewhat different from the practice in other places. Africa requires a large number of physicians who have been educated to become medical practitioners, but with a marked bias towards the prevention of disease on a mass as well as on an individual scale. It is therefore essential that, in pre-medical and medical studies, the African student should be prepared for the role he will be called upon to play in his emergent nation. WHO is assisting in designing courses of study so oriented and in appointing teachers able to inculcate into the student the idea that the best possible medical service must be given where it is most needed, i.e., in the front-line attack on disease. This service should be the task of every general practitioner, during whose training the epidemiological approach to the study and control of disease must be stressed. Meanwhile, the Organization will go on studying the large number of technical, administrative and financial problems related to the creation of new medical schools, which deserves the highest priority.

4. Training of Nurses

As in the case of African doctors, it is particularly important that the nurse who is to serve in Africa should receive a training with a public health bias. In training nurses, WHO will go on putting the main emphasis on strengthening the overall planning for nursing services and nursing education at national level, on improving nursing services in hospitals and in public health by establishing national and regional facilities for post-basic nurse training, and on improving basic nursing education by incorporating in it public health nursing. It is also essential that senior staff be trained in the supervision of auxiliary nursing and midwifery personnel.

5. Training of Health Auxiliaries

The lack of professional personnel in the medical and paramedical fields has brought about a great need for trained auxiliaries as substitutes for qualified doctors, nurses, public health inspectors and other categories. In Africa, the success, or otherwise, of health programmes often depends on auxiliaries who work at some distance from their professional supervisor, so that supervision is very infrequent. It is expected that the training of such auxiliaries within the next decade will constitute one of the important factors of local health services.

This special situation and the problems it involves will often necessitate the advancement of auxiliary staff, through proper training, to the professional level. Wherever possible, therefore, health administrations will have to select the more talented medical assistants for entry into a medical school and afford them every facility to enable them to complete their professional studies.
6. The Elements of the Programme

The education and training programme for the newly independent and emerging States would be evolved along the following main lines. An initial fact-finding survey would endeavour to determine the situation with regard to general education and therefore the potentialities for training personnel, and also to establish targets for each category of staff to be trained in the light of the number of medical and health establishments that are estimated to be required by the individual countries.

The training would be to the greatest extent possible organized in the countries themselves and oriented to their particular health problems. However, inevitably, in many of these countries it will be necessary to envisage training abroad for the supervisory category of staff.

Post-basic training should be reserved for countries which already have some physicians and paramedical staff from which to select those who have special aptitudes for more specialized work.

Furthermore, international assistance can further supplement the efforts of the countries in educating and training their own staff through action at the inter-country level, as well as at regional level. Thus, the Organization would continue to advise countries on assessing their education and training needs and their staffing resources and on the most efficient ways of upgrading their medical schools and facilities for training professional, paramedical and auxiliary staff. Meanwhile, for key personnel and potential tutors and teachers, fellowships will be awarded.

Since for several decades it will not be possible for each of the countries in Africa to have its own university facilities, the Organization will seek to establish inter-country facilities for the training of those with common cultural and socio-economic patterns and language. Furthermore, the Organization will continue to promote inter-country seminars and workshops for the exchange of experience of health workers from different countries.

In this international effort, WHO will continue to collaborate with other international agencies, particularly with the United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Labour Organisation (ILO) and the Food and Agriculture Organization of the United Nations (FAO), with a view to enabling countries to carry out their medical and education programme within the realistic context of other needs in the socio-economic field.

7. The WHO-assisted Training Programmes (Costing)

The activities for developing the training programmes, outlined above, can be summarized as follows:

7.1 Fact-finding and planning: General surveys and studies of particular institutions, with a view to stock-taking and assisting in elaborating plans for orderly improvement or development of education and training facilities, within which indigenous efforts and assistance from outside are brought to bear.

*Estimated costs:* 4 teams of 2 consultants each, $38,400

7.2 Assignment of visiting professors to specific institutions for the purpose of filling deficiencies or of establishing adequate conditions and training local personnel to take over later.

*Estimated costs:* Assignment of 8 doctors and 12 nurses for 24 months each $512,000

7.3 Sending for a short period advisory and demonstration groups of professors in one or several disciplines.

*Estimated costs:* 3 teams, each of 2 consultants, for 2 months $19,200

7.4 Limited supply of literature and teaching equipment, in so far as this is part of a more inclusive plan of assistance.

*Estimated costs:* Education and training equipment (purchase of books, clinical, laboratory and other equipment) $80,000

7.5 Organization of, or assistance to, teaching institutions in organizing courses for new, evolving or neglected subjects of study.

*Estimated costs of two seminars/training courses:* 2 consultants — 2 months each; 24 participants; and organizational expenses (4-5 weeks) $60,000

7.6 Fellowships and travel grants for advanced studies and observation abroad (exceptionally also for basic professional studies whenever not available in the country of origin), and grants to permit attendance at educational meetings organized by WHO for the exchange of scientific information among participants. (The importance of this aspect of WHO's activities is shown by the fact that, from 1947 until the end of 1960, 11,833 fellowships were granted for the benefit of 166 countries and territories in all parts of the world.)
### Annex 4

#### Estimated costs of fellowships:
- **36 post-graduates (doctors and nurses) — 12 in Africa, 24 abroad (1 year)**: $114,000
- **36 undergraduate doctors — 12 in Africa, 24 abroad (6 years)**: $684,000
- **36 undergraduate nurses — 12 in Africa, 24 abroad (3 years)**: $342,000

#### Obtaining and making widely available collective expert opinion on matters of education and training of medical and allied personnel, by organizing meetings of expert committees and study groups.

#### Estimated costs of two conferences:
- **Organizational expenses, participants, travel and per diem**: $30,000

#### Collection and publication of information on teaching institutions and on the teaching of individual subjects.

#### Estimated costs: Consultants and supplies... $8,400

In summary, this initial phase of the expanded and accelerated education programme for the newly independent African States would involve the following costs:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and training</td>
<td></td>
</tr>
<tr>
<td>1. Surveys of institutions</td>
<td>38,400</td>
</tr>
<tr>
<td>2. Assignment of teachers</td>
<td>512,000</td>
</tr>
<tr>
<td>3. Demonstration teams</td>
<td>19,200</td>
</tr>
<tr>
<td>4. Education and training equipment</td>
<td>80,000</td>
</tr>
<tr>
<td>5. Seminars/training courses</td>
<td>60,000</td>
</tr>
<tr>
<td>6. Fellowships</td>
<td>114,000</td>
</tr>
<tr>
<td>7. Conferences</td>
<td>30,000</td>
</tr>
<tr>
<td>8. Collection of information</td>
<td>8,400</td>
</tr>
</tbody>
</table>

These costs include earmarking of funds for the entire duration of the fellowships. The funds required to continue such a programme, say, on a biennial basis, after the initial two years, would be somewhat less and, for the most part, would be affected by the number of fellowships awarded and of teachers assigned.

## PART 5. OPERATIONAL ASSISTANCE

### 1. The Problem

As can be seen from Part 1 of this report, the Director-General reported to the Executive Board at its twenty-ninth session on the problem of operational assistance. He drew attention to one feature of the accession to independence of some of the newly independent States that affected their health status — namely, the departure of doctors formerly provided by the metropolitan country and the consequent vacuum created which threatened to cripple existing health services. This more or less sudden depletion of health services staff gives rise to administrative problems of recruitment and to financial difficulties in that most of these young countries lack foreign exchange wherewith to pay the salaries that would attract the right kind of staff.

The Director-General, therefore, believed that, in the light of the potential benefits from maintaining pre-existing health services and the deleterious effect of their being abolished, the situation justified, on occasion, accommodating requests from governments for operational staff in the form of assignment of physicians and surgeons to perform essential clinical and preventive services.

### 2. The Nature of Operational Staff

Operational staff assignments are characterized by two features: first, as to function — while it is not necessarily excluded that such staff combine some advice and training with their operational duties, they are meant essentially to ensure continuation of the day-to-day medical care services to individuals rather than to render technical assistance in the organization and strengthening of health services; and second, as to status — operational staff are expected to perform their medical care duties as civil servants of the government concerned and not as international staff members of the Organization. The bulk of such staff would normally be made up of doctors, but under certain specific conditions, nurses, public health engineers, sanitarians and possibly other health workers would need to be included.

### 3. Extent and Form of Operational Assistance

It is difficult to generalize about the extent and form of the assistance that WHO should render to newly independent States in this field. It is obvious that each country’s needs would require individual study. The Director-General would propose that the main criterion for meeting requests from governments for operational staff be the threatened crippling of a pre-existing health service.

The Organization could not envisage the appointment of operational staff on a large scale, but only the minimum necessary to maintain a skeleton of essential physicians, surgeons or paramedical person-
nel to ensure, as the Executive Board indicated in its resolution EB29.R32, "that the level of health services which existed at the time of independence can be maintained". It follows that, for the most part, operational staff would in all probability be assigned as heads of clinical departments, e.g., surgical, medical, obstetrical and gynaecological, or to equivalent key posts. In some cases, a chief nurse and possibly other key paramedical personnel would have to be considered. In short, the role of WHO would be one of filling gaps in the maintenance of a minimum skeleton staff essential for tiding over a critical situation threatening to cripple essential health services existing at the time of independence.

4. Duration of Assistance

Again, no general rule can be laid down for the length of time during which assistance in the form of operational staff may be needed by the countries concerned. The duration of assistance will vary with the degree of availability of national staff and with the extent of the resources available to national health services, as well as with the degree of development of the latter. It is taken for granted that countries would make every effort to achieve self-sufficiency in the shortest possible time, but this type of assistance would necessarily be, in most cases, of a long-term nature — perhaps five to fifteen years.

5. Financial Arrangements

The Executive Board, in its resolution EB29.R32, requested the Director-General to submit a report to the World Health Assembly which would, inter alia, indicate "the assistance the Director-General believes may be available from sources other than the World Health Organization". It has not yet been possible to ascertain whether other sources may be prepared to provide such assistance.

5.1 Responsibility of the Government and of the Organization

If the Health Assembly decides as a matter of policy that the Organization should provide assistance to newly independent States in the form of operational staff, it will wish to consider the financial responsibility which the Organization should undertake. The Director-General suggests that, since such staff would be carrying out functions normally the responsibility of an employee of the government concerned, the government should make the same financial provisions towards meeting the cost of the staff as it would do if the staff were nationals of the country. If this suggestion is accepted by the Health Assembly, the Organization's financial responsibility would be limited to the difference between what the government would provide and the amount necessary to meet the salary and allowances of internationally-recruited staff.

5.2 Order of Magnitude of Costs to WHO

In view of the different levels of development of the health services of newly independent States and the fact that the number of metropolitan staff which may or may not remain in the service of a particular country on its attainment of independence is unpredictable, it is not possible at this time to give any precise estimate of the funds required for the Organization to render operational assistance to newly independent States, on the basis of the criteria recommended in this report. Furthermore, any precise estimate of the costs could be made only after the Health Assembly has decided the question of criteria, and would have to be made on the basis of country-by-country surveys of the needs which should be met in the light of those criteria. It would also be necessary to know the amounts which the governments would pay towards the cost of the operational staff. However, judging from the experience of requests so far received and from the limited fact-finding that has been possible since the Executive Board studied this matter at its twenty-ninth session, it is estimated that the Organization would require, in order to render effective operational assistance, some $700 000 to $1 000 000 in 1963. The Director-General would expect to make more precise estimates for 1964, based on more complete data than is now available.

5.3 Method of Providing Staff

It is suggested that WHO could help newly independent States with the problem of obtaining adequate operational staff in sufficient numbers to maintain the health services in one or other of the following ways:

(1) The recruitment by WHO of the staff required and their secondment to governments. It would be necessary to define the nature of the responsibilities that WHO and the government should have or share with regard to the staff concerned.

(2) The establishment of a system of grants-in-aid for the purpose of meeting urgent needs for operational staff. Under this arrangement the requirements for operational assistance could be met more uniformly and with greater flexibility and adaptability; the appointments and the financial arrangements would be governed by the terms of an agreement between WHO and the country concerned, under which WHO would retain adequate controls, commensurable with its financial investment.
6. Conclusion

Although the provision of operational staff is different in nature from the assistance usually given by WHO, its aim would be the same — to strengthen the national health services and help the countries concerned towards self-sufficiency in the shortest possible time. Training would be implicit in it, and the period during which such assistance would be needed would be greatly influenced by the present concentration on developing education and training programmes in WHO's regular programme on behalf of countries which are short of medical and health staff.

In some cases, newly independent States may be in a position to finance completely the recruitment of some foreign staff required for their health services, and yet lack the necessary administrative machinery. This administrative problem could best be met by the Organization's providing recruitment service to newly independent States requesting it. In fact, the Organization has provided such service in the past to requesting governments.
Annex 5

REPORTS OF THE LÉON BERNARD FOUNDATION COMMITTEE

1. **FINANCIAL REPORT ON THE LÉON BERNARD FOUNDATION FUND**

[A15/2 — 1 March 1962]

The Léon Bernard Foundation Committee met on 25 January 1962 and noted the following situation of the Fund, presented by the Director-General of the World Health Organization as Administrator of the Léon Bernard Foundation.

<table>
<thead>
<tr>
<th>Total balance of the Fund Sw. fr.</th>
<th>Cash available for award Sw. fr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance of Fund as at 1 January 1960:</td>
<td></td>
</tr>
<tr>
<td>Capital</td>
<td>13 000.00</td>
</tr>
<tr>
<td>Accumulated interest</td>
<td>632.20</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13 632.20</td>
</tr>
<tr>
<td>Income accrued during 1960</td>
<td>417.50</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14 049.70</td>
</tr>
<tr>
<td>Total Fund on 31 December 1960</td>
<td></td>
</tr>
<tr>
<td>Income accrued during 1961</td>
<td>417.50</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14 467.20</td>
</tr>
<tr>
<td>Less: Capital</td>
<td>13 000.00</td>
</tr>
<tr>
<td></td>
<td>1 467.20</td>
</tr>
</tbody>
</table>

The Committee noted that there was sufficient accrued interest to cover the expenses of awarding a prize in 1962.

2. **REPORT OF THE MEETING OF THE LÉON BERNARD FOUNDATION COMMITTEE**

[A15/3 — 1 March 1962]

The Léon Bernard Foundation Committee met on 25 January 1962, in conformity with the Statutes of the Léon Bernard Foundation, to propose to the Fifteenth World Health Assembly a candidate for the award of the Léon Bernard Foundation Prize in 1962.

The Committee noted the replies received from governments to the Director-General’s circular letter of 10 July 1961 requesting nominations, as well as a reply received from one of the individuals competent to propose candidates, and examined in detail the documentation provided to support candidatures.

It was agreed to recommend to the World Health Assembly that the Léon Bernard Foundation Prize be awarded in 1962 to Sir John Charles, in recognition of his outstanding contribution and practical achievements in the field of social medicine.

Sir John Charles has had a distinguished career in the field of public health and social medicine. As Medical Officer of Health of Newcastle-upon-Tyne he contributed greatly to the expansion of local preventive and welfare services, particularly in the field of child care and domiciliary services and in the provision of benefits for the sick and deprived. He also played a vital part in planning the National Health Service in his country, and when he became Chief Medical Officer of the Ministry of Health in 1950 he was able further to advance his earlier concepts, and his name will always be associated with the evolution, development and consolidation of that service during its difficult formative years.

International health also interested Sir John Charles, who devoted himself to international health during a period of many years, and he contributed substantially in many different ways to the work of the World Health Organization.

Sir John Charles contributed much to the raising of health standards, first in his home town, later in his native land, and eventually in the world as a whole.
Annex 6

UNITED NATIONS PRIZES FOR THE INTERNATIONAL ENCOURAGEMENT OF SCIENTIFIC RESEARCH INTO THE CONTROL OF CANCEROUS DISEASES

REPORT BY THE DIRECTOR-GENERAL

[7 May 1962]

1. Introduction

The Fourteenth World Health Assembly, in its resolution WHA14.54, noted the report of the Director-General on resolution 1398 (XIV) of the General Assembly of the United Nations on the international encouragement of scientific research into the control of cancerous diseases, and, recalling resolution EB25.R68 of the Executive Board and resolution WHA13.68 of the Thirteenth World Health Assembly, authorized the Director-General to respond to any request made by the General Assembly to nominate candidates for the award of prizes, in accordance with the procedure approved by the Thirteenth World Health Assembly in its resolution WHA13.68, and requested the Director-General to submit a report on any action he might take in this connexion.

Resolution WHA14.54 was transmitted to the Secretary-General of the United Nations, who replied that he would be happy to submit to the United Nations General Assembly any recommendations made by the World Health Organization.

In pursuance of this resolution, therefore, and in accordance with the procedure formulated by the Director-General in consultation with the Secretary-General of the United Nations, nominations for the award of the United Nations prizes were invited from all Member States, and from national institutes recommended by them; from members of the WHO expert advisory panels on cancer and on other related fields; from members of the WHO Advisory Committee on Medical Research; and from the International Union Against Cancer. The closing date for nominations was set at 1 November 1961. An Expert Committee on Cancer was convened from 19 to 21 December 1961 to study the nominations made and to select from these a list of persons who, in the opinion of the Expert Committee, merited consideration for the award of a United Nations prize.

As requested in resolution WHA14.54, the Director-General reported to the Executive Board at its twenty-ninth session on the action taken, as summarized in the preceding paragraph, and submitted to the Board in private session the confidential report of the Expert Committee on Cancer.

2. Action taken by the Executive Board at its Twenty-ninth Session

The attention of the Assembly is drawn to resolution EB29.R17 adopted by the Executive Board at its twenty-ninth session, quoted below:

The Executive Board,

General on the action taken in connexion with the award of United Nations prizes for the international encouragement of scientific research into the control of cancerous diseases,

Having studied the confidential report of the Expert Committee on Cancer convened to make recommendations for these awards,

1. THANKS the members of the Expert Committee on Cancer for their work;
2. ENDORSES the recommendations made by the Expert Committee;
3. SUBMITS these recommendations to the Fifteenth World Health Assembly, putting in alphabetical order the names of persons recommended for awards;
4. REQUESTS the Director-General to consult the Secretary-General of the United Nations on the questions:
   (a) the amount of these awards;
   (b) the intervals at which future awards may be made;
5. REQUESTS further the Director-General to report to the Fifteenth World Health Assembly on the

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1 See resolution WHA15.3.
result of this consultation together with any comments and recommendations he may wish to make.

In accordance with paragraph 3 of the above resolution, the recommendations for the award of the United Nations prizes will be made available to delegates to the Fifteenth World Health Assembly in a confidential conference room document, which will be distributed at the time at which this item is considered.

3. Consultation with the Acting Secretary-General of the United Nations

In accordance with paragraph 5 of the above resolution, the Director-General has the honour to submit to the Fifteenth World Health Assembly the following report on his consultation with the Acting Secretary-General of the United Nations on the points raised by the Executive Board.

The Director-General wrote to the Acting Secretary-General of the United Nations on 16 March 1962, informing him of the action taken to date on the question of the United Nations cancer prizes, and enclosing copies of his report to the Executive Board, resolution EB29.R17, and the confidential report of the Expert Committee on Cancer. In this letter, the Director-General summarized the recommendations of the Expert Committee—namely, that six prizes of equal value should be awarded, five to each of five individual workers, and one jointly to two workers who should each receive half the amount of an individual award. He then reported on the questions raised by the Expert Committee on such points as the size, frequency and proposed number of awards, and made the following proposals for the consideration of the Acting Secretary-General:

(a) that the amount of the six awards now recommended should be $10,000 for each individual award, or a total of $60,000, leaving a balance of $40,000 to be used for awards to be made at a later date;

(b) that the next awards should be made in 1964.

The Acting Secretary-General of the United Nations replied to the Director-General on 2 April 1962, saying that he was pleased to accept both these proposals, and that he would inform the General Assembly of the United Nations at its Seventeenth Session of the agreement between himself and the Director-General on these points, and would bring to its attention the proposals which would be made by the Fifteenth World Health Assembly concerning the persons to whom the prizes should be awarded.

Appendix

CONFIDENTIAL REPORT OF THE EXECUTIVE BOARD ON NOMINATIONS FOR THE UNITED NATIONS PRIZES FOR THE INTERNATIONAL ENCOURAGEMENT OF SCIENTIFIC RESEARCH INTO THE CONTROL OF CANCEROUS DISEASES

The Executive Board, at its twenty-ninth session, made the following recommendations for the award of the United Nations prizes for the international encouragement of scientific research into the control of cancerous diseases:

To Dr W. R. S. Doll (United Kingdom), Member of the British Medical Research Council, London, for his epidemiological studies of cancer in man, including the relationships between lung cancer and smoking, and the dose/response relationship between radiation and leukaemia, and for his general contribution to the theory of experimental design in epidemiological studies of cancer.

To Dr Ludwick Gross (United States of America), of the Sloan-Kettering Institute for Cancer Research, for his research on the viral etiology of certain tumours in mice and their unusual mode of transmission—which to a great extent is responsible for the promising tide of contemporary investigations in the field of viral oncolgy.

To Dr William H. Hueper (United States of America) and Professor Leon M. Shabad (Union of Soviet Socialist Republics), for their fundamental investigations on environmental carcinogens and for the development of practical methods of preventing cancer by eliminating carcinogens from the environment of man. Dr Hueper is Head of the Environmental Cancer Section of the National Cancer Institute, Bethesda, and Professor Shabad is Head of the Cancer Research Department, Institute of Experimental and Clinical Oncology, Soviet Academy of Medical Sciences.

To Professor Dr A. Lacassagne (France), Director of Research, Radium Institute, Paris, for a long and distinguished career in cancer research with many major contributions in the radiobiology of cancer, the role of estrogens in the causation of mammary cancer and the role of hydrocarbons in carcinogenesis.

To Dr George N. Papanicolaou 2 (United States of America), Director of the Papanicolaou Cancer Research Institute, Miami, for the development of a cytological technique for the early diagnosis of certain forms of cancer which has led to effective mass screening of populations, especially with regard to uterine cancer.

To Dr Peyton Rous (United States of America), of the Rockefeller Institute, New York, for a long and distinguished career in cancer research; especially for his discovery of the virus etiology of sarcoma in fowl, which has laid the foundation for a major field of scientific exploration, and for his contribution towards an understanding of the biological mechanism of chemical carcinogenesis.

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2 Dr Papanicolaou died on 19 February 1962.
Annex 7

SUPPLEMENTAL AGREEMENT MODIFYING THE AGREEMENT ON THE TERMS OF EMPLOYMENT OF THE DIRECTOR-GENERAL 1

THIS SUPPLEMENTAL AGREEMENT is made this Twenty-first day of May One Thousand Nine Hundred and Sixty-two between the World Health Organization (hereinafter called “the Organization”) of the one part and Dr M. G. Candau (hereinafter called “the Director-General”) of the other part.

WHEREAS
1. It is provided by Article 31 of the Constitution of the Organization that the Director-General of the Organization shall be appointed by the Health Assembly on the nomination of the Executive Board on such terms as the Health Assembly may decide; and

2. Upon the recommendations contained in Resolution EB29.R24 adopted by the Executive Board at its Twenty-ninth Session, the Fifteenth Health Assembly, by its Resolution WHA15.4, decided that, as from the First day of January One Thousand Nine Hundred and Sixty-two, the salary of the Director-General shall be twenty-four thousand United States dollars and his representation allowance ten thousand United States dollars; and

3. The Fifteenth Health Assembly, by its Resolution WHA15.4, furthermore authorized the President of the Fifteenth Health Assembly to sign on behalf of the Organization a Supplemental Agreement modifying accordingly paragraphs 1 and 2 of Article II of the Agreement on the Terms of Employment of the Director-General.

NOW THIS AGREEMENT WITNESSETH and it is hereby agreed as follows:

1. Paragraphs 1 and 2 of Article II of the Agreement of the Fourteenth day of May One Thousand Nine Hundred and Fifty-three between the Organization and the Director-General, as renewed by the Agreement of the Twenty-second day of November One Thousand Nine Hundred and Fifty-seven and as further renewed by the Agreement of the Sixteenth day of December One Thousand Nine Hundred and Fifty-nine, are hereby amended to read as follows:

II. (1) As from the First day of January One Thousand Nine Hundred and Sixty-two the Director-General shall receive from the Organization an annual salary, to be paid monthly, of twenty-four thousand United States dollars or its equivalent in such other currency as may be mutually agreed between the parties to this Agreement;

(2) In addition to the normal allowances authorized to staff members under the Staff Rules, he shall receive, as from the First day of January One Thousand Nine Hundred and Sixty-two, an annual representation allowance, to be paid monthly, of ten thousand United States dollars or its equivalent in such other currency as may be mutually agreed between the parties to this Agreement. The representation allowance shall be used at his discretion entirely in respect of representation in connexion with his official duties. He shall be entitled to such reimbursable allowances as travel allowances and removal costs on appointment, on subsequent change of official station, on termination of appointment, or on official travel and home leave travel.

WHEREUNTO we have set our hands the day and year first above written.

(signed) M. G. Candau
Director-General

(signed) S. V. Kurashov
President of the
Health Assembly of the
World Health Organization

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1 See resolution WHA15.4.
Annex 8

FINANCIAL REPORT ON THE ACCOUNTS OF WHO FOR 1961 AND
REPORT OF THE EXTERNAL AUDITOR

[28 June 1962]

FIRST REPORT OF THE AD HOC COMMITTEE OF THE EXECUTIVE BOARD

1. At its twenty-ninth session, the Executive Board (in resolution EB29.R59) established an Ad Hoc Committee, consisting of Dr A. O. Abu Shamma, Dr H. van Zile Hyde and Dr G. E. Godber, to meet on 7 May 1962 to consider the report of the External Auditor on the accounts of the Organization for the year 1961, and to submit to the Fifteenth World Health Assembly, on behalf of the Board, such comments as it deemed necessary.

2. The Committee met on 7 May 1962 in the Palais des Nations, and Dr van Zile Hyde was elected Chairman.

3. Mr Uno Brunskog, the External Auditor, introduced his report and commented on the more important matters raised therein and in the Financial Report of the Director-General.

4. The Committee then reviewed the Report of the External Auditor in detail and received, either from the External Auditor or from representatives of the Director-General, explanations on various points raised by the members of the Committee.

5. On the basis of its review, the Committee desires to bring the following items to the attention of the Assembly:

5.1 In paragraph 1 of his report, the External Auditor comments on the scope and character of his audit and states: "There has been no material change in either the scope or the character of the audit compared with earlier years. Transactions, accounts and inventories were examined to the extent necessary to satisfy myself as to the correctness of the accounts and the financial statements submitted to me for audit certification. I have also examined the reports of the internal auditors and have been able to review their work, which has given me complete satisfaction".

5.2 In paragraphs 2 and 3 of his report, the External Auditor states:

2. In 1961 I visited the Regional Office for the Americas and made a short visit to the Regional Office for Europe in connexion with other duties. From my review of the financial and administrative aspects of the work in these offices on the spot, I formed the opinion that it was being performed satisfactorily.

3. In checking in Geneva the accounts of the headquarters and those of the other regional offices, I have been able to confirm that the opinion expressed in paragraph 2 above applies to the whole Organization. As in earlier years, I have during 1961 issued internal and informal reports concerning minor errors discovered in the course of the audit, and the few observations thus made have immediately been taken care of and the errors adjusted. It should be pointed out that, in any organization, small calculating mistakes, etc., are unavoidable; it is the frequency of such errors which counts. In the World Health Organization, however, the number of errors has been negligible.

5.3 In paragraph 4 of his report, the External Auditor makes the following comment:

4. With regard to the audit of the 1961 accounts and its result, I wish to state specifically that to my knowledge there have been no cases of fraud or presumptive fraud. The financial transactions have been carried out in conformity with the rules, regulations and policies of the Organization.

---

1 See resolution WHA15.8.
consider that the management of the different funds of the Organization has been good and that the financial situation of the Organization is sound.

5.4 In paragraph 8 of his report, the External Auditor notes:

8. The active Member States were assessed $17,586,620 by the Thirteenth World Health Assembly. Collections of contributions amount to 94 per cent. The corresponding figures for the years 1959 and 1960 were 95.6 and 96.1 respectively.

Uncollected arrears of contributions relating to active Members not affected by the arrangements provided for in resolution WHA9.9 amounted to $1,214,978 at 31 December 1961. The corresponding figure at 31 December 1960 was $812,535.

The Committee noted that, due to legislative difficulties, one of the larger contributors had not been able to pay its contribution before the end of 1961, and that payment had been received early in January 1962. Had the Member been able to effect payment as usual before the end of the year, the record of collection of contributions would have been as good as that at the end of 1960.

5.5 In paragraph 10 of his report, the External Auditor notes:

10. In 1961 there was a cash deficit (i.e., the difference between obligations incurred in respect of the financial year 1961 and the budgetary income in cash) amounting to $468,294, which was covered by a withdrawal from the Working Capital Fund. In 1960 the cash deficit was $301,775.

The Committee noted that this increase in the amount of the cash deficit was attributable to the delayed payment of the contribution noted above, and that the total advance had been repaid to the Working Capital Fund in January 1962 when the contributions due had been received.

5.6 In view of the importance of the fellowships programme, the Assembly will wish to note the remarks of the External Auditor contained in paragraph 15 of his report:

15. During 1961, the amount liquidated in respect of fellowships awarded from the regular budget of the World Health Organization was $1,672,651. However, taking into account all the different funds from which the Organization is awarding fellowships, the following figures are arrived at:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fellowships not completed at 1 January 1961</td>
<td>$1,984,520</td>
</tr>
<tr>
<td>Awards placed during 1961</td>
<td>$3,105,450</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$5,089,970</strong></td>
</tr>
<tr>
<td>Liquidated during 1961</td>
<td>$2,995,122</td>
</tr>
<tr>
<td>Outstanding at 31 December 1961</td>
<td>$2,094,848</td>
</tr>
<tr>
<td>Of which:</td>
<td></td>
</tr>
<tr>
<td>relating to 1960 and prior years</td>
<td>$449,474</td>
</tr>
<tr>
<td>relating to 1961</td>
<td>$1,645,374</td>
</tr>
<tr>
<td><strong>as above</strong></td>
<td><strong>$2,094,848</strong></td>
</tr>
</tbody>
</table>

6. In Section II of his report, on operations under the Expanded Programme of Technical Assistance, paragraph 4, the External Auditor noted an ex-gratia payment. After hearing an explanation of this payment, the Committee was satisfied with the decision made in this case.

7. The Committee wishes to commend the External Auditor on his report, and to express its appreciation of the explanations given by him and by the representatives of the Director-General during the review of the Report.

8. The Committee recommends to the Fifteenth World Health Assembly the adoption of the following resolution:

The Fifteenth World Health Assembly,

Having examined the Financial Report of the Director-General for the period 1 January to 31 December 1961 and the Report of the External Auditor for the same financial period, as contained in Official Records No. 117; and

Having considered the report of the Ad Hoc Committee of the Executive Board on its examination of these reports,

Annex 9

SUPPLEMENTARY BUDGET ESTIMATES FOR 1962

[Anex 9]  

SECOND REPORT OF THE AD HOC COMMITTEE OF THE EXECUTIVE BOARD

1. At its twenty-ninth session the Executive Board, in resolution EB29.R59, established "an ad hoc committee of the Executive Board consisting of: Dr A. O. Abu Shamma, Dr H. van Zile Hyde and Dr G. E. Godber, to meet on Monday, 7 May 1962, to... report to the Fifteenth World Health Assembly on the minor adjustments reported by the Director-General in the cost estimates for the supplementary budget for 1962”.

2. The Committee met on 7 May 1962 in the Palais des Nations, Geneva, and Dr van Zile Hyde was elected Chairman.

3. In considering the adjustments reported by the Director-General, the Committee noted that they had resulted from decisions and recommendations of the Executive Board at its twenty-ninth session, and from subsequent developments as detailed in the Director-General’s report (see Appendix, below).

4. With particular reference to the increase in the salary levels of general service staff at headquarters, as referred to in paragraph 3.1 of the Director-General’s report, the Committee noted that agreement had been reached between the organizations concerned to appoint a committee of three outside experts to examine and make recommendations on various aspects of the problem of general service salaries in Geneva, including the recommendation of a formula by which these salaries may be periodically adjusted in the future. It was expected that the report of the committee would become available within the next few weeks.

5. As regards the changes introduced by the Director-General in the policy governing travel for the staff of the Organization, the Committee was informed that they related to extension of tourist/economy class for all air travel of staff members below the Director level. Where the journey by the most direct and fastest route is scheduled to take nine hours or more, the traveller will be entitled to a stop-over en route, or, when on duty travel, he may schedule his travel to arrive at his destination one full day before commencing his duties. The Committee considered that this decision of the Director-General was deserving of commendation. The Committee noted that this policy decision does not apply to the allowance for transportation provided for delegates to the Health Assembly and to members of the Executive Board, which is governed by decisions of the Health Assembly; nor does it apply to members of expert committees.

6. The Committee, having reviewed the Director-General’s report, considered the adjustments to be satisfactory, and accordingly decided to recommend to the Fifteenth World Health Assembly approval of the supplementary estimates for 1962 in the amount of $1 256 620.

7. The Committee also noted that, in addition to the amount of casual income recommended to be used to help finance the 1963 budget, sufficient casual income had become available to finance the supplementary estimates for 1962. The Director-General, in his report to the Committee, proposed the financing of the supplementary estimates entirely from casual income, and the Committee decided to recommend this method of financing to the Fifteenth World Health Assembly.

8. The Committee therefore recommends to the Fifteenth World Health Assembly, on behalf of the Board, that it adopt the following resolution, in place of that set forth in paragraph 2 of resolution EB29.R30:

The Fifteenth World Health Assembly,

Having considered the proposals of the Director-General and the recommendations of the Executive Board concerning supplementary budget estimates for 1962,

1. APPROVES the supplementary budget estimates for 1962;
2. DECIDES to amend the Appropriation Resolution for 1962 (resolution WHA14.43) by increasing (or decreasing) the amounts voted under paragraph I as follows:

\[\text{...}\]

1 See resolution WHA15.10.
The Executive Board, having considered the supplementary estimates for 1962—submitted by the Director-General, recommends in resolution EB29.R30 "to the Fifteenth World Health Assembly that it approve the supplementary budget estimates for 1962 and their financing, as proposed by the Director-General". In making this recommendation, the Board noted "that there may be minor adjustments in the cost estimates as a result of decisions and recommendations taken at this session of the Executive Board, and also as a result of developments prior to the World Health Assembly".

In resolution EB29.R59 the Executive Board appointed an ad hoc committee to meet prior to the Fifteenth World Health Assembly inter alia to "report to the Fifteenth World Health Assembly on the minor adjustments reported by the Director-General in the cost estimates for the supplementary budget for 1962 and the programme and budget estimates for 1963".

The adjustments in the cost estimates for the supplementary budget for 1962 which the Director-General presents in accordance with the provisions of the above quoted resolutions are set forth below.

2. Adjustments resulting from Decisions and Recommendations of the Executive Board at its Twenty-ninth Session

2.1 The Executive Board, in resolution EB29.R25, approved "the Director-General's proposal to establish representation allowances for ungraded posts in WHO from 1 January 1962". The total amount approved for this purpose is $29,000, as compared with $34,000 included in the Director-General's supplementary estimates for 1962. Thus these estimates can be reduced by $5000.

2.2 The Executive Board, in resolution EB29.R24, recommended to the Fifteenth World Health Assembly the adoption of a resolution modifying the contract of the Director-General. If approved, this will require an increase of $7400 in the supplementary estimates for 1962.

3. Adjustments resulting from Developments prior to the World Health Assembly

3.1 In his report of 21 December 1961 to the Executive Board on his supplementary estimates for 1962, the Director-General stated (in para. 1.4):

"Studies are at present being pursued jointly by the international organizations in Geneva on the salary levels of general service staff in Geneva and it appears likely that an additional increase will result therefrom. Without prejudice to the results of these studies the Director-General is including in these supplementary estimates a tentative amount of $86,250 to cover such increased costs. It should be emphasized that the estimated amount now proposed may be subject to adjustment, and the Director-General will inform the Executive Board should it develop that this estimate requires any change."

Following an inter-agency agreement in Geneva, the Director-General revised the salary levels of headquarters general service staff with effect from 1 January 1962 by varying percentages according to the grade levels. For WHO staff this resulted in an average increase equivalent to 9.4 per cent., and the additional budgetary provision required for 1962 is $135,020—an increase of $48,770 over the tentative amount of $86,250 previously estimated.

3.2 Since the twenty-ninth session of the Executive Board, the Director-General has made a review of the policy governing travel for the staff of the Organization. This review was prompted by the increased availability of jet aircraft facilities through-
out the world, reducing travel time very considerably. Following the review, the Director-General decided to introduce certain changes involving an extended use of tourist/economy class air travel. This decision, effective from February 1962, is expected to result in an estimated reduction of $500,000 in expenditure in 1962, based on actual experience of travel costs for a twelve-month period. The Director-General proposes that this reduction be reflected in the adjustments to the supplementary estimates for 1962.

4. Summary of Adjustments to the Supplementary Estimates for 1962

Taking account of the adjustments described in paragraphs 2 and 3 above, the supplementary estimates for 1962 proposed by the Director-General amount to $1,256,620, as follows:

<table>
<thead>
<tr>
<th></th>
<th>US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimates as originally submitted by the Director-General</td>
<td>1,705,450</td>
</tr>
<tr>
<td>Increases:</td>
<td></td>
</tr>
<tr>
<td>Paragraph 2.2 (above)</td>
<td>7,400</td>
</tr>
<tr>
<td>Paragraph 3.1 (above)</td>
<td>48,770</td>
</tr>
<tr>
<td>Sub-total</td>
<td>1,761,620</td>
</tr>
<tr>
<td>Decreases:</td>
<td></td>
</tr>
<tr>
<td>Paragraph 2.1 (above)</td>
<td>5,000</td>
</tr>
<tr>
<td>Paragraph 3.2 (above)</td>
<td>500,000</td>
</tr>
<tr>
<td>505,000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,256,620</td>
</tr>
</tbody>
</table>

The supplementary estimates as adjusted are shown according to Purpose of Expenditure Code and Appropriation Section in Annex 1, below. Annex 2 shows by Appropriation Section the approved 1962 estimates, the supplementary estimates as adjusted, and the total revised estimates for 1962.

5. Proposed Method of Financing the Supplementary Estimates for 1962

5.1 As stated in paragraph 1 above, the Executive Board recommended to the Fifteenth World Health Assembly that it approve the method of financing the supplementary estimates for 1962, as proposed by the Director-General. To preclude the necessity of making additional assessments on Members, the Director-General had proposed that the estimates be financed by casual income available for the purpose, and by a special advance from the Working Capital Fund, to be authorized by the Fifteenth World Health Assembly.

5.2 The amount of casual income as shown in the Financial Report for 1961 and the cash balance of the Assembly Suspense Account as at 30 April 1962 total $1,784,319, as follows:

<table>
<thead>
<tr>
<th>US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessments on new Members from previous years</td>
</tr>
<tr>
<td>Miscellaneous income</td>
</tr>
<tr>
<td>Available by transfer from the cash portion of the Assembly Suspense Account</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

5.3 The Director-General, in keeping with the principle established by the Eleventh World Health Assembly, has proposed that out of available casual income an amount of $500,000 be used to help finance the 1963 budget. This proposal has been recommended by the Board for approval by the Fifteenth World Health Assembly. Should the Fifteenth World Health Assembly approve the proposal, there would still remain sufficient casual income to finance the supplementary budget estimates for 1962, adjusted as indicated in paragraph 4 above, making it unnecessary for the Fifteenth World Health Assembly to authorize a special advance from the Working Capital Fund.

6. Recommendation to the Fifteenth World Health Assembly

In the light of the above adjustments to the supplementary estimates for 1962 and the changed method of financing them now proposed by the Director-General, the Ad Hoc Committee will wish to consider its recommendation on behalf of the Board, to the Fifteenth World Health Assembly, including a resolution in place of that set forth in paragraph 2 of resolution EB29.R30.

ANNEX 1

SUPPLEMENTARY BUDGET ESTIMATES FOR 1962: SUMMARY BY PURPOSE OF EXPENDITURE CODE AND APPROPRIATION SECTION

<table>
<thead>
<tr>
<th>Part I: Organizational Meetings</th>
<th>Estimated expenditure US $</th>
<th>Estimated expenditure US $</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SECTION I: WORLD HEALTH ASSEMBLY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter 00 Personal Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 Salaries and wages (temporary staff)</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Total — Chapter 00</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Chapter 20 Travel and Transportation</td>
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<td></td>
</tr>
<tr>
<td>25 Travel of delegates</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Total — Chapter 20</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Total — Section 1</td>
<td>7,000</td>
<td></td>
</tr>
</tbody>
</table>

### Section 2: Executive Board and its Committees

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Salaries and wages (temporary staff)</th>
<th>Total - Chapter 00</th>
<th>Total - Section 2</th>
<th>Total - Part 1</th>
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<tbody>
<tr>
<td>00</td>
<td>3 950</td>
<td>3 950</td>
<td>3 950</td>
<td>10 950</td>
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</tbody>
</table>

### Section 3: Operating Programme

#### Part II: Operating Programme

<table>
<thead>
<tr>
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<th>Salaries and wages</th>
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<th>Total - Section 4</th>
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<tbody>
<tr>
<td>00</td>
<td>1 189 920</td>
<td>1 189 920</td>
<td>967 920</td>
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#### Part III: Administrative Services

<table>
<thead>
<tr>
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<th>Salaries and wages</th>
<th>Total - Chapter 00</th>
<th>Total - Section 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>12 731 232</td>
<td>12 731 232</td>
<td>210 312</td>
</tr>
</tbody>
</table>

### Section 4: Programme Activities

<table>
<thead>
<tr>
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<th>Salaries and wages</th>
<th>Total - Chapter 00</th>
<th>Total - Section 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>193 763</td>
<td>193 763</td>
<td>174 763</td>
</tr>
</tbody>
</table>

### Section 5: Regional Offices

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Salaries and wages</th>
<th>Total - Chapter 00</th>
<th>Total - Section 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>168 895</td>
<td>168 895</td>
<td>134 490</td>
</tr>
</tbody>
</table>

### Section 9: Other Statutory Staff Costs

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Salaries and wages</th>
<th>Total - Chapter 00</th>
<th>Total - Section 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>168 895</td>
<td>168 895</td>
<td>26 498</td>
</tr>
</tbody>
</table>

### Section 10: Personal Allowances

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Salaries and wages</th>
<th>Total - Chapter 00</th>
<th>Total - Section 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>3 950</td>
<td>3 950</td>
<td>10 950</td>
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</tbody>
</table>

### Section 11: Fixed Charges and Claims

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Salaries and wages</th>
<th>Total - Chapter 00</th>
<th>Total - Section 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>168 895</td>
<td>168 895</td>
<td>26 498</td>
</tr>
</tbody>
</table>

Total - Parts I, II and III: 1 256 620
### Annex 2

**Approved Estimates, Supplementary Estimates as Adjusted, and Total Revised Estimates for 1962, by Appropriation Section**

<table>
<thead>
<tr>
<th>Appropriation Section</th>
<th>Purpose of Appropriation</th>
<th>Appropriated by Fourteenth World Health Assembly[^1] US $</th>
<th>Supplementary estimates as adjusted US $</th>
<th>Total revised estimates US $</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART I: ORGANIZATIONAL MEETINGS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>World Health Assembly</td>
<td>296 010</td>
<td>7 000</td>
<td>303 010</td>
</tr>
<tr>
<td>2.</td>
<td>Executive Board and its Committees</td>
<td>184 100</td>
<td>3 950</td>
<td>188 050</td>
</tr>
<tr>
<td>3.</td>
<td>Regional Committees</td>
<td>114 000</td>
<td>—</td>
<td>114 000</td>
</tr>
<tr>
<td><strong>Total — Part I</strong></td>
<td></td>
<td>594 110</td>
<td>10 950</td>
<td>605 060</td>
</tr>
<tr>
<td><strong>PART II: OPERATING PROGRAMME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Programme Activities</td>
<td>11 996 475</td>
<td>967 920</td>
<td>12 964 395</td>
</tr>
<tr>
<td>5.</td>
<td>Regional Offices</td>
<td>2 260 915</td>
<td>174 763</td>
<td>2 435 678</td>
</tr>
<tr>
<td>6.</td>
<td>Expert Committees</td>
<td>222 000</td>
<td>—</td>
<td>222 000</td>
</tr>
<tr>
<td>7.</td>
<td>Other Statutory Staff Costs</td>
<td>4 307 728</td>
<td>(133 823)</td>
<td>4 173 905</td>
</tr>
<tr>
<td><strong>Total — Part II</strong></td>
<td></td>
<td>18 787 118</td>
<td>1 008 860</td>
<td>19 795 978</td>
</tr>
<tr>
<td><strong>PART III: ADMINISTRATIVE SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Administrative Services</td>
<td>1 465 998</td>
<td>210 312</td>
<td>1 676 310</td>
</tr>
<tr>
<td>9.</td>
<td>Other Statutory Staff Costs</td>
<td>462 954</td>
<td>26 498</td>
<td>489 452</td>
</tr>
<tr>
<td><strong>Total — Part III</strong></td>
<td></td>
<td>1 928 952</td>
<td>236 810</td>
<td>2 165 762</td>
</tr>
<tr>
<td><strong>PART IV: OTHER PURPOSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Headquarters Building Fund</td>
<td>297 000</td>
<td>—</td>
<td>297 000</td>
</tr>
<tr>
<td>11.</td>
<td>Contribution to the Malaria Eradication Special Account</td>
<td>2 000 000</td>
<td>—</td>
<td>2 000 000</td>
</tr>
<tr>
<td><strong>Total — Part IV</strong></td>
<td></td>
<td>2 297 000</td>
<td>—</td>
<td>2 297 000</td>
</tr>
<tr>
<td><strong>Sub-total — Parts I, II, III and IV</strong></td>
<td></td>
<td>23 607 180</td>
<td>1 256 620</td>
<td>24 863 800</td>
</tr>
<tr>
<td><strong>PART V: RESERVE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Undistributed Reserve</td>
<td>1 683 140</td>
<td>—</td>
<td>1 683 140</td>
</tr>
<tr>
<td><strong>Total — Part V</strong></td>
<td></td>
<td>1 683 140</td>
<td>—</td>
<td>1 683 140</td>
</tr>
<tr>
<td><strong>TOTAL — ALL PARTS</strong></td>
<td></td>
<td>25 290 320</td>
<td>1 256 620</td>
<td>26 546 940</td>
</tr>
</tbody>
</table>

**Less:** Reimbursement from the Special Account of the Expanded Programme of Technical Assistance | 642 000 | — | 642 000 |

**Less:** Casual Income:
- Assessments on new Members from previous years | 51 720 | — | 51 720 |
- Miscellaneous income | 448 280 | 475 049 | 923 329 |
- Available by transfer from the cash portion of the Assembly Suspense Account | — | 781 571 | 781 571 |

**Total Casual Income** | 500 000 | 1 256 620 | 1 756 620 |

**Total Deductions** | 1 142 000 | 1 256 620 | 2 398 620 |

**Total Assessments on Members** | 24 148 320 | — | 24 148 320 |

[^1]: Taking into account transfers between sections of the 1962 Appropriation Resolution (WHA14.43) effected with the concurrence of the Executive Board in resolution EB29.R9.
Annex 10

ACCOMMODATION FOR THE REGIONAL OFFICE FOR AFRICA

[A15/AFL/16 — 12 May 1962]

REPORT BY THE DIRECTOR-GENERAL

1. Introduction

1.1 The African Region has, in recent years, undergone considerable change and development. At 31 December 1951, the Region comprised two Member States and one Associate Member. On 30 April 1962 it included twenty-two Member States and two Associate Members. This increase in the number of Member States in the Region has been accompanied by a corresponding increase in the needs to be satisfied and the work to be done. Its resources which, in 1956, amounted to nearly one million dollars, have risen in 1962 to close on six million dollars, taking into account funds from all sources. The present premises at Brazzaville accommodating the Regional Office have clearly become too small, and their extension is an immediate necessity if the work to be done in the Region is to proceed as planned.

1.2 Following the discussion of a report on the situation submitted by the Regional Director to the eleventh session of the Regional Committee for Africa, the following resolution was unanimously adopted:

The Regional Committee for Africa,

Having considered the problems relating to the additional premises for the regional headquarters in Africa;

Having examined the relevant report of the Regional Director on the subject;

Recognizing the considerable extension of the activities of the World Health Organization in this part of the world; and

Recalling the urgent necessity that there be placed at the disposal of the Regional Office premises which would permit it satisfactorily to carry out its duties,

1. RECOMMENDS to the Members and Associate Members in the African Region that they participate voluntarily, to the greatest extent possible, in the expenses involved through the extension of the Djoué premises and that they inform the Regional Director of the amount of the contribution which they would be prepared to make available for this purpose; and

2. REQUESTS the Regional Director to propose to the Director-General the inclusion in the next working budget of a special chapter relating to the proposed works.

The adoption of the above resolution was preceded by declarations made by various participating delegations undertaking to make contributions.

1.3 The Director-General submitted a report on this subject to the Executive Board at its twenty-ninth session,1 and the Board adopted resolution EB29.R29.

1.4 The Director-General has included a provision of $100 000 in his proposed programme and budget estimates for 1963 towards the cost of constructing an extension to the Regional Office building.

2. Developments since the Twenty-ninth Session of the Executive Board

2.1 Pursuant to the authority vested in the Director-General to accept the generous offer of the French Government of transfer to the Organization of its property rights in the Djoué Estate under the provisions of resolution EB29.R29, the property rights were ceded to the Organization on 10 April 1962 against the payment of a nominal price (NF 100). The buildings constituting the Djoué Estate, which include the regional office building, are therefore owned by the Organization as from that date.

2.2 In section 2 of his report to the twenty-ninth session of the Executive Board2 the Director-General indicated that unofficial contacts had been made with the architect of the existing building and that it had been ascertained that the approximate price of the extension of the premises was in the neighbourhood of CFA fr. 140 million ($560 000). However, the

1 See resolution WHA15.14.
2 Document AFR/RC11/5.
present indications are that, because of rising prices, and taking into consideration the time lag before the extension of the building can be completed, it would be prudent to provide for a contingency of CFA fr. 10 million (or approximately $40 000), bringing the total estimated cost to an amount of $600 000.

2.3 The resolutions of the eleventh session of the Regional Committee and resolution EB29.R29 of the Executive Board were brought to the notice of the Members of the African Region in a circular letter dated 15 February 1962. The majority of the governments intimated that they would respond favourably to the appeal made for voluntary contributions. Representatives of the Director-General have also contacted some of the governments concerned.

2.4 Up to the present, the following five governments have paid, or have formally pledged, contributions in amounts as follows:

<table>
<thead>
<tr>
<th>Country</th>
<th>US $ equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameroon (CFA fr. 1 000 000)</td>
<td>4 082</td>
</tr>
<tr>
<td>Congo (Brazzaville) (CFA fr. 42 000 000)</td>
<td>171 429</td>
</tr>
<tr>
<td>Madagascar (CFA fr. 500 000)</td>
<td>2 041</td>
</tr>
<tr>
<td>Mauritania (CFA fr. 500 000)</td>
<td>2 041</td>
</tr>
<tr>
<td>Tanganyika (£1 000)</td>
<td>2 800</td>
</tr>
</tbody>
</table>

2.5 Taking into account the amount of $100 000 included in the Director-General's proposed programme and budget estimates for 1963, and the contributions of $182 393 paid or formally pledged, there will still remain an amount of $317 607 needed to meet the total estimated cost of the construction. Continuing efforts will be made by the Director-General to obtain contributions from the countries in the Region which have not yet pledged or paid contributions to help finance the cost of extending the accommodation for the Regional Office.

3. Financing

3.1 The Director-General believes that, in view of the necessity of proceeding with the construction work without delay, the best way of providing the necessary financing would be for the Fifteenth World Health Assembly to authorize him to advance from the Working Capital Fund, as and when needed, an amount not exceeding $300 000; the amount which will have to be withdrawn can be reduced to the extent that further voluntary contributions are pledged and paid. The Director-General further suggests that such total sum as may be required to be withdrawn from the Working Capital Fund for this purpose should be included for reimbursement to the Fund in his proposed programme and budget estimates for 1964, taking into account such further contributions as may be received.

Annex 11

HOUSING OF STAFF OF THE REGIONAL OFFICE FOR AFRICA

1. In the report of the Director-General under agenda item 3.19.1—Accommodation for the Regional Office for Africa—reference is made to the considerable expansion of the work in the African Region leading to the immediate necessity for extending the Regional Office accommodation. This expansion of activities in the Region is accompanied by a need for additional staff, for whom housing will have to be provided.

2. Although qualified staff can be recruited to fill the new posts, recruitment has had to be delayed on account of the acute housing shortage in Brazzaville. Without this staff, the Regional Office is not in a position to provide the Members of the Region with the kind of service they request.

3. The housing of staff of the Regional Office for Africa has presented a problem to the Organization ever since the Office was first established. The problem was alleviated at the time the Office moved to its present location on the Djoué Estate where twenty-five houses for staff accommodation were made available by the Government of France at a nominal rent, and, later, by the leasing of a further twenty houses owned by Energie Electrique on the same site. The twenty-five houses previously rented from the French Government have now become the property of the Organi-

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1 See resolution WHA15.15.
2 Annex 10.
zation. However, as the work of the Regional Office has expanded, it has become necessary to provide temporary housing by leasing houses, apartments, and even hotel rooms at very high rents, and there are increasing requirements to be met. At present the Organization is renting the accommodation from the owners and sub-leasing it to the staff. In so far as the twenty houses rented from Energie Electrique are concerned, the Organization recovers from the staff the amount of rent which it pays, but for the other temporary housing the Organization recovers approximately 50 per cent. of the rentals which it is required to pay. This is necessary in order that staff members should pay comparable rentals for comparable housing. The rentals payable by staff are set at a reasonable level, compatible with the present post adjustment for Brazzaville. Any variation in rentals will have a direct effect on the post adjustment.

4. A preliminary study has been made as to the best means of meeting this problem, and the following possible solutions have emerged. The solutions contemplated are based on the utilization of land near the present office site, including four existing houses, and the construction of new buildings. This would provide, together with the housing mentioned in paragraph 3 above, enough housing units to meet the needs foreseen until the end of 1964. Additional housing may be required in future years.

5. One possible solution would be to arrange for additional housing units to be built commercially, and leased to the Organization on a long-term basis. As the commercial owners would expect to recover their total construction cost in a few years, the rentals would be extremely high, and are estimated at $128 000 a year, of which approximately 50 per cent. would be recoverable from rentals paid by staff members. The owners would require a three-year advance payment amounting to $384 000, and a further three-year advance payment of the same amount at the beginning of the fourth year. If this arrangement were to be made, the Assembly would have to appropriate for 1963 the sum of $384 000 for the payment of advance rentals.

6. Another possible solution would be for the Organization to buy the land and the four existing houses, and to construct the additional housing units. The costs have been estimated as follows:

| Description                        | Cost  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of land and four existing villas</td>
<td>$151,100</td>
</tr>
<tr>
<td>Construction of 50 housing units</td>
<td>$754,000</td>
</tr>
<tr>
<td>Furniture</td>
<td>$120,500</td>
</tr>
<tr>
<td>Architect’s fees</td>
<td>$46,000</td>
</tr>
<tr>
<td>Contingency</td>
<td>$51,400</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,123,000</strong></td>
</tr>
</tbody>
</table>

The adoption of this solution would mean a saving to the Organization of approximately $64,000 a year, since, as mentioned in paragraph 5 above, the total annual rental paid for equivalent accommodation would amount to $128,000 a year, of which approximately 50 per cent.—or $64,000—would be recoverable from rentals charged to staff members. Over a period of approximately eighteen years the cost incurred by the Organization, excluding the costs of maintenance, would equal the capital outlay involved, after which time the Organization would have acquired an asset in the land and buildings. This solution would make it necessary for the Health Assembly to appropriate for 1963 an amount of $1,123,000.

7. The Director-General believes that additional study of the problem is necessary before proceeding with the programme outlined in paragraph 6 above. Though some steps must be taken to meet the immediate and urgent needs, a more comprehensive study must be made of long-term requirements and of the best means of meeting them.

8. In these circumstances, the Director-General inclines to the view that a modest beginning might be considered at this time. This would consist of acquiring the tract of land on which four houses already exist, and constructing buildings containing twenty-four apartments. The land acquired would be large enough to allow for the construction of additional apartments in the future. The estimated costs are as follows:

| Description                        | Cost  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of land and four existing villas</td>
<td>$98,000</td>
</tr>
<tr>
<td>Construction of apartment blocks</td>
<td>$265,000</td>
</tr>
<tr>
<td>Furniture for apartments</td>
<td>$55,000</td>
</tr>
<tr>
<td>Architect’s fees</td>
<td>$36,000</td>
</tr>
<tr>
<td>Contingency</td>
<td>$28,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$482,000</strong></td>
</tr>
</tbody>
</table>

To rent equivalent housing on a commercial basis would require annual rentals of $57,000, of which approximately 50 per cent.—or $28,500—would be recoverable from rentals payable by staff members. Over a period of approximately eighteen years the
cost incurred by the Organization, excluding costs of maintenance, would equal the capital outlay involved, after which time the Organization would have acquired an asset in the land and buildings. Should the Health Assembly adopt this solution, which is designed only to meet immediate and urgent needs, it would be necessary to appropriate for 1963 an amount of $482,000.

9. Any solution adopted to obtain additional housing units will increase the real estate management activities of the Organization, which now owns twenty-five houses and rents and sub-leases twenty houses. The Director-General will continue his study to determine the most efficient methods for the Organization’s real estate operations, giving consideration to the establishment of a Revolving Fund for such operations. If it seems desirable to establish a Revolving Fund, the appropriate time for doing so would probably be 1 January 1963. The Director-General will report in full on the subject—including the question of a Revolving Fund—to the Executive Board at its thirty-first session. The Assembly might wish to delegate to the Executive Board the authority to approve, on its behalf, the establishment of such a fund, if the Board deems it desirable.

Annex 12

ASSISTANCE TO THE REPUBLIC OF THE CONGO (LEOPOLDVILLE) ¹

[A15/P&B/16 — 8 May 1962]

REPORT BY THE DIRECTOR-GENERAL

1. Introduction

This report is the sixth of a series submitted by the Director-General pursuant to the requests of the World Health Assembly and the Executive Board to continue to report on developments in the assistance of the Organization to the Republic of the Congo (Leopoldville), and describes the developments that have taken place since January 1962.

The previous reports were submitted in October 1960 ² to the twenty-sixth session of the Executive Board, in January 1961 ³ to the twenty-seventh session of the Executive Board, in February 1961 ³ to the Fourteenth World Health Assembly, in May 1961 ⁴ to the twenty-eighth session of the Executive Board, and in January 1962 ⁵ to the twenty-ninth session of the Executive Board. In these, the Director-General has been reporting on WHO’s endeavours to maintain the medical and health services in the Congo since they were threatened with collapse during the crisis following the country’s attainment of independence. The more recent of these reports also indicated the first results of the policy of initiating, even at the height of the crisis, long-term programmes of technical advisory services and of education and training.

² See resolution WHA15.18.

2. WHO Staff in the Congo

2.1 The Three Groups: Advisory, Teaching and Operational

The staff assigned by the Organization to the Congo form three groups: an advisory group, consisting of staff members assigned to the central and provincial ministries to carry out the usual advisory services, characteristic of technical assistance; a small group of teaching staff assigned to Lovanium University; and a large contingent of operational staff, consisting of physicians, surgeons, anaesthetists, various medical specialists, technicians for laboratories and X-ray services, and pharmacists and biochemists. In Leopoldville there is also a WHO liaison team with the United Nations.

2.2 Staff Position in the Congo as at 3 May 1962

WHO is providing from its regular budget a central advisory team made up of four staff members, and also one professor assigned to Lovanium University. A liaison team of five has been provided, and is financed from ONUC funds (Operations of the United Nations in the Congo). It includes a post of personnel officer assigned to headquarters.

The Organization is assigning advisory staff to the central and provincial health authorities consisting of

⁶ Covering costs such as those relating to the central administrative services of the United Nations Civilian Operations and its immediately associated teaching staff.
twenty-four staff members and two consultants, financed from the United Nations Congo Fund. As at 3 May 1962, sixteen of these staff members had already been appointed.

Finally, the Organization has undertaken to assign to the health services of the Congo 200 medical and paramedical health staff (operational staff), financed from the United Nations Congo Fund. Of these, as at 3 May 1962 the Organization had provided 129 health staff and seven teaching staff assigned to the University of Lovanium. A further twenty persons are expected to report for duty within a few weeks. Others are being recruited.

2.3 Distribution of the Operational Group

The health staff (operational staff) assigned to the Congo provides a framework for the maintenance of medical care services, but, of course, nothing like the 450 doctors previously considered indispensable. The distribution of the 129 health staff provided as at 3 May 1962 was as follows: Equateur 24, Kasai 25, Katanga 4, Kivu 26, Leopoldville 28, Orientale 20; one was awaiting assignment; and an X-ray technician has been appointed for maintenance of X-ray equipment throughout the country.

Of the medical and paramedical health staff (operational staff) recruited in 1960 and 1961, eighty-five were willing to continue to serve until the end of 1962. They are included in the total number of 129 as at 3 May 1962.

A team of twenty medical staff has been provided by the Swiss Government to ONUC to staff the Kitambo Hospital in Leopoldville. This medical unit is co-operating very closely with WHO.

3. WHO Operations in the Congo

3.1 Operational Difficulties

Requests for doctors are flowing in from all the provinces. The need is particularly great in the Kivu Province, where additional medical problems are created by the presence of Ruanda refugees. On the whole, general security has improved, but there have been difficult situations when doctors were cut off in remote bush hospitals and, in peripheral areas, when doctors have had transport difficulties and were unable to obtain the necessary petrol for their cars. A particularly difficult situation was created by the floods in Orientale and Equateur Provinces, where doctors remained in isolated bush hospitals for weeks without being able to communicate with the provincial centre or to obtain adequate food supplies or drugs.

3.2 Advisory Public Health Services

Members of the advisory teams in Leopoldville and the provinces made many visits in the provinces—including the remote areas—to advise WHO and national staff on the spot. There is considerable collaboration between members of the advisory team stationed in Leopoldville and the appropriate sections of the Central Ministry of Health, as well as in some provinces. In Kasai, co-operation between WHO staff and the members of the Provincial Ministry of Health is particularly close.

3.3 Medical Care

Medical care services have been maintained in most of the existing hospitals and clinics, due consideration being given in the assignment of staff to the size of the population served and the varying workload involved. A system of air patrols has been put into operation by ONUC between Leopoldville and the Equateur and Orientale Provinces. Urgently needed medical supplies are being delivered from Leopoldville to the provincial capitals and then flown to the bush hospitals wherever landing facilities for a small plane are available. Medical supplies are also being sent to several provinces by ONUC planes on a "space available" basis. In this way, several tons of medical supplies were sent by air to Kabalo, Northern Katanga, and to most of the provincial capitals. Assistance and technical advice are being provided to a new health centre which serves a community of 50,000 people outside Leopoldville.

Support is also being given to the maternal and child health activities.

3.4 Environmental Sanitation

In the field of environmental sanitation, WHO engineers continue to focus their main attention on the problem of ensuring a safe, potable community water supply in the various urban and semi-urban areas, supervising existing facilities both at source and in the distribution systems. Attention is also being given to the need for training staff for health and sanitation work. Wherever possible, health education activities are being organized with the participation of the health advisory team as a whole. Appreciable assistance has been given by sanitary engineers to waterworks in the provinces affected by floods.

3.5 General Epidemiological Situation

3.5.1 Smallpox epidemic. The dominant epidemiological feature has been the outbreak of smallpox in Leopoldville. The epidemic started in September 1961 with fifteen cases, and reached its peak by the end of February 1962, with 300 cases in that month alone.
There is an indication that the intensity of the epidemic is decreasing: in March, there were only 262 cases. The total number of cases reported from the beginning of the epidemic up to 31 March 1962 was 943. The mortality rate is 24 per cent. The Organization assisted the Congolese health authorities in the planning, organization and execution of the mass vaccination campaign started on 26 February. The decision to start this mass campaign was taken following evidence that 540,000 vaccinations previously made between September and the end of December had not been as effective as expected. In the new campaign, freeze-dried vaccine is being used. The Organization has provided 1,000,000 doses of vaccine for this purpose. The Congolese Red Cross provided 162 vaccinators trained by the local health authorities with WHO technical advice. In addition, the Organization co-ordinated the various services concerned and provided the supervisory personnel. There has been close co-operation with the Swiss medical unit, and ONUC provided transportation facilities.

There are twenty-seven teams carrying out vaccinations, district by district, throughout the city, and within a period of one month 350,865 vaccinations were given. There has been an excellent response on the part of the population to the vaccination campaign: this is due to the combined work of the Provincial Ministry of Health, the city authorities, voluntary organizations, radio and press.

3.5.2 Sleeping sickness. In Kasai Province over 400 old cases and more than 200 recently detected cases have been reported. Although preventive measures are known, their execution seems difficult, owing to the present lack of personnel trained in public health work. To remedy this situation, a training programme for Africa is under study.

3.5.3 Malaria. A plan for the unification of malaria control/eradication services has been prepared.

3.5.4 Kwashiorkor. The outbreak of kwashiorkor, which cropped up in South Kasai, has been largely controlled, but vigilance is being maintained.

3.5.5 Leprosy. A WHO consultant carried out a fact-finding survey and visited the leprosaria of Leopoldville, Equateur, Kasai, Kivu and Orientale. He was unable to visit Katanga. He reported that the political upheaval following independence led to a considerable deterioration in case-finding and treatment of leprosy. The consultant made several recommendations, which are being implemented as conditions permit. However, for a long time to come, it will not be possible to achieve anything like the degree of thoroughness with which leprosy was previously being controlled. It has nevertheless been possible to maintain a modicum of medical care services and out-patient treatment in most of the leprosy establishments in the country.

4. The WHO Education and Training Programme for the Congo

The latest position of this programme, which is being implemented locally and through fellowships abroad, is summarized hereunder.

4.1 Training in the Congo

4.1.1 Lovanium University. Since its independence, the Congo has received assistance for Lovanium University through the provision of teaching staff. Seven visiting WHO professors are at present teaching pathology, gynaecology, otorhinolaryngology, anaesthesiology, bacteriology, radiology and dermatology. With the exception of one professor provided from WHO's regular budget, these are financed from the United Nations Congo Fund (as already indicated in paragraph 2.2). A cardiology technician has also been appointed, and arrangements have been made under this fund to assign three nursing tutors. The provision of medical teaching staff has been extended to the end of 1962, and it is hoped that means for financing their further provision will be found, so as not to discontinue their service.

The number of applications from Congolese students for entrance as first-year medical students in November 1961 was very satisfactory, and 38 were admitted. The Lovanium Faculty of Medicine has 87 medical students, of whom 65 are Congolese, as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-year</td>
<td>38</td>
</tr>
<tr>
<td>Second-year</td>
<td>13</td>
</tr>
<tr>
<td>Third-year</td>
<td>3</td>
</tr>
<tr>
<td>Fourth-year</td>
<td>3</td>
</tr>
<tr>
<td>Fifth-year</td>
<td>3</td>
</tr>
<tr>
<td>Sixth-year</td>
<td>3</td>
</tr>
<tr>
<td>Seventh-year</td>
<td>2</td>
</tr>
</tbody>
</table>

It is expected that the number of entrants will increase during the coming academic years. WHO has provided 50 fellowships for Congolese medical students. The University has made provision for 60 medical students for the academic year 1962-1963, and for 100 students for 1963-1964, and provision is planned for a like number for the academic years thereafter. (The appendix gives a detailed breakdown of all students attending the Faculty of Medicine at Lovanium University during the academic year 1961-1962.)

One very significant development in the education and training programme for the Congo is the assistance
that the Organization will give to the Lovanium School of Nursing in the form of three nursing tutors and a fellowship for its director. The training of nurses in the orthodox sense has hitherto been a rather weak aspect of the education and training programme in the Congo. However, recent developments justify the hope that this assistance to the school of nursing will enable it to make available the necessary nursing staff for the health services of the country, just as effectively as the Organization's assistance in the training of doctors will provide physicians.

4.1.2 Other local training. The members of the advisory team continue to assist in the training of various categories of auxiliary staff.

4.2 The Training of Congolese Abroad

4.2.1 “Assistants médicaux”. Of the sixty fourth-year students who took their final examinations at the end of their first academic year in France (1960-1961), fifty-eight were successful. The remaining two will have to repeat the year's studies. Following these favourable results, the Secretary-General of the United Nations agreed to raise from thirty to fifty-five the number of new fellows for 1961-1962 to be financed from the United Nations Congo Fund. One fellowship is financed by the Norwegian Red Cross. The students, who arrived in 1960, are receiving special tuition in preparation for the Certificat général d'Education, for which they will sit during the summer of 1962. During their last year of study, emphasis will be laid on training in tropical medicine and, perhaps, emergency surgery. This is not, however, a form of specialization—which, at this stage, would be premature.

4.2.2 Regular students. Of the seven fellowships awarded to Congolese undergraduates for study abroad, six are being continued for the academic year 1961-1962. No other fellowships are being awarded to undergraduates to study outside the Congo, since training at Lovanium University is now possible, and WHO aid is being made available to students there. Five of the six regular students have passed their first-year examinations; it is hoped that the remaining one will pass during the summer of 1962.

4.2.3 “Infirmiers diplômés”. Twenty-five selected infirmiers diplômés have been awarded fellowships for specialized training of one to two years in the following fields: laboratory techniques 12; X-ray 2; dentistry 6;

entomology 5. A grant from the Norwegian Red Cross has made possible the award of an additional fellowship for a trainee in kinesitherapy. The five fellowships for entomology are financed from MESA funds, the other twenty by ONUC. Examinations have not yet been held, but the results of these courses for infirmiers seem to be promising. As the lack of trained hospital administrators is very serious in the Congo, an instructor in this field has been recruited and will start training hospital administrators there. It is also intended to award some fellowships for this purpose for a course due to start in Switzerland in September 1962.

5. Financial Aspects

The expenditure for 1961 under the regular budget was $112,119. Expenditure reimbursed by the United Nations amounted to $1,588,202, and outstanding obligations in that year amounted to $1,190,195. In 1962, the estimated expenditure under the regular budget is $113,100, and the estimated expenditure for which reimbursement is expected from the United Nations amounts to $3,724,500.

6. Bilateral Assistance

Several countries have been providing bilateral assistance to the Republic of the Congo in the field of health. By and large, this assistance has been in the form of medical and other supplies, help with staff training, or assistance in extending the medical care services of the country. In rendering this assistance, many of the countries have taken advantage of the co-ordinating role of the Organization, and sought its technical advice. In most cases, these projects have proved very useful in complementing the efforts of the Government and the Organization in the maintenance of an essential network of health services in the country. To the extent that WHO has been consulted, it has endeavoured to advise all concerned on the most efficient way of utilizing such assistance so that it fits most usefully into the pattern being developed for the country as a whole. The Organization would emphasize that it would be premature to train Congolese personnel in various specialities before the minimum number of doctors the country requires is available—a goal towards which, at this stage, all efforts, irrespective of the source of assistance, should be directed.
Appendix

STUDENTS AT LOVANIUM UNIVERSITY FACULTY OF MEDICINE
DURING ACADEMIC YEAR 1961-1962

<table>
<thead>
<tr>
<th>Year</th>
<th>Congolese students</th>
<th>Students from other African countries</th>
<th>Asian students</th>
<th>European students</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-year (natural and medical sciences)</td>
<td>38</td>
<td>2</td>
<td></td>
<td>2</td>
<td>42</td>
</tr>
<tr>
<td>Second-year (natural and medical sciences)</td>
<td>13</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>17</td>
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<tr>
<td>Third-year (natural and medical sciences)</td>
<td>3</td>
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<td>8</td>
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<td>Fourth-year (first of doctorate)</td>
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<td>1</td>
<td>5</td>
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<tr>
<td>Fifth-year (second of doctorate)</td>
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<td></td>
<td></td>
<td>3</td>
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<tr>
<td>Sixth-year (third of doctorate)</td>
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<td>3</td>
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<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Seventh-year (fourth of doctorate)</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>65</strong></td>
<td><strong>16</strong></td>
<td><strong>1</strong></td>
<td><strong>5</strong></td>
<td><strong>87</strong></td>
</tr>
</tbody>
</table>

Annex 13

ACCELERATION OF THE MALARIA ERADICATION PROGRAMME
FROM CONTINUED VOLUNTARY CONTRIBUTIONS

1. Introduction

1.1 The Fourteenth World Health Assembly, in resolution WHA14.27, *inter alia* expressed "the conviction that voluntary contributions will remain essential to the success of the programme in order (a) to maintain the programme and to provide additional resources to enable more rapid and broader prosecution of the programme". Pursuant to that provision, the Director-General is submitting the following information giving an indication of the type of activities that could be undertaken or expanded in order to accelerate the global malaria eradication programme.

1.2 In submitting this information, which also provides some tentative cost estimates, it is emphasized that any additional assistance which would be provided by the Organization, should sufficient funds become available from continued voluntary contributions to the Malaria Eradication Special Account, would have to be continued for some years. The data provided are not related to any one particular year, but, for the reason just stated, the approximate estimates have in some cases been based on a period of five years.

1.3 While the accelerated programme described below covers the various parts of the world, the area in which most additional assistance could be given is in Africa.

2. Assistance for Accelerating the Malaria Eradication Programme

2.1 Pre-eradication Programmes

2.1.1 In the report on the development of the malaria eradication programme submitted to the Fourteenth World Health Assembly, it was stated that the result of previous pilot projects demonstrated the technical feasibility of interrupting transmission in the majority of the malarious areas of tropical Africa. It was also stated that the feasibility of interrupting transmission is only one of the factors necessary for the success of a malaria eradication programme;
other essential factors are: an adequate level of administrative and operational facilities, the availability of trained personnel, sufficient financial provision, etc. Finally, it was reported that, to promote the development of the required supporting operational facilities—amongst which an adequate rural health infrastructure is essential—a new type of assistance was required in the form of a "pre-eradication programme" as a prelude to a full eradication operation. Considerable interest in and enthusiasm for pre-eradication programmes has been evidenced by the newly-independent countries in Africa. In Part I of the report on the development of the malaria eradication programme to the Fifteenth World Health Assembly | reference is also made to this particular aspect.

2.1.2 There is no doubt that with increased resources the assistance of the Organization could be much more effective, thus speeding up the development of the projects already planned, and accelerating the implementation of the new ones, shortening in this manner the time needed for global malaria eradication.

2.1.3 With particular reference to pre-eradication programmes, experience of the difficulties and needs of the developing countries in carrying out malaria eradication programmes suggests that the following kinds of assistance would speed up their implementation:

(a) In the pilot operation areas (minimum population 100,000) to be organized in every country with a pre-eradication programme, some limited supplies and equipment should be provided for training and demonstration purposes, as well as subsidies towards the payment of local labour.

(b) Some subsidies should be given to supplement the salaries of national professional and sub-professional workers assigned to pre-eradication programmes, in order to enable them to devote their full time to this work.

(c) Additional fellowships should be given for training either locally or in international training centres, including short-term training of professional and auxiliary public health workers in the techniques of malaria eradication.

2.1.4 It is estimated that approximately $53,000 would be required annually for the purposes described under (a), (b) and (c). Assuming that such assistance is given to twenty-two countries, the approximate cost over a five-year period would amount to $5,830,000.

2.1.5 In addition to the assistance described in paragraph 2.1.3 above, some further strengthening of advisory services personnel provided by the Organization will be required to accelerate the pre-eradication programmes in the twenty-two countries. Twenty-two new posts should be added to these programmes at a total cost over a five-year period of $1,375,000.

2.1.6 There remain twenty countries and territories in the African Region which could start pre-eradication programmes at an earlier date if sufficient funds became available. For these, provision will have to be made for the full number of international advisory personnel, as well as for the type of assistance described in paragraph 2.1.3 above. It is estimated that approximately $87,000 will be required annually for each country for such assistance. Over the next five years an amount of between $5,000,000 and $6,000,000 will be needed for this purpose.

2.2 Operational Assistance

Some of the newly-independent and emerging countries may require the assistance of specialized professional people who could undertake national operational responsibilities, organizing and temporarily directing the new national malaria services until such time as the national personnel is recruited and duly trained. It is estimated that twenty professionals (malarialogists, engineers, etc.) would meet this need, and that each such professional would have to be assigned for an average period of two-and-a-half years. The total cost would be about $600,000.

2.3 Training

2.3.1 Training is a continuous and growing need. As many programmes are now approaching or entering the consolidation phase, part of the international staff will require refresher courses on the epidemiological aspect of disappearing malaria and the precise techniques for tracing it. Not less than one third of the international staff needs the benefit of such courses. The same applies to national malarialogists, of whom half should be re-trained (there are at present more than 1000 malarialogists working on a full-time basis in national positions). Public health workers, both professional and sub-professional, will need short training in some malaria eradication techniques to enable them to provide efficient support to the health services during the consolidation phase, and facilitate the taking over of responsibilities at the beginning of the maintenance phase.
2.3.2 Apart from the training required for pre-eradication programmes, as referred to in paragraph 2.1 above, an intensified effort in training for other phases of the programme would cost about $1 500 000 over a five-year period.

3. Financing

A report is being submitted by the Director-General under agenda item 3.10.1 on the Malaria Eradication Special Account. In this report, specific reference is being made to the requirements of this accelerated programme.¹

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Annex 14

HEALTH PROBLEMS OF SEAFARERS *

REPORT BY THE DIRECTOR-GENERAL

1. The Eleventh World Health Assembly, in resolution WHA11.49, requested the Director-General "(1) to undertake a study of the nature and extent of the health problems of seafarers and of the health services available to them; (2) to indicate possible further needs and ways and means by which health services could be provided in major ports to seafarers of all nationalities on a wider scale than at present; and (3) to present a progress report to the Twelfth World Health Assembly ".

2. The Director-General, in submitting a progress report to the Twelfth World Health Assembly, indicated that there was lack of information on the subject, to the extent that neither the health problems of seafarers nor the health services available to them were sufficiently known; not even the exact size of the seafaring population was known. Therefore, it was advisable that, as a first step in this study, basic data should be collected through a questionnaire circulated to all the Member States of the World Health Organization.

3. The Twelfth World Health Assembly, in resolution WHA12.23, requested the Director-General "to continue this study and to present a progress report to the Thirteenth World Health Assembly ".

4. The Director-General, in submitting a further progress report to the Thirteenth World Health Assembly, indicated that a questionnaire had been compiled and circulated to Member States. The report explained that the information collected from government replies would be supplemented by a further study of the situation in a number of ports, to analyse further the problem where services had already been organized, and that the result of the study would be reviewed by the Joint ILO/WHO Committee on the Hygiene of Seafarers. The conclusions of the Committee could then be reviewed by the Executive Board before being submitted to the Fifteenth World Health Assembly.

5. The Thirteenth World Health Assembly, in resolution WHA13.51, requested the Director-General "to submit a final report to the Executive Board at its first session in 1962, and to the Fifteenth World Health Assembly ".

6. Government replies were tabulated and analysed, and a WHO consultant visited the ports of Liverpool, London, Marseilles, Athens, Alexandria, Bombay, Singapore, Manila, Hong Kong, Tokyo, San Francisco, Montreal, Helsinki, Göteborg and Hamburg, to analyse the problems, survey the services and augment where necessary the information given in the replies to the questionnaire.

7. Details of the result of the study were given in a report submitted to the Joint ILO/WHO Committee on the Hygiene of Seafarers, which met at the International Labour Office in Geneva from 1 to 4 May 1961. The Committee had before it the replies to the questionnaire circulated by WHO to Member States, the report prepared by the consultant, a note by the WHO secretariat on maritime aspects of venereal disease control and the Brussels Agreement of 1924, and the WHO document already submitted to the Fourteenth World Health Assembly on health hazards from nuclear-powered merchant ships. The Committee also considered five working papers prepared by the WHO secretariat.

¹ See Annex 16, section 5.
² See resolution WHA15.21.
8. The Committee reviewed the nature and extent of the health problems of seafarers, the health services available to them, and the ways and means by which health services could be provided in major ports to seafarers of all nationalities on a wider scale than at present. Their report, the third on this subject, is published as World Health Organization Technical Report Series No. 224.

9. In this report, the Committee recommended that:

(a) all seafaring nations should institute the following types of medical examinations as an essential feature of their health services:

(1) pre-entry medical examination;
(2) pre-engagement/pre-signing/pre-employment or periodic examination;

(b) the contents of medicine chests should be reviewed at regular intervals, and the inspection of medicine chests should be rigidly adhered to and carried out at specified intervals as provided for in ILO Recommendation 105;

(c) the time was opportune for the production of an international model for a ships’ medical guide;

(d) consideration should be given to the improvement of radiotelephony services for the provision of medical advice to ships at sea (although it was appreciated that there were language and technical difficulties);

(e) the introduction of a specially trained rating to provide care for the sick in the absence of a ship’s surgeon on board was a development that should be encouraged;

(f) the list of functions for seafarers’ health centres set out in the WHO report could be of assistance to countries that felt it desirable to introduce or develop a system of seafarers’ health centres in their major ports, but the administrative and financial arrangements should be left to be developed according to local conditions and circumstances;

(g) each seaman, on being discharged from hospital, should be given a detailed report on the condition for which he was admitted, the treatment that had been carried out, and the treatment that remained to be carried out to ensure the best recovery. Where at all possible, the names of the drugs used should be in conformity with the International Pharmacopoeia;

(h) WHO should study ways and means of improving the present systems of medical recording;

(i) ILO, WHO and IMCO should undertake as a matter of urgency the establishment of a coordinated scheme, incorporating the three existing medical aids at sea—i.e., medicine chests, medical guides, and the use of radio to provide medical advice to ships at sea;

(j) the title of the Committee should be changed to “Joint ILO/WHO Committee on the Health of Seafarers”;

(k) the interval between the 1961 meeting and the next one should be very much shorter than the period that had elapsed since the previous meeting.

10. The report of the Joint ILO/WHO Committee, together with the general discussions and recommendations contained in the consultant’s report, was submitted for the consideration of the Executive Board at its twenty-ninth session.

11. The Executive Board, in resolution EB29.R10, requested the Director-General “to ensure that the recommendations made by the Joint ILO/WHO Committee in its third report be transmitted as the requested final report to the Fifteenth World Health Assembly, together with the comments made at the Executive Board”.

12. The present report is accordingly submitted to the Fifteenth World Health Assembly. The summary record of the comments made at the Executive Board is annexed to this report.¹

13. The Director-General wishes to draw particular attention to the recommendation made in paragraph 4 of the above-mentioned resolution, in which the Board recommends “that the health services made available to seafarers should continue to be adapted to the needs and situations of different countries and should be of the same quality as those provided for the general public”.

¹ Not reproduced in this volume. See revised minutes of the Executive Board, twenty-ninth session, second, third and fourth meetings (EB29/Min/2 Rev. 1, section 3; EB29/Min/3 Rev. 1, section 2; EB29/Min/4 Rev. 1, section 1).
Annex 15

HEADQUARTERS ACCOMMODATION

PROGRESS REPORT BY THE DIRECTOR-GENERAL

1. The developments which have taken place between the time of the Fourteenth World Health Assembly and the twenty-ninth session of the Executive Board regarding the construction of the headquarters building were reported to the Executive Board at its twenty-eighth and twenty-ninth sessions. In accordance with the request of the Fourteenth World Health Assembly, in resolution WHA14.9, that the Director-General report further to the Fifteenth World Health Assembly, this document brings up to date the information contained in the reports to the two sessions of the Executive Board.

Tendering and Award of Contracts

2. Tenders for the first section of the work were opened on 5 February as planned, in the presence of the consulting engineers and a considerable public. One tender was received for the general contracting work, eleven for the main building work, nine for all or parts of the electrical and telephone installations, five for heating and air-conditioning, four for all or some of the lifts, and one for the sanitary installations. All tenders received were referred to the consulting engineers for study and recommendation.

3. The contract for the main building work was awarded on 20 April to the Compagnie française d'Entreprises. The company is to begin its work within the next few days.

4. The following awards have also been made:
   
   Electrical work. Saunier-Duval and Clemançon, Paris (main electrical work); Téléphonie S.A., Geneva (telephones); Siemens-Schuckertwerke A.G., Erlangen (auxiliary generator).

5. The single tender received for the sanitary installations was considered too high, and was rejected. New tenders were invited, and these were opened on 17 April. Seven firms submitted tenders, and these are at present being studied by the consulting engineers.

Access Roads

6. Construction of the first of the access roads began in January 1962, and is at present nearing completion in its provisional form, to provide access to the construction site.

Gifts from Governments

7. On 9 February 1962 the Director-General addressed a circular letter to all Member States, inviting their attention to the provisions of resolution WHA13, 46 regarding contributions to the Building Fund of gifts of furnishing. As at 30 April 1962 the following replies had been received:

7.1 Contributions in Kind

   Mauritania has offered to furnish a lounge; Cyprus has offered flooring and hangings for one room; and the Netherlands, a contribution to the interior decoration to the value of 25 000 Dutch guilders (US $6900). Several other States have made inquiries about the kinds of gifts desired.

7.2 Contributions in Cash

   Ghana: 1000 Ghana pounds (US $2800); Jordan: 500 Jordan dinars (US $1400).

Designation of Architect

8. On 25 January, during the twenty-ninth session of the Executive Board, the Director-General was informed of the sudden death of Mr Tschumi, the
architect of the building. In informing the Board of this sad news, the Director-General declared his intention, nevertheless, to proceed without delay with the project, according to the plans prepared by Mr Tschumi.

9. On 3 March the Director-General presented to the Executive Board’s Standing Committee on Headquarters Accommodation his proposal regarding an architect to succeed Mr Tschumi. The Committee approved the choice of Mr Pierre Bonnard of Lausanne (who had been an associate of Mr Tschumi on some other projects) to put into effect the plans prepared by Mr Tschumi. Mr Bonnard assumed his responsibilities on 5 March.

Annex 16

MALARIA ERADICATION SPECIAL ACCOUNT

REPORT BY THE DIRECTOR-GENERAL

[10 May 1962]

1. Introduction

Under the terms of resolution WHA14.27 the Director-General is requested "to report to the Fifteenth World Health Assembly on the status of the Malaria Eradication Special Account, and the disposition of the moneys in the Account to the various purposes, including those listed in paragraph 3 above". In paragraph 3 the Fourteenth World Health Assembly "expresses the conviction that voluntary contributions will remain essential to the success of the programme in order: (a) to maintain the programme and to provide additional resources to enable more rapid and broader prosecution of the programme; and (b) to provide funds for the payment of credits;".

2. Status of the Malaria Eradication Special Account

2.1 Contributions received or pledged from the inception of the Special Account up to 30 April 1962 are shown in Appendix 1 (page 123).

2.2 To complete the information on the voluntary contributions made to finance the world malaria eradication programme, a table showing contributions received or pledged for the Pan American Health Organization's Special Malaria Fund up to 30 April 1962 is given in Appendix 2 (page 125).

2.3 As at 30 April 1962, the status of the Malaria Eradication Special Account was as follows:

\[\text{See resolution WHA15.34.}\]

\[\begin{align*}
\text{Voluntary contributions received} & = 17,576,651 \\
\text{Contributions pledged but not received} & \\
\text{in cash} & = 116,113 \\
\text{in kind} & = 157,898 \\
\text{Contributions from the regular budget for 1962} & = 2,000,000 \\
\text{Other income} & = 672,835 \\
\text{Total (including the pledged contributions in kind)} & = 20,523,497 \\
\text{Less:} & \\
\text{Total obligations, 1956-1961} & = 14,573,566 \\
\text{(including credits for 1962)} & \\
\text{Estimated obligations, 1962} & = 5,416,667 \\
\text{(including increased salaries and allowances for staff in professional category)} & \\
\text{Earmarked for the approximate amount of credits for 1963, assuming that the Fifteenth World Health Assembly will implement the recommendations contained in resolution WHA14.15} & = 270,000 \\
\text{Estimated balance at 31 December} & = 263,264 \\
\text{1962} & \\
\text{Less:} & \\
\text{Contributions pledged but not received} & = 274,011 \\
\text{Shortfall} & = (10,747) \\
\end{align*}\]

2.4 The Director-General has been informed that the United States of America intends to make a further pledge to the Malaria Eradication Special Account...
Account amounting to $2,500,000, of which $1,000,000 would apply to the programme for 1962 and $1,500,000 to the programme for 1963.

3. Requirements for 1963

3.1 The cost of the malaria eradication field operations in the year 1963 is estimated at $5,322,728 (including increased salaries and allowances for staff in the professional category). The Special Account has to cover that part of the estimated costs not met from the regular budget (the amount proposed by the Director-General being $4,000,000, in accordance with the request of the Fourteenth World Health Assembly in resolution WHA14.15)—i.e. $1,322,728.

3.2 The approximate amount of credits for 1964 ($200,000) should be secured in 1963, assuming that the Sixteenth World Health Assembly will implement the recommendations contained in resolution WHA14.15.

4. Financial Outlook

As will be seen from paragraphs 2.3 and 3 above, the requirements which need to be met from the Malaria Eradication Special Account up to 31 December 1963 are as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present estimated shortfall at 31 December 1962 (para. 2.3 above)</td>
<td>$10,747</td>
</tr>
<tr>
<td>Estimated cost of that part of the programme not met from the regular budget in 1963 (para. 3.1 above)</td>
<td>$1,322,728</td>
</tr>
<tr>
<td>Estimated amount of credits for 1964 (para. 3.2 above)</td>
<td>$200,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,533,475</strong></td>
</tr>
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</table>

Taking into account the expected pledge of a further voluntary contribution from the United States of America referred to in paragraph 2.4 above, sufficient funds would be available to cover the above amount required until the total cost of the programme in 1964 is integrated into the regular budget. In addition, there would be available in the Special Account approximately $1,000,000 which could be used “to enable more rapid and broader prosecution of the programme” in accordance with resolution WHA14.27 referred to in paragraph 1 above, and to which further reference is made in paragraph 5.

5. Additional Resources to enable a More Rapid and Broader Prosecution of the Programme

Pursuant to the provisions of the above-mentioned resolution WHA14.27, the Director-General is submitting a separate document 1 under agenda item 2.3 (Report on development of the malaria eradication programme). That document sets forth the type of additional activities that could be undertaken by the Organization over a period of years in order to accelerate the malaria eradication programme, subject to the availability of funds from continued voluntary contributions to the Malaria Eradication Special Account. As will be seen from that document, it is estimated that some $14,000,000 to $15,000,000 over a five-year period could be used effectively for accelerating the programme. In view of the financial outlook, the Director-General would be in a position to start implementing in 1962 some of the additional activities which he considers should be given high priority, in the firm hope that voluntary contributions to the Special Account will be forthcoming to enable the Organization to continue activities under the accelerated programme.

6. Fund-raising Efforts

6.1 The Director-General has continued his efforts to obtain voluntary contributions from all possible sources, including governments, voluntary organizations, foundations, industries, labour organizations, institutions and individuals, along the lines described in his earlier reports on the Special Account.2

6.2 As in the past, only a limited number of Members responded to the appeal for contributions. It is thanks to their generosity that it has been possible to finance the planned malaria eradication field operations under the transitional arrangements laid down by the Fourteenth World Health Assembly and to envisage, already in 1962 the provision of additional assistance for accelerating the programme.

---

1 Annex 13.  
Appendix 1

CONTRIBUTIONS TO THE MALARIA ERADICATION SPECIAL ACCOUNT

Position as at 30 April 1962

(Expressed in US dollars)

<table>
<thead>
<tr>
<th>Country</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
<th>1959</th>
<th>1960</th>
<th>1961</th>
<th>1 Jan. 1962 to 30 April 1962</th>
<th>Total received up to 30 April 1962</th>
<th>Pledged but not yet received</th>
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* Of which $54 000 in kind.
## Appendix 2

### CONTRIBUTIONS TO THE SPECIAL MALARIA FUND OF THE PAN AMERICAN HEALTH ORGANIZATION

**Position as at 30 April 1962**

*Expressed in US dollars*

<table>
<thead>
<tr>
<th>Country</th>
<th>Received during</th>
<th>Total received up to 30 April 1962</th>
<th>Pledged but not yet received</th>
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<td>5 000</td>
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<td><strong>Totals (cash)</strong></td>
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<td>5 000 000</td>
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**Grand Total (cash and pledged)**: 10 809 400

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1 This contribution was reported to the Fourteenth World Health Assembly as a pledge to the Malaria Eradication Special Account of the World Health Organization, but it was subsequently ascertained that the contribution was intended for the Special Malaria Fund of the Pan American Health Organization.
### Annex 17

**SUMMARY OF BUDGET ESTIMATES FOR THE FINANCIAL YEAR**

1 JANUARY — 31 DECEMBER 1963

As approved by the Fifteenth World Health Assembly

<table>
<thead>
<tr>
<th>PART I — ORGANIZATIONAL MEETINGS</th>
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<tbody>
<tr>
<td><strong>SECTION 1: WORLD HEALTH ASSEMBLY</strong></td>
</tr>
<tr>
<td><strong>Chapter 00 Personal Services</strong></td>
</tr>
<tr>
<td>01 Salaries and wages (temporary staff)</td>
</tr>
<tr>
<td>02 Short-term consultants' fees</td>
</tr>
<tr>
<td><strong>Total — Chapter 00</strong></td>
</tr>
<tr>
<td><strong>Chapter 20 Travel and Transportation</strong></td>
</tr>
<tr>
<td>21 Duty travel</td>
</tr>
<tr>
<td>22 Travel of short-term consultants</td>
</tr>
<tr>
<td>25 Travel of delegates</td>
</tr>
<tr>
<td>26 Travel and subsistence of temporary staff</td>
</tr>
<tr>
<td><strong>Total — Chapter 20</strong></td>
</tr>
<tr>
<td><strong>Chapter 30 Space and Equipment Services</strong></td>
</tr>
<tr>
<td>31 Rental and maintenance of premises</td>
</tr>
<tr>
<td>32 Rental and maintenance of equipment</td>
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<td><strong>Total — Chapter 30</strong></td>
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<tr>
<td><strong>Chapter 40 Other Services</strong></td>
</tr>
<tr>
<td>43 Other contractual services</td>
</tr>
<tr>
<td>44 Freight and other transportation costs</td>
</tr>
<tr>
<td><strong>Total — Chapter 40</strong></td>
</tr>
<tr>
<td><strong>Chapter 50 Supplies and Materials</strong></td>
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<tr>
<td>51 Printing</td>
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<tr>
<td>52 Visual material</td>
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<tr>
<td>53 Supplies</td>
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<td><strong>Total — Chapter 50</strong></td>
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<td><strong>Chapter 60 Fixed Charges and Claims</strong></td>
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<tr>
<td>62 Insurance</td>
</tr>
<tr>
<td><strong>Total — Chapter 60</strong></td>
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</table>

| **Chapter 80 Acquisition of Capital Assets** |
| 82 Equipment | 1,500 |
| **Total — Chapter 80** | 1,500 |
| **TOTAL — SECTION 1** | 329,310 |

| **SECTION 2: EXECUTIVE BOARD AND ITS COMMITTEES** |
| **Chapter 00 Personal Services** |
| 01 Salaries and wages (temporary staff) | 47,800 |
| **Total — Chapter 00** | 47,800 |
| **Chapter 20 Travel and Transportation** |
| 21 Duty travel | 13,300 |
| 25 Travel and subsistence of members | 61,500 |
| **Total — Chapter 20** | 88,200 |
| **Chapter 30 Space and Equipment Services** |
| 31 Rental and maintenance of premises | 4,840 |
| 32 Rental and maintenance of equipment | 1,100 |
| **Total — Chapter 30** | 5,940 |
| **Chapter 40 Other Services** |
| 43 Other contractual services | 18,150 |
| 44 Freight and other transportation costs | 800 |
| **Total — Chapter 40** | 18,950 |
| **Chapter 50 Supplies and Materials** |
| 51 Printing | 28,900 |
| 53 Supplies | 800 |
| **Total — Chapter 50** | 29,700 |
| **Chapter 60 Fixed Charges and Claims** |
| 62 Insurance | 700 |
| **Total — Chapter 60** | 700 |
| **TOTAL — SECTION 2** | 191,290 |

---

1 See resolution WHA15.42.
SECTION 3: REGIONAL COMMITTEES

Chapter 00 Personal Services
  01 Salaries and wages (temporary staff) 17 000
  Total — Chapter 00 17 000

Chapter 20 Travel and Transportation
  21 Duty travel 28 600
  26 Travel and subsistence of temporary staff 23 020
  Total — Chapter 20 51 620

Chapter 30 Space and Equipment Services
  32 Rental and maintenance of equipment 7 040
  Total — Chapter 30 7 040

Chapter 40 Other Services
  43 Other contractual services 4 870
  Total — Chapter 40 4 870

Chapter 50 Supplies and Materials
  53 Supplies 7 040
  Total — Chapter 50 7 040

Chapter 70 Grants and Contractual Technical Services
  71 Fellowships 1 385 808
  72 Contractual technical services 1 297 778
  73 Participants in seminars and other educational meetings 355 146
  Total — Chapter 70 3 038 732

Chapter 80 Acquisition of Capital Assets
  81 Library books 29 195
  82 Equipment 167 751
  Total — Chapter 80 196 946

TOTAL — PART I 601 200

PART II — OPERATING PROGRAMME

SECTION 4: PROGRAMME ACTIVITIES

Chapter 00 Personal Services
  01 Salaries and wages 7 749 758
  02 Short-term consultants’ fees 409 400
  Total — Chapter 00 8 159 158

Chapter 20 Travel and Transportation
  21 Duty travel 577 597
  22 Travel of short-term consultants 444 900
  25 Travel of temporary advisers 80 070
  26 Travel and subsistence of temporary staff 23 890
  Total — Chapter 20 1 128 457

Chapter 30 Space and Equipment Services
  31 Rental and maintenance of premises 175 249
  32 Rental and maintenance of equipment 29 048
  Total — Chapter 30 204 297

1 Purpose of expenditure code not yet determined.
### Chapter 40 Other Services

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<td>44</td>
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### Chapter 50 Supplies and Materials

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### Chapter 60 Fixed Charges and Claims

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### Chapter 80 Acquisition of Capital Assets

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### PART III — ADMINISTRATIVE SERVICES

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| Chapter 20 Travel and Transportation
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| Chapter 40 Other Services
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### TOTAL — SECTION 7

|        | **Total — Section 7**              | 4,768,630                       |

|        | TOTAL — SECTION 5                  | 2,463,225                       |

### TOTAL — PART II

|        | TOTAL — PART II                   | 22,135,583                      |

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1 Purpose of expenditure code not yet determined.
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<td>4 969 000</td>
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**PART IV — OTHER PURPOSES**

**Section 10: Headquarters Building: Repayment of Loans**

<table>
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<th>Supplies and Materials</th>
</tr>
</thead>
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<td>Acquisition of Capital Assets</td>
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<td>Chapter 80: Acquisition of Capital Assets</td>
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<td>482 000</td>
</tr>
<tr>
<td>Total — Section 10</td>
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<td>387 000</td>
<td>100 000</td>
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<tr>
<td>TOTAL — ASSESSMENTS ON MEMBERS</td>
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<td>30 884 570</td>
</tr>
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*Less:*

- Reimbursement from the Special Account of the Expanded Programme of Technical Assistance | 721 000 |
- Casual Income | 500 000 |
- Assessments on new Members from previous years | 195 040 |
- Miscellaneous income | 304 960 |

TOTAL — ASSESSMENTS ON MEMBERS | 30 884 570 |
Annex 18

REVIEW AND APPROVAL OF THE PROPOSED PROGRAMME
AND BUDGET ESTIMATES FOR 1963

[A15/P&B/17, A15/AFL/9 — 8 May 1962]

THIRD REPORT OF THE AD HOC COMMITTEE OF THE EXECUTIVE BOARD

1. In resolution EB29.R59, the Executive Board at its twenty-ninth session established an ad hoc committee of the Board consisting of Dr A. O. Abu Shamma, Dr H. van Zile Hyde and Dr G. E. Godber, to meet on Monday, 7 May 1962, and to “report to the Fifteenth World Health Assembly on the minor adjustments reported by the Director-General in the cost estimates for... the programme and budget estimates for 1963”.

2. The Committee met on 7 May 1962, in the Palais des Nations, Geneva, and Dr van Zile Hyde was elected Chairman.

3. In its consideration of the adjustments to the cost estimates of the programme and budget estimates for 1963, the Committee had before it a report submitted by the Director-General in accordance with the provision of resolution EB29.R59. This report is reproduced in the appendix below.

4. The Committee noted the net increase of $2400 in the estimates resulting from decisions and recommendations of the Executive Board at its twenty-ninth session relating to the approval of representation allowances for ungraded posts in WHO as from 1 January 1962 and from the proposed modifications to the contract of the Director-General.

5. The Committee reviewed the further increase of $51 600 in the estimates, resulting from the revision of the salary levels of general service staff in Geneva, effective as from January 1962; the reduction, estimated at $550 000, resulting from the changes in travel policy for the staff of the Organization, effective as from February 1962, and the deletion of the provision of $700 000 included for “Reimbursement of the Working Capital Fund” in the proposed programme and budget estimates for 1963 — since that provision was no longer required as a result of the changed method of financing the supplementary estimates for 1962.

6. In endorsing the adjustments to the proposed programme and budget estimates for 1963 as reported by the Director-General, the Committee noted that the Director-General is submitting reports to the Fifteenth World Health Assembly on the matters referred to in paragraph 6 of the appendix which, subject to the decisions of the Health Assembly thereon as well as on any other matters before it, may affect the level of the effective working budget to be established for 1963.

Appendix

REPORT BY THE DIRECTOR-GENERAL

1. Introduction

1.1 Following its review of the proposed programme and budget estimates for 1963, the Executive Board at its twenty-ninth session adopted resolution EB29.R57, in which it recommended to the Fifteenth World Health Assembly “that it approve an effective working budget for 1963 in the amount of $29 956 000, as proposed by the Director-General”. In making its recommendation, the Board recognized that the cost estimates were subject to minor adjustments “to be reported by the Director-General to the Fifteenth World Health Assembly, through the Ad Hoc Committee of the Executive Board, which will meet on 7 May 1962”.

1.2 In accordance with resolution EB29.R59, establishing the Ad Hoc Committee of the Board, one of the Committee’s terms of reference was to “report to the Fifteenth World Health Assembly on the minor adjustments reported by the Director-General in the cost estimates for... the programme and budget estimates for 1963”.

1.3 The adjustments in the cost estimates for the programme and budget estimates for 1963 which the Director-General presents in accordance with the provisions of the above-quoted resolutions are set forth below.

1 See resolutions WHA15.23 and WHA15.42.
2. Adjustments resulting from Decisions and Recommendations of the Executive Board at its Twenty-ninth Session

2.1 The Executive Board, in resolution EB29.R25, approved "the Director-General's proposal to establish representation allowances for ungraded posts in WHO from 1 January 1962". The total amount required for this purpose in 1963 is $29,000, as compared with the amount of $34,000 included in the Director-General's proposed programme and budget estimates for 1963. Thus, these estimates can be reduced by $5000.

2.2 The Executive Board, in resolution EB29.R24, recommended to the Fifteenth World Health Assembly the adoption of a resolution modifying the contract of the Director-General. If this proposal is approved, the proposed programme and budget estimates for 1963 will need to be increased by an amount of $7400.

3. Salaries of General Service Staff in Geneva

3.1 In the report to the Executive Board on his supplementary estimates for 1962 (21 December 1961) the Director-General stated:

Studies are at present being pursued jointly by the international organizations in Geneva on the salary levels of general service staff in Geneva and it appears likely that an additional increase will result therefrom. Without prejudice to the results of these studies, the Director-General is including in the supplementary estimates a tentative amount of $86,250 to cover such increased costs. It should be emphasized that this amount now proposed may be subject to adjustment, and the Director-General will inform the Executive Board should it develop that this estimate requires any change.

Note: The results of these studies were not known before the closure of the Board’s twenty-ninth session.

3.2 The tentative estimated costs included in the proposed programme and budget estimates for 1963 were $90,000. When the Board considered these estimates and the Director-General informed the Board that a final decision had not yet been taken on the studies undertaken jointly by the international organizations on the salary levels of general service staff in Geneva, so that the precise budgetary implications for 1963 were not yet known. He therefore suggested, and the Board agreed, that the adjustments to the 1963 estimates that might become necessary as a result of developments between the time of the twenty-ninth session of the Board and the Fifteenth World Health Assembly should be reported to the Fifteenth World Health Assembly through the Ad Hoc Committee of the Executive Board which was to meet on 7 May 1962.”

3.3 Following an inter-agency agreement in Geneva, the Director-General revised the salary levels of headquarters general service staff with effect from 1 January 1962. The resulting additional budgetary provision required for 1963 is estimated at $141,600, an increase of $51,600 over the tentative amount of $90,000 previously estimated.

4. Adjustments resulting from Changes in Travel Policy

Since the twenty-ninth session of the Board, the Director-General has made a review of the policy governing travel for the staff of the Organization in the light of the increased availability of jet aircraft facilities throughout the world which reduces travel time very considerably. Following the review, the Director-General decided to introduce certain changes involving an extended use of tourist/economy-class air travel. This decision, effective from February 1962, is expected to result in an estimated reduction in expenditure of $550,000 in 1963, on the basis of actual experience of travel costs for a twelve-month period. The budgetary provisions for travel included in the proposed programme and budget estimates for 1963 can thus be reduced by that amount.

5. Reimbursement of the Working Capital Fund

5.1 To preclude the necessity of making additional assessments on Members, the Director-General had proposed to the Executive Board at its twenty-ninth session that the supplementary estimates for 1962 be financed from casual income available for the purpose and from a special advance from the Working Capital Fund to be authorized by the Fifteenth World Health Assembly. He had further proposed that this special advance, amounting to $700,000, be reimbursed to the Working Capital Fund by including provision therefor in the proposed programme and budget estimates for 1963. The Executive Board, in resolution EB29.R30, recommended "to the Fifteenth World Health Assembly that it approve the supplementary budget estimates for 1962 and their financing, as proposed by the Director-General".

5.2 As explained in the separate report submitted to the Ad Hoc Committee concerning the adjustments to the supplementary budget estimates for 1962, the Director-General recommended that the revised estimates could now be financed entirely from casual income, thus avoiding the need to request from the Fifteenth World Health Assembly authorization for a special advance in 1962 from the Working Capital Fund. Should the Fifteenth World Health Assembly approve the Director-General’s proposal for the financing of the supplementary budget estimates for 1962, the provision of $700,000 included in the proposed programme and budget estimates for 1963 for reimbursement of the Working Capital Fund may be deleted.

6. Other Matters considered by the Executive Board which may have Budgetary Implications in 1963 and which are on the Agenda of the Fifteenth World Health Assembly

6.1 For the information of the Ad Hoc Committee, the Director-General calls attention to the following matters on which he is submitting reports for consideration by the Fifteenth World Health Assembly, and which, depending upon the decisions of the Health Assembly, may have budgetary implications for 1963.

6.2 In resolution EB29.R32 concerning "continued assistance to newly independent States" the Executive Board noted the report of the Director-General on this subject, transmitted the report, together with the record of the discussion on this item at the twenty-ninth session of the Executive Board, to the Fifteenth World Health Assembly and, subject to the comments made in Part II on the question of operational assistance, fully endorsed the views expressed in the report and its conclusions. In pursuance of paragraphs 3 and 6 of that resolution, the Director-General is submitting a report to the Fifteenth World Health Assembly. The Board, in paragraph 7 of the resolution, requested "the Fifteenth World Health Assembly to consider as a matter of policy the extent, form and nature of the assistance which the Organization might provide to newly independent States in the form of operational staff, limited to assistance for ensuring that the level of health services which existed at the time of independence can be maintained ".

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6.3 The Executive Board at its twenty-ninth session also considered a report by the Director-General on accommodation for the Regional Office for Africa. In resolution EB29.R29 on this subject the Board, inter alia, noted "that it is important that the Regional Office should have adequate premises at an early date, which will facilitate the effective functioning of the services provided to the governments in the Region"; thanked "those Members in the African Region that have announced their intention to make contributions to help finance the cost of extending the premises of the Regional Office"; and invited "all the other Members in the African Region to make contributions for the said constructions". The Director-General is submitting a report to the Fifteenth World Health Assembly on the developments concerning this matter subsequent to the twenty-ninth session of the Board. In the light of that report and of the firm pledges of contributions by Members, and taking into account the budgetary provision of $100,000 "towards the costs of erection of such additional accommodation" included for this purpose in the Director-General's proposed programme and budget estimates for 1963, it will be for the Fifteenth World Health Assembly to determine how the financing of the total cost of adequate premises for the African Regional Office might best be accomplished, and whether it would be prudent to provide a larger amount in the approved budget for 1963.

7. Recommendation to the Fifteenth World Health Assembly

7.1 The adjustments described in paragraphs 2, 3, 4 and 5 above are summarized as follows:

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<td>for approval by the Health Assembly</td>
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7.2 In formulating its recommendations to the Fifteenth World Health Assembly on the above adjustments reported by the Director-General, the Ad Hoc Committee may wish to invite the attention of the Health Assembly to the matters considered by the Executive Board and referred to in paragraph 6 above which, subject to the decisions of the Health Assembly thereon and on any other matters before it, may affect the level of the effective working budget to be established for 1963.

Annex 19

DEVELOPMENT OF THE MALARIA ERADICATION PROGRAMME IN 1961

[A15/P&B/2 — 19 March 1962]

REPORT BY THE DIRECTOR-GENERAL

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<td>1.1 The Overall Picture</td>
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<td>1.2 Global Epidemiological Assessment</td>
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<td>II. Training and Staffing for National Malaria Eradication Programmes</td>
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<td>III. Operational Aspects</td>
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<td>3.1 Planning, Organization and Management</td>
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<td>3.2 Spraying Operations</td>
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<td>VII. Terminology</td>
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<td>VIII. Registration of Areas where Malaria has been eradicated</td>
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1 See Annex 10.
2 Off. Rec. Wild Hlth Org. 113, 100.
3 See resolution WHA15.19.
INTRODUCTION

This yearly report on the development of the malaria eradication programme has the aim of providing not only an annual review of the progress of the global malaria eradication programme but also a critical appraisal of the gains and losses of the whole campaign.

The year 1961 marked a turning point in the global malaria eradication effort, as is evidenced by three different developments. The first is the shift of emphasis in operations in the malaria eradication programmes which began soon after the historic resolution (WHA8.30) of the Eighth World Health Assembly, adopted in Mexico City in 1955. Many of the mammoth deployments for the large-scale field spraying operations against the vector are now subsiding and, owing to the increasing size of the areas under consolidation, the battlefield is shifting to the quietness of the laboratories, where thousands of trained eyes look for the remaining reservoirs of the disease, and a detective-like operation follows to discover the origin of the positive cases and their causes. In like fashion, even in programmes still in the attack phase, there is a greater tendency to visualize the operation in terms of epidemiological assessment rather than by counting the population protected or the number of houses sprayed. A healthy anxiety is growing in those responsible for steering these programmes about what is happening to the level of transmission and how best to recognize operational failures quickly. In advanced programmes, the finding of a single positive blood slide creates a chain reaction of epidemiological inquiries and control measures, as if for a pestilential disease.

The second is the increased consciousness of the need for sound programme planning. An operation such as malaria eradication requires exceptional skill, adequate knowledge of the problems involved and the application of sound management principles. These essential criteria have been expressed in policy documents issued by the Organization. New plans of operation are now being developed in conformity with such criteria and the old plans are being revised to bring them into line with the Organization's policies.

The third is the new line of approach towards malaria eradication in the newly independent countries: the planning of pre-eradication programmes with the objective of helping governments to build up gradually the necessary operational services and facilities for an eradication campaign, as well as an adequate supporting rural health infrastructure. This essential line of approach to eventual eradication in such countries is now fully recognized, and a series of pre-eradication programmes is gradually bringing the whole of Africa into the global endeavour for eradication. Furthermore, in some instances where pre-eradication surveys or even malaria eradication programmes had been prematurely planned, these operations have been revised in favour of setting up a more realistic pre-eradication programme. The establishment of pre-eradication programmes in appropriate areas will permit the building of a solid foundation for the more certain and more efficient development of a malaria eradication programme in the future.

A rapid assessment of the year's advances already demonstrates the tangible dividends of the global campaign. Operations covering a population of 24 million, living mostly in tropical and sub-tropical areas, have moved from the attack into the consolidation phase during 1961, and those involving over 100 million people are expected to cross the same line during 1962. An official register has been established of areas where malaria eradication has been achieved. The first certification inscribed therein related to a large part of Venezuela; this certification took place after the area had been inspected and all the technical requirements fulfilled. Three other countries have requested the visit of a certification team.

Regional malaria conferences have enabled delegates of countries sitting around the conference table to request and accept close and, at times, severe scrutiny and comments from their colleagues from neighbouring countries, and this has led to the improvement of eradication operations. At border meetings of technical authorities, convened in different parts of
the world, plans have been drawn up for co-ordinated activities, exchange of information and reciprocal protection, even though some of the countries participating do not have official diplomatic relations with each other. Along the parallels, from Mexico to the Philippines, and along the meridians, from the United States of America to Argentina or from the Union of Soviet Socialist Republics to South Africa, malariologists are unifying their technical language and uniting their efforts, making the malaria eradication programme a real world-wide co-ordinated endeavour.

The World Health Organization can look to the future with confidence.

I. GENERAL PROGRESS AND PROSPECTS

1.1 The Overall Picture

During 1961 there has been further steady progress towards the goal of global malaria eradication. Table A gives a summary of the status of malaria eradication by regions as at 31 December 1961. From this it may be seen that of a total population of 1420 million, living in currently or formerly malarious areas from which information is available, 317 million, or 22.4 per cent., are now in areas where malaria has been eradicated, while 710 million (50 per cent.) are covered by malaria eradication programmes at various stages of development.

In the African Region only two countries in southern Africa and the islands of Mauritius, Zanzibar and Pemba had embarked on malaria eradication programmes, but these were progressing fairly satisfactorily. It is in this region that the policy of preradication programmes is having its widest application and plans for several such programmes had already been drafted by the end of 1961. The need for training technical personnel is also keenly felt in Africa, and it is anticipated that this need will be very largely met by the setting-up of two training centres in the Region in the near future.

In the Region of the Americas the last two countries without eradication programmes in 1960, namely Cuba and Haiti, initiated the preparatory phase during 1961. Every country in this region, therefore, now has a malaria eradication programme in progress. A considerable step forward was also made in two other respects — first in the very large programme in Brazil, where preparatory phase operations were extended to almost all malarious states, and, secondly, in the large area of Venezuela which was certified as having achieved the eradication of malaria. In the Region of the Americas careful attention continues to be paid to the administrative and financial aspects of programmes in a number of countries, and epidemiological assessment activities are being further developed to meet increasing demands.

TABLE A. SUMMARY OF STATUS OF MALARIA ERADICATION, BY REGION, AT 31 DECEMBER 1961
(population in thousands)

<table>
<thead>
<tr>
<th>Region</th>
<th>Total population</th>
<th>Population in areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>where malaria never</td>
</tr>
<tr>
<td></td>
<td></td>
<td>indigenous or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>disappeared</td>
</tr>
<tr>
<td></td>
<td></td>
<td>without</td>
</tr>
<tr>
<td></td>
<td></td>
<td>specific</td>
</tr>
<tr>
<td></td>
<td></td>
<td>antimalaria</td>
</tr>
<tr>
<td></td>
<td></td>
<td>measures</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa . . . .</td>
<td>167 078</td>
<td>14 521</td>
</tr>
<tr>
<td>The Americas . . .</td>
<td>413 881</td>
<td>267 289</td>
</tr>
<tr>
<td>South-East Asia . .</td>
<td>616 222</td>
<td>45 463</td>
</tr>
<tr>
<td>Europe . . .</td>
<td>691 746</td>
<td>389 326</td>
</tr>
<tr>
<td>Eastern Mediterranean .</td>
<td>209 505</td>
<td>37 221</td>
</tr>
<tr>
<td>Western Pacific . .</td>
<td>209 525</td>
<td>134 214</td>
</tr>
<tr>
<td>Total</td>
<td>2 307 957</td>
<td>888 034</td>
</tr>
<tr>
<td>Western Pacific **</td>
<td>694 722</td>
<td>2 307 957</td>
</tr>
<tr>
<td>Total</td>
<td>3 002 679</td>
<td>2 307 957</td>
</tr>
</tbody>
</table>

* Where information available.
** Where information not available: China (mainland), North Korea, Mongolia and North Viet-Nam. (Mongolia was subsequently assigned to the South-East Asia Region.)
MAP I. EPIDEMIOLOGICAL ASSESSMENT OF STATUS OF MALARIA, DECEMBER 1960

- Areas in which malaria has disappeared or never existed
- Malarious areas not yet in consolidation phase
- Areas in consolidation phase
- Areas in which malaria has been eradicated
- Countries from which information is not available in regard to the precise extent of the malarious area and the epidemiological status
MAP 2. EPIDEMIOLOGICAL ASSESSMENT OF STATUS OF MALARIA, DECEMBER 1961

AREAS IN WHICH MALARIA HAS DISAPPEARED OR NEVER EXISTED
MALARIOUS AREAS NOT YET IN CONSOLIDATION PHASE
AREAS IN CONSOLIDATION PHASE
AREAS IN WHICH MALARIA HAS BEEN ERADICATED

? COUNTRIES FROM WHICH INFORMATION IS NOT AVAILABLE IN REGARD TO THE PRECISE EXTENT OF THE MALARIOUS AREA AND THE EPIDEMIOLOGICAL STATUS
In the South-East Asia Region, all countries now have malaria eradication programmes, except Bhutan and the Maldives Islands, which have a very small percentage of the total population in the malarious areas of the Region. Good progress has been made in some of the countries, and eradication appears to be in sight in Ceylon. In most other countries problems associated with the provision of sufficient trained staff and adequate administrative machinery are receiving the required attention. This region contains the largest single malaria eradication programme in the world, namely that of India, and here the progress can be considered to be satisfactory.

In the European Region, only Algeria and Morocco have not yet embarked on malaria eradication programmes. If we consider continental Europe by itself, we find that all the malarious countries have eradication programmes and that eradication has been achieved in the areas inhabited by 90 per cent. of the population involved. It can be said that in this part of the Region there are practically no operational or administrative problems and no technical ones, and it is expected that all the countries will achieve eradication within the next four or five years. In countries of the Region outside continental Europe, progress has also been made—in Turkey, which has a fairly advanced eradication programme, and in Morocco, where preparatory training of personnel is being undertaken.

In the Eastern Mediterranean Region, half the malarious countries have malaria eradication programmes. The largest of these countries from the population point of view is Pakistan, with 94 million people living in malarious areas—55 per cent. of the total population under malaria risk in the Region. The Pakistan malaria eradication programme was started early in 1961 and is progressing, though it is somewhat behind the originally planned schedule.

In the Western Pacific Region, there are malaria eradication programmes in a quarter of the countries, covering 35 per cent. of the total population living in malarious areas. In this region also it has been necessary to redefine the projects, and in some countries pre-eradication programmes are now being developed. The programme in the Region as a whole, however, shows noticeable advances from the standpoint of operational expansion and improvement of both technical standards and of administrative facilities.

The year 1961 may be considered to have been a year both of advance and of consolidation of achieved advances. While new problems continue to appear, the outlook for the future is an optimistic one.

### 1.2 Global Epidemiological Assessment

A large number of programmes in the global campaign for malaria eradication were launched during the years 1956 and 1957. Assuming an average duration of the attack phase of four years, one would therefore expect to see considerable areas and populations reaching the consolidation phase during 1961.

This expectation has been largely, although not entirely, fulfilled. Table B indicates, by region, the population of the areas that moved during the year under review from the attack phase into the consolidation phase. It will be seen that a total population of more than 24 million in nineteen countries has been affected by this significant progress.

#### TABLE B. POPULATION OF AREAS MOVED FROM ATTACK PHASE INTO CONSOLIDATION PHASE DURING 1961, BY REGION

<table>
<thead>
<tr>
<th>Region</th>
<th>Population of countries included in attack phase in January 1961</th>
<th>Population of areas moved from attack phase into consolidation phase during 1961</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Americas</td>
<td>23,761</td>
<td>12,767</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>23,267</td>
<td>3,586</td>
</tr>
<tr>
<td>Europe</td>
<td>5,174</td>
<td>1,661</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>13,065</td>
<td>3,777</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>7,556</td>
<td>2,612</td>
</tr>
<tr>
<td>Total</td>
<td>72,823</td>
<td>24,403</td>
</tr>
</tbody>
</table>

* Country programmes included in above data:
  - The Americas: Bolivia, Jamaica, Mexico, Peru, Surinam.
  - South-East Asia: Afghanistan, Burma.
  - Europe: Romania, Union of Soviet Socialist Republics, Yugoslavia.
  - Eastern Mediterranean: Iran, Iraq, Lebanon, Libya, Syria.
  - Western Pacific: China (Taiwan), North Borneo, Philippines, Sarawak.

A word of explanation is needed for the better understanding of Table B. In compiling this table, the only shifts of population that were taken into account were those caused by the movement of areas from the attack phase into the consolidation phase. Changes in population figures caused by movement of areas into the maintenance phase, by reclassification of original malarious areas, or by natural increase of population, were not taken into consideration. For this reason Table B does not include country programmes in which changes of the population figure in areas in the consolidation phase were due only to the causes just listed. The increase in the population figure for areas in the consolidation phase, by region, as presented in Table B can therefore not be compared with the population figure for this phase as given in Table A (page 134), or in Table J in the Appendix to this report (see page 184). An impression of the areas in the consolidation phase added in 1961 can also

While on the whole the progress illustrated by Table B is gratifying and satisfactory, it must be pointed out that according to schedule more populations in more programmes should have reached consolidation phase by 1961. The outstanding causes for this delay in progress in all regions are still administrative, operational and financial difficulties in the running of programmes. However, these have to some extent been overcome during the year under review. In some areas the delays in reaching the consolidation phase, or even in breaking transmission, are due to technical problems. Amongst these we may mention resistance to one, and sometimes both, groups of insecticides (DDT and dieldrin) by a vector species, such as that of Anopheles albimanus in some parts of Central America and that of A. stephensi in southern Iran. Another entomological cause of difficulties in breaking transmission arises when the main or a secondary vector has partially or entirely exophilic habits, either naturally or acquired under the pressure of insecticide application. This factor would seem to underlie problems of persistent transmission in some parts of Mexico and Central America in regard to A. albimanus and A. pseudo-punctipennis, and in some parts of South America in regard to A. nuñez-tovari; the same problem arises in regard to A. balabacensis in parts of Indo-China and to anophelines of the punctulatus group in the South Pacific and Netherlands New Guinea.¹

It will be seen from Table B that the greatest progress, in terms of population in areas moving into the consolidation phase in 1961, was achieved in the Region of the Americas. A very large proportion of the population figure given is that affected by the shift in Mexico. Further large populations could also be advanced to the consolidation phase (i.e., spraying could be withdrawn) in Bolivia, Jamaica and Surinam. In addition to the programmes in these countries, a considerable number of programmes in the Region of the Americas were started in 1956 and 1957; in these, however, spraying could not yet be withdrawn in any area. The delay in attaining the consolidation phase in these programmes is due to the fact that in most of them the attack phase was begun with a once-yearly spraying cycle with dieldrin. By 1958-1959 it became clear that the once-yearly spraying cycle with dieldrin was not able to effect interruption of transmission, because the main vector species had developed physiological resistance to dieldrin, or because a single spraying cycle per year with any insecticide could not be effective on account of the large amount of insecticide deposits rubbed off sprayed surfaces during such long periods, or because of the large number of new houses or huts built during the year. Consequently, in all these programmes the spraying procedure was changed from dieldrin once a year to DDT twice a year, this shift having taken place during the years 1959-1960. As interruption of transmission had not been obtained before this change in spraying procedure, the point at which the change took place has to be regarded as a recommencement of the attack phase, so that the consolidation phase could not possibly have been reached by 1961. Evaluation data available for 1961 show, however, that interruption of transmission has by now been achieved in most of these programmes. This progress must be ascribed not only to the change of spraying schedule but also to the considerable strengthening of evaluation (case-detection) activities, by which it has been possible to reveal any undue continuation of transmission in scattered areas and to take appropriate remedial measures in time.

Judging solely by the data given in Table B, not much progress would appear evident in the European Region. This is, however, a wrong impression: on the European continent the large majority of the population has been covered by operations in the consolidation or maintenance phase for the last two or three years, and very substantial progress was made during 1961 in further improvement in the epidemiological situation in these areas, i.e., in the considerable further decrease in the number of residual cases of malaria. On the European continent, only populations in some small areas are still covered by operations in the attack phase (in Albania, Romania and Yugoslavia) and it can be confidently expected that the consolidation phase will be attained in all these areas before the end of 1962, as planned.

Very good progress has been made during 1961, as judged by epidemiological criteria, in some of the countries in the Eastern Mediterranean Region (Iran, Iraq, Israel, Jordan, Lebanon, Syria) as is clearly shown by the data for this region in Table B. The outstanding problem in malaria eradication in this area is still that in southern Iran, where a combination of unfavourable factors—such as large-scale nomadic movements and double insecticide resistance in A. stephensi—makes interruption of transmission impossible by ordinary methods at present. The first evaluation data available for the new large programme in Pakistan, in which the attack phase began only in 1960, seem to indicate that interruption of transmission is being achieved.

Of the population of 3 586 000 in the South-East Asia Region shown in Table B as being in areas which have moved into the consolidation phase

¹ Now styled West New Guinea (West Irian).
during 1961, 3.5 million are in Burma and 86,000 in Afghanistan. While there is reasonable hope that the situation in the area of Burma now in the consolidation phase can be maintained and further improved, it should be remembered that in Burma areas with a population of over ten million are still in the attack phase and that the progress of the eradication programme in those districts is not yet fully assured, mainly because of operational difficulties. In Afghanistan, the whole conduct of the eradication operations has been greatly improved during the year under review and it is confidently expected that during 1962 it will be possible to withdraw spraying from additional areas with a population of approximately 1.5 million.

In Ceylon, the steady progress of 1959 and 1960 has continued during 1961. While during 1961 spraying has not yet been withdrawn from the area at present in the attack phase (and this country, therefore, is not included in Table B), the epidemiological situation in that area is highly satisfactory and spraying will be withdrawn during 1962 from practically the whole area remaining in the attack phase.

The gigantic malaria eradication programme of India (covering 424 million people) seems on the whole to be making satisfactory progress. At the beginning of this programme in 1958 it had been envisaged that spraying might be withdrawn from very substantial areas in 1961. An assessment of evaluation (case-detection) procedures and results has shown, however, a certain number of residual foci that were not expected. Also, owing to some delays in the implementation of the case-detection/surveillance programme, these operations did not reach the degree of efficiency, in some states and areas, which the directing authorities of the Indian malaria eradication programme require before they decide to withdraw spraying, and they therefore postponed that decision. It is, however, envisaged, on the basis of data accumulated during 1961, that it will be possible to withdraw spraying for a population of 125 million in 1962.

In the Western Pacific Region, in North Borneo and Sarawak, interruption of transmission had already been achieved in large parts of the programme area and some parts of the area have been put into the consolidation phase (see Table B). The eradication programme in the Philippines has been lagging since 1958 and the situation as judged by epidemiological standards has not very much improved during 1961. In substantial areas interruption of transmission has not yet been achieved in spite of more than four years of attack phase operations. The difficulties in this programme are chiefly of an administrative and operational nature.

The whole of Taiwan is in either the maintenance or the consolidation phase and the good progress of the last years has continued during 1961. One small new focus of transmission, discovered in June 1961, was quickly and efficiently dealt with. The whole island will probably reach complete eradication within the next two years.

In the African Region, apart from the Republic of South Africa where eradication of malaria has almost been reached through a long process of control and spontaneous disappearance of malaria over many years, there are only three malaria eradication programmes, sensus stricto, in Swaziland, Mauritius and Zanzibar. Swaziland is in the consolidation phase, but some trouble has been experienced through importation of cases from adjoining territories. In Zanzibar, which is in the attack phase, complete interruption of transmission has not yet been achieved but seems to be in sight. In Mauritius, the whole territory was considered to be in the consolidation phase from 1957 onwards; unfortunately the experience of 1960 recurred in 1961 and a considerable number of new foci of malaria transmission appeared during the first half of the year. On account of this, areas with a population of 316,000 (of the total population of 649,000) have been put back under the attack phase.

II. TRAINING AND STAFFING
FOR NATIONAL MALARIA ERADICATION PROGRAMMES

The international malaria eradication training centres have continued to play a large part in providing persons trained in malaria eradication techniques. The numbers attending the regular courses in 1961 are shown in Table C.
TABLE C. COURSES AT TRAINING CENTRES ATTENDED BY STAFF OF NATIONAL MALARIA ERADICATION SERVICES, IN 1961

<table>
<thead>
<tr>
<th>Training centre</th>
<th>Type of course</th>
<th>Number of courses</th>
<th>Language of instruction</th>
<th>Number attending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgrade, Yugoslavia</td>
<td>senior</td>
<td>1</td>
<td>French</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>junior</td>
<td>1</td>
<td>French</td>
<td>21</td>
</tr>
<tr>
<td>Cairo, United Arab Republic</td>
<td>junior</td>
<td>2</td>
<td>English and Arabic</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>senior</td>
<td>1</td>
<td>English</td>
<td>20</td>
</tr>
<tr>
<td>Jamaica</td>
<td>senior</td>
<td>3</td>
<td>English</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>junior</td>
<td>1</td>
<td>English</td>
<td>13</td>
</tr>
<tr>
<td>Maracay, Venezuela</td>
<td>senior</td>
<td>1</td>
<td>Spanish</td>
<td>11</td>
</tr>
<tr>
<td>São Paulo, Brazil</td>
<td>entomological</td>
<td>1</td>
<td>Portuguese</td>
<td>18</td>
</tr>
<tr>
<td>Tala, Philippines</td>
<td>junior</td>
<td>1</td>
<td>English</td>
<td>17</td>
</tr>
</tbody>
</table>

Total 12 Total 202

The persons attending the courses referred to in Table C came from fifty-seven countries.

The centre in the Western Pacific Region at Tala, Philippines, was temporarily closed, owing to administrative difficulties, but negotiations are already in hand for it to be reopened in 1962 (see also page 182). In addition to the course referred to in the above table, an engineers' course, attended by some forty students, was held at Tala at the beginning of 1961.

Plans were initiated for the opening in 1962 of two international training centres in West Africa—one to give courses in English and the other courses in French. Arrangements have also been made for two senior courses—one in English, the other in French—to be held in Moscow, USSR, in 1962.

Considerable attention has also been given to providing assistance in the establishment and running of national training centres. In this connexion, two centres have been opened in Pakistan (in Dacca and Lahore), where courses for microscopists have already been given. There was in addition a senior course for fifteen trainees in Peshawar. In the Eastern Mediterranean Region also, two courses, each catering for about twenty-five persons, were held at the training centre in Ethiopia. In the South-East Asia Region too, training activities have been increased. The Malaria Institute of India at Delhi has continued to give training to students from many parts of the Region. Seventy-five medical officers, including participants from Afghanistan, Nepal and the Republic of Viet-Nam, in addition to those from the Indian programme, were trained in two courses. A course was also given to fifty-four malaria inspectors. In Indonesia, where the national staff has increased tremendously during the year, training has been given great emphasis: some hundred microscopists were trained in East and West Java, and twenty-five administrative assistants in Djakarta; and, in addition, an entirely new training centre was opened in September in Tjiloto where, before the end of the year, thirty zone chiefs and twenty-one sub-zone chiefs had received courses of instruction.

While the international and the larger national centres referred to above are providing, and will continue to provide, the basic training for senior technical and junior supervisory staff, field experience and the training of lower echelons must take place in the countries of origin. This has been the case throughout 1961. All WHO staff working on malaria in Turkey, for example, have given lectures at the various training courses that have been held. In Ghana the main activity of the project staff for the year has been training, concentrated on geographical reconnaissance. In Cameroon there was a training course for microscopists and entomological aides. Here the difficulty in finding suitable recruits was accentuated, in that only twenty-seven of the forty undergoing training reached the required standard. Geographical reconnaissance was the subject of a seminar in Iran and received detailed attention from the training point of view in Somalia, and in Burma, where a course for some twenty-five national staff was conducted by the WHO engineer. Training in Jordan, assisted by WHO advisory staff, was focused on surveillance activities and agents were trained for both active and passive case-detection. Social welfare workers were trained as surveillance agents in Burma. Assistance was given to the training of thirty-seven junior inspectors in Afghanistan, microscopists, entomological aides, surveillance agents and squad leaders in Cambodia, and technicians, assistant technicians and microscopists in North Borneo. In Cambodia and North Borneo, a hundred employees of the national staff were involved. In Sarawak the WHO entomologist conducted a preliminary course to train entomological technicians; on its completion selected candidates, together with two of the North Borneo national staff, were given instruction in the more advanced entomological techniques, with the assistance of the regional entomologist.

Another form of assistance to training given by the Organization through its advisory staff is help to national staff in the preparation of teaching media such as the manual for assistants used in Morocco,
where more than a thousand persons will require training. The Organization continues to encourage technically sound manuals and teaching aides, which, with the assistance of WHO advisory field staff, are prepared in the form of most value to the programme in which they will be used.

III. OPERATIONAL ASPECTS

3.1 Planning, Organization and Management

Experience continues to prove the need for detailed and realistic plans before malaria eradication programmes are started. For this reason comprehensive criteria and methodology for the preparation of such plans have been developed and great attention has been paid to them especially in the past year. Failures in some earlier programmes have shown that it is imprudent to begin even pre-eradication surveys before it has been demonstrated that an attack method exists which is applicable in all malarious areas of a country; that basic public health services exist in an adequate measure, or will be developed in time to support the surveillance operation and to maintain vigilance after eradication of malaria; and that funds can and will be allocated on a scale adequate to carry the programme through to completion. Governments in all regions, therefore, have been reviewing their plans of operation and revising those which do not comply with the stringent criteria now established.

In the African Region considerable advances have been made in planning on the basis of earlier experience. Special emphasis has been laid on careful preparation and on the creation of the necessary rural health infrastructure. In line with this policy, many countries in this region are now developing pre-eradication programmes. An aspect of preparatory work calling for special emphasis in this region is geographical reconnaissance, which is required to contend with the very complex pattern of life and population movements in African countries.

It is to be noted that in the Region of the Americas new plans of operation have been developed in Cuba and Haiti and the preparatory phase is well advanced. In Brazil the national malaria eradication service has been reorganized, and under the terms of a presidential decree there is a new flexibility which has permitted the expansion of the preparatory phase to almost all malarious areas of the country, so that the attack phase will go ahead more rapidly than had been previously expected.

The situation in some countries of South-East Asia has improved with the formation of high-level malaria eradication boards in Thailand and Burma. In Indonesia the Minister of Health has direct responsibility for the malaria eradication programme, and in Thailand malaria eradication has been put in the direct charge of an under-secretary in the Ministry. In India, where health activities are decentralized to the states, effective co-operation has been achieved through an energetic central technical direction and the excellent support given to the programme by the Central Government.

In the Eastern Mediterranean Region, new plans were completed for malaria eradication programmes in six countries and plans are being developed in three others. Greater attention is being paid to the administrative aspects of the programme in several countries of this region.

In continental Europe, programmes are far advanced but, even so, further progress has been made in organization and management, leading to greater efficiency of operations. In Morocco considerable attention has been given to planning the development of the rural health infrastructure before implementing the malaria eradication programme.

In the Western Pacific Region also, attention has been given to the redefinition of programmes, and new plans of operation have been developed. A serious matter is that of the very low salaries at present paid to malaria workers in some countries of the Region, resulting in high turnover and difficulties in attracting workers into employment with the malaria service.

3.2 Spraying Operations

There have been no important changes in the methodology of house spraying operations during 1961 except as a result of increased emphasis on the details of good technique. DDT suspension has been used in most programmes; DDT emulsion or solution and dieldrin formulations have been used only where required by special circumstances. Hand-operated compression sprayers are still considered the best devices for most field situations, and their number in the field has continued to increase in proportion to that of other types of sprayer. The method, long used in American programmes, of training spraymen to work individually and to shoulder the responsibility for satisfactory results in the houses they have sprayed.
is gaining favour in some programmes in other regions. The pre-operational weighing and packaging of individual insecticide tank charges to improve the efficiency and accuracy of field work is being more widely employed. The consumption of insecticide per capita and per house is generally increasing, owing both to the greater emphasis on total coverage and to the effort to spray all possible resting places of blood-fed mosquitoes.

Despite the obvious need for strong technical direction in large spraying operations, many programmes still do not have separate officers specially responsible for this work. The advantages of employing engineers, national and international, in such operations are far from universally appreciated. In a number of specific instances improved efficiency was reported during 1961 in programmes where spraying operations had been reorganized and where staffing had been improved during the previous year. At the field level, the importance of maintaining frequent training activities to deal with the problem of yearly temporary employment has been noted and action taken in some programmes. Many training and field manuals have been produced during the year.

During 1961 there has been a growing appreciation of the importance of good maps and of complete geographical reconnaissance to the success of malaria eradication programmes. In the Eastern Mediterranean Region a seminar on geographical reconnaissance was held in Iran, and it has been recognized in that region that geographical reconnaissance is needed even in areas which have already passed into the consolidation phase. Several attempts were made in the African Region to develop through field trials an efficient and adequate method of obtaining the required maps and information on distribution of dwellings.

Spraying operations were completed on schedule in most programmes. As geographical reconnaissance has progressed, more and more attention has been given to achieving and assessing the totality of coverage. Obstacles represented by closed houses, new houses, temporary shelters, silkworm culture, replastering of walls, etc., have been better defined and dealt with in a number of programmes. For instance, some countries, where one annual spraying cycle of short duration is carried out in the spring, have a summer spraying cycle specially to deal with the houses which have not yet been sprayed and with summer shelters. In another region, where a single spring spraying cycle is the rule, special "maintenance spraying teams" are employed to deal with new houses and those that have not yet been sprayed while the regular spraying cycle is in progress.

It is to be noted that considerable interest has centred during the year on the development of improvements in spraying equipment. Recent work has resulted in the appearance on the market of better devices for regulating sprayer discharge and of nozzles less subject to erosion. Interest has also centred on providing easily extendable lances for use in places where ceilings are likely to be high. From 1959 until the end of 1961 the Organization had a special sprayer evaluation unit carrying out extensive field tests on these devices and improvements, some of which are likely to be available for field programmes in the near future.

3.3 Epidemiological Evaluation and Surveillance Operations

The tendency to increase the emphasis—begun in 1959—on epidemiological operations in malaria eradication programmes has continued during the year under review. Malaria case-detection activities, which form the basis of epidemiological evaluation, both in the later stages of the attack phase and, particularly, as a part of surveillance operations in the consolidation phase, have been greatly augmented, as may be witnessed by the large increase of field personnel engaged in these activities in all malaria eradication programmes and by the very considerable increase in the number of blood slides examined.

The total number of blood slides examined in malaria eradication programmes was 9,253,704 in 1960, and it had increased to 24,370,226 in 1961. The increase was specially marked in the South-East Asia Region, where the number of blood slides examined rose from 2,722,000 in 1960 to 11,843,000 in 1961, a large share of this increase being due to the rapidly expanding case-detection activities in India and Indonesia. There is an increasing tendency to utilize the experience of supervisory and field personnel of spraying operations for the logistic planning and organization of epidemiological operations. In some areas where problems of persisting transmission require frequent visits, personnel with dual responsibility are used, carrying out supplementary spraying and case-detection at the same time. In Mexico, in large areas which passed into the consolidation phase during the year under review, the routine part of case-detection activities has been transferred at all levels to the Field Operations Department which, during the attack phase, was responsible for spraying operations.

The standards for case-detection and surveillance 1 which were laid down by the Expert Committee on Malaria at its eighth meeting in July 1960 have been universally accepted, and great efforts have been made

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to introduce them into practice. It can be said without exaggeration that the improvement in epidemiological evaluation has been the main factor in improving in general the performance of malaria eradication operations. It has made it possible to recognize in good time, during the attack phase, localized failures of spraying operations to bring about interruption of transmission, and to take adequate remedial measures (see the remarks on American programmes in section 1.2—Global Epidemiological Assessment); it has in many instances provided a sounder basis for the decision on the time for withdrawal of spraying, and it has made for more efficient operations during the consolidation phase. The overall progress made in this field is also reflected in the quality and number of quarterly reports on surveillance operations (on the standardized forms designed by WHO) which have been received in the regional offices and at headquarters.

During the year under review, eight more countries have been added to those already participating in this system of reporting, making a total of thirty-five countries. These reports give an excellent basis for the epidemiological assessment of progress at regional and headquarters level and also furnish data for observing the development of operational patterns in surveillance. On this basis a review has been made recently of the staffing patterns and staffing needs in active case-detection. This analysis has shown that the most important factors to be taken into consideration are population density and accessibility of localities. As judged by the adequacy of the examination rate reached in populations (i.e., the number of blood slides taken per year in relation to the population) it would seem from the data analysed that, for a monthly cycle of active case-detection visits, one surveillance agent can cover efficiently a population of approximately 10 000 if the population density of the area is between 100 and 200 per km² (a fairly common situation in rural areas). If the population density is below 100 he cannot cover more than approximately 7000; if the population density is above 200 he can cover a population of up to 15 000.

In May 1961 two experimental studies on surveillance, sponsored by WHO, in Ceylon and Mysore (India), were concluded. The data from these studies show that, under the epidemiological conditions of the trial areas, monthly visits in active case-detection would seem to be efficient enough for the purpose of surveillance and that not much is gained by fortnightly cycles. On the other hand, six-weekly or eight-weekly cycles would definitely impair the efficiency of surveillance. In the Indian programme, covering a population of over 420 million, where case detection is based almost exclusively on the active pattern, the financial and logistic implications of carrying out fortnightly, as opposed to monthly, house visits would be immense. In consideration of this, additional studies are being conducted in India in order to determine more conclusively under what conditions two-weekly cycles of visits can be replaced by four-weekly cycles. Another aspect that was studied in the original field experiments in Ceylon and Mysore was that of the proportion and epidemiological danger of asymptomatic malaria cases escaping detection by the ordinary fever surveillance procedure. This was investigated by means of check mass blood surveys. For at least one of the study areas (Ceylon) it can be said that the observations have shown that the number and danger of such cases is small and that most of them are discovered through epidemiological investigations of "contacts" (collaterals) of malaria positive fever cases without the need to resort to large mass blood surveys. The superior effectiveness of screening in passive case-detection as against active case-detection was also clearly shown in Ceylon in areas where passive case-detection is based on a dense network of rural dispensaries.

The importance of thorough epidemiological investigation of cases found by detection procedures and their actual classification as to origin of infection is being more and more stressed, and training of key personnel in these procedures is vigorously pursued. One of the most important criteria laid down by the Expert Committee on Malaria for achieved eradication is the absence of indigenous cases for a specified period, and the proof of this through a register showing all cases found in that period, classified as relapsing, imported, introduced or induced. Accurate and reliable classification of cases during the consolidation phase is therefore essential. The Organization has issued a special document, entitled "Classification of Malaria Cases", in which detailed instructions and explanations are given and problems and difficulties frequently encountered are discussed.

### 3.4 Entomology

There continues to be an important shift of emphasis, increasingly reflected in field practice, in the methodology of this work. The shift is away from a reliance depending mainly on the traditional methods of entomological checking (particularly breeding densities of vectors, adult day-resting densities in houses, and sporozoite dissections) which are recognized as being of limited value for assessing the possibility of low-grade malaria transmission in sprayed areas. The measurements increasingly used include outlet window-trap densities of vectors (i.e., the level of their nighttime activity in human habitations); numbers and
ratios of survivors from the traps; man-biting rates of vectors outdoors and indoors; outdoor-resting densities; and the age composition of vector populations. These types of measurement should provide much better presumptive evidence of the absence or presence of occasional transmission at any given time and place during the attack phase. No entomological index devised, however, can give positive proof whether transmission is continuing at a very low level; to obtain this, reliance has to be placed on the direct search for fresh infections in man, by infant-parasite survey and by case-detection. The most the entomological evaluation can do is to furnish evidence which, when considered together with the parasitological findings, will provide a clear picture of the progress made towards interruption of transmission.

Where a fresh infection, which constitutes a focus of transmission, has been demonstrated, entomological evaluation acquires primary importance, since there is always (even in cases of operational breakdown) an entomological causative factor to be investigated. Investigations of foci of transmission in the attack phase employ various combinations of the traditional and the new methods mentioned, selected at the discretion of the field entomologist and depending on entomological trends throughout the epidemiological area concerned. In addition, a routine precaution observed in most programmes is to carry out insecticide-susceptibility checks on the vectors in such foci, whether or not these checks are also made in other areas. Three further methods, namely the bioassay test, the irritability test and the human blood ratio of anopheline stomach smears, may provide contributory evidence, although the results of these tests may be interpreted with caution and the limitations of each, considered in isolation, are now widely appreciated.

The number of methods mentioned above shows that the methodological armoury of the malaria eradication entomologist has been considerably enriched. It follows that the operational scientist evaluating an insecticidal attack in the field requires considerably more specialized training than hitherto, and that he must constantly exercise a high degree of judgement when choosing his methods of work and when interpreting the results. Recognition of these needs is reflected in the increased attention being given to specialized training courses in entomological techniques, at the instigation of a number of national malaria eradication services and of the Organization itself. A special refresher course for WHO entomologists, with stress on the epidemiological aspects of their work, was held in the Malaria Eradication Training Centre in Cairo in May and June 1961. A meeting of senior WHO malaria entomologists (including all regional malaria entomological advisers) took place in Alexandria from 22 to 27 May 1961, when the need for standardization of the newer entomological methods was discussed. In view of the importance of this subject, the Expert Committee on Malaria discussed "Entomology in Malaria Eradication" at its meeting in April 1962.

The testing of insecticides in the field is another primarily entomological matter to have received attention during 1961. One aspect concerns trials which may be needed to determine, in a given set of circumstances, the maximum economy of dosage and frequency of spraying consistent with effectiveness where the insecticide in use (or to be used) is an established material such as DDT or dieldrin. A tentative method of field trial for this purpose was put forward by the Organization and has been tried out, with or without modifications, in several malaria eradication programmes. Consideration of the results of the trials has shown the direction in which modification of the method must be sought, and has brought nearer the time when it will be possible to advise any country starting a programme as to whether a "dosage trial" is required and how to plan it.

The other aspect of insecticide testing is the trial of new materials previously screened in the laboratory and judged to show high promise as potential replacements for the chlorinated hydrocarbons, where these have proved, or have become, ineffective in malaria eradication. For these also some kind of standard dosage and frequency of spraying must be arrived at by experiments made under field conditions; but the methodology is complicated by the need to align it on the one hand with the methods used in the earlier screening of the new materials and, on the other, with those of operational evaluation to which they may be subjected later. If at least some methods are used which are applicable and relevant in all these contexts, the task of spotting why an insecticide which appears successful on one occasion is a failure on another will be rendered much easier.

The situation with regard to physiological insecticide resistance in malaria vectors is dealt with elsewhere in this report (section 4.2). The fact that it has become rather more stable (though no less serious) than before allows more attention to be paid to the significance of other phenomena, such as the irritant effects of DDT. In theory this effect may be advantageous at first, if it prevents vectors from entering houses or prevents them from biting inside. Somewhat later it may turn into a disadvantage, for it may then be too weak to stop the vector entering and biting but too strong to allow it to rest on a treated surface and pick up a lethal dose. It is with the aim of finding out what actually happens, week by week, in a sprayed
MAP 3 INSECTICIDE RESISTANCE IN MAJOR MALARIA VECTORS (OCTOBER 1961)
area, that renewed emphasis is now placed on the operational value of indoor biting rates, window-trap catches and window-trap mortalities. At the same time a true assessment of the danger of outdoor transmission is recognized as of cardinal importance. Whereas this is a matter primarily of human ecology, it is the entomologist who has to measure the actual amount of man/vector outdoor contact in sprayed areas and the probability of such mosquitoes living to a dangerous age. Experience seems to show that, where the human host is regularly available outside during the period when the vector bites, even the presence of a fully efficient insecticidal treatment within the houses may sometimes not interrupt transmission.

3.5 Drug Administration

The role of chemotherapy in the different phases of malaria eradication programmes has been outlined in two previous reports on the development of the malaria eradication programme—to the twenty-fifth session of the Executive Board in January 1960 ¹ and to the Fourteenth World Health Assembly in February 1961 ²—and no substantial changes or new developments have taken place during the year under review.

In practically all eradication programmes, residual insecticide spraying continues to be the fundamental method in the attack phase, while chemotherapy is the main antimalaria measure in the consolidation phase, when its use is confined to individuals or small groups who receive drugs only for short periods and for radical cure.

During the consolidation phase, when spraying operations have been suspended and the vector is no longer controlled by insecticides, relapses of residual vivax infections may lead to the resumption of transmission unless these cases receive adequate treatment for radical cure within the shortest possible time after their detection. For the radical cure of relapsing infections, most countries have now adopted the standard fourteen-day course with an 8-aminoquinoline, usually primaquine. In rural areas not yet covered by a network of antimalaria stations or by an efficient rural health service, prompt radical treatment of all detected infections presents serious operational difficulties. Regular visits for domiciliary treatment of each case or compulsory hospitalization are the only means to ensure that each dose is actually taken. To leave the tablets with the patient for self-administration is not advisable; either the drugs will not be taken, or they will be misused. Supervision is also advisable to watch for the possible appearance of toxic effects in primaquine-sensitive individuals, when treatment may need to be discontinued. In general, however, experience has shown that in the recommended doses primaquine seldom gives rise to toxic symptoms.

In some exceptional circumstances, where residual insecticides are either ineffective or impracticable, antimalarial drugs may remain the sole means of attack. This would imply that a given drug or drug association is administered regularly and at short intervals (at least once a week) to every inhabitant of an area over a considerable period. As in the case of residual spraying, total coverage of the population at each distribution is essential if interruption of transmission is to be achieved. So far, this has not been found possible, except for very small communities. Even when a programme has been confined to relatively small areas and carried out for a limited period under most favourable conditions, the population treated at any distribution has not exceeded 90-93 per cent.

With the almost insuperable practical difficulties in total coverage which confront mass drug treatment by means of regular distribution of tablets, much interest has been aroused in the use of medicated salt. This indirect method of drug administration, by mixing the drug with a generally used food additive such as common salt (Pinotti's method), may often be more practicable, more economic and more efficient than the classical method by means of tablets. It has the advantage of reaching every household without subjecting the people to the discipline of regular drug distribution and ingestion, and saves the considerable expense of organizing and running individual drug treatment.

Projects employing medicated salt as the sole antimalaria measure are now under way in British Guiana, Cambodia, Ghana and Netherlands New Guinea; a similar project in Brazil was suspended in November 1961. Practical experience in these projects has shown, however, that this method, too, presents a number of problems, some of which have so far defied solution.

The first limitation of the medicated salt method is that, in many under-developed areas which are also highly malarious, common salt has not yet become a regular and indispensable food additive, either because salt is not readily available to the people, or because it is sold at a relatively high price. Distribution of medicated salt free of charge would be the obvious solution. But in areas where commercial salt distribution by traders is already well established it is generally not possible to distribute medicated salt otherwise than through the existing commercial channels. The success of the method will then largely depend on

² Mimeographed document A14/P&B/2, December 1960.
the economic condition of the people, and where the economy is at a low level a system of subsidizing the cost or reimbursement of the traders may be necessary in order to ensure that the whole population of all income levels can afford to obtain their full requirements of medicated salt.

Before a medicated salt project can be started in any area, consideration must be given to certain technical and operational aspects. Some of the essential requirements for the introduction of medicated salt are: regular consumption of common salt by the population, possibility of controlling all sources of non-medicated salt, suitability of the local salt for preparing an effective drug-salt mixture stable under local conditions and acceptable to the population. One of the main obstacles to the large-scale application of medicated salt has been the difficulty of preparing a drug-salt mixture which would be stable under tropical conditions of high humidity. Considerable progress has been made during the past year towards the solution of this problem, either by resorting to less soluble compounds of antimalarial drugs, or by protecting the soluble form by some special coating (such as cetyl-stearyl-alcohol).

Probably the greatest drawback of the medicated salt method is that the age-group most heavily infected, namely infants and young children, receive very little or no salt with their daily diet. Thus the essential total coverage cannot be achieved by this method and in highly endemic areas medicated salt alone is unlikely to interrupt transmission unless infants and young children are treated by direct drug administration. Medicated salt may well serve a purpose if it is used as a complementary method to insecticide spraying in areas in which the latter alone is unable to interrupt transmission. The Organization, with the co-operation of several governments, is trying to assess the real possibilities of this promising method and how it could be applied to its best advantage under various local conditions. A guide to the use of medicated salt has been prepared and is being followed in these programmes.1

IV. THE PROBLEMS OF RESISTANCE

4.1 Problems of Resistance of Malaria Parasites to Drugs

Drug resistance is the ability of a malaria parasite strain to withstand doses of a drug which normally destroy malaria parasites of the same species or prevent their multiplication.

The fact that, after administration of adequate doses of the proper drug, parasites do not disappear from the blood of a malaria-infected person, may be due either to drug failure or to drug resistance. Drug failure may result from defective absorption or unusual rates of degradation or excretion of the drug. On the other hand, in drug resistance, while absorption and degradation of the drug are normal, the parasite itself is insensitive to the action of the drug.

Although observations of lessened sensitivity of some strains of malaria parasites to quinine, pamaquine and mepacrine have been reported in the past, the problem of drug resistance of human malaria parasites became significant only since 1948-1950, when an increasing number of falciparum and vivax infections in Malaya were found to be resistant to proguanil. Further observations on proguanil resistance were reported from Assam, Indonesia, Netherlands New Guinea, the Republic of Viet-Nam and several parts of Malaya.

The evidence of cross-resistance to pyrimethamine of proguanil-fast strains of P. falciparum was produced as long ago as 1952 in East Africa. Since 1954 when pyrimethamine-resistant strains of P. falciparum and P. malariae were reported from the field from Kenya and Tanganyika, the number of such records kept increasing every year. Most of these reports pertain to P. falciparum and come from Africa. Outside tropical Africa pyrimethamine resistance was reported in P. vivax from Venezuela and in P. falciparum from Netherlands New Guinea. In Venezuela the resistance was reported from a relatively large area in the western part of Venezuela inhabited by 38,000 people given at first a weekly, and later a fortnightly adult dose of 50 mg of pyrimethamine for over one year. In Netherlands New Guinea resistance was recognized after six months of distribution of medicated salt containing pyrimethamine. Resistance to pyrimethamine or proguanil has not been recorded in Romania or the USSR, where these drugs have been widely used for “mass prophylaxis”, together with other antimalarial drugs.

Over the past ten years chloroquine has proved to be one of the most dependable antimalarials for treatment of acute attacks and for suppression of parasitaemia. This drug not only has a high activity combined with the absence of serious side-effects, but has also been found so far not to give rise to resistance.

Although Indian workers showed a few years ago that a 200-fold increase of the level of chloroquine tolerance could be produced experimentally in
Reference to Table D will show apparent instances of reversion towards DDT-susceptibility in *A. stephensi* in the areas of Ahwaz (Iran) and Basra (Iraq), and in *A. sundaicus* at Semarang (Indonesia). The only vectors now added to the resistance list for the first time are two which play a localized role in malaria transmission: *A. nuñez-tovari* has shown increased tolerance to DDT in the Táchira district of Venezuela, and dieldrin resistance in *A. neomaculipalpus* has been reported from Colombia and from Trinidad.

While there has been some spreading of the areas of known resistance in major vectors, the spread is by no means commensurate with either the amount of spraying or the amount of testing in progress. Thus, in *A. albimanus* (Map 3, Fig. I) resistance has spread to only one additional country (Costa Rica—one district only); in *A. culicifacies* (Fig. V) developing resistance to DDT is now found in an extensive area of India comprising parts of three states; and in Africa dieldrin resistance has been found additionally in *A. gambiae* (Fig. II) in certain districts of Ghana, Mali, Sierra Leone, and the Congo (Brazzaville). The last-named report is somewhat alarming, as it is the first from south of the equator, but there is no sign of resistance anywhere in the eastern side of the continent.

The position in *A. sacharovi* remains unchanged (see Fig. III), but among members of the same group evidence of dieldrin resistance has come from Bulgaria (*A. maculipennis* group, unspecified) and from Algeria (*A.m. labranchiae*), besides Morocco where it was previously reported. The situation in *A. stephensi* (Fig. IV) also remains much as before; however, the dieldrin-resistant strain has now spread over the plain at the head of the Persian Gulf, from which the species had been reported absent since 1958 when total coverage with dieldrin was initiated. Finally, the areas of resistance of *A. sundaicus* (Fig. VI) have not spread, nor has any case been detected of a population resistant to both insecticides.

In five of the major vectors mentioned above, insecticide resistance has proved decisive in preventing the successful interruption of transmission by use of the insecticide or insecticides concerned. In the sixth, *A. culicifacies*, this does not appear to be the case; in the areas of DDT resistance, as in others of the Indian programme, the attack phase is nearing a successful conclusion with DDT, in spite of vector densities which frequently remain high and room mortalities apparently of a low order. Many of these districts are entering the consolidation phase in 1962. A number of fortunate circumstances seem to have conspired to produce this result, including a much reduced degree of contact between man and vector and the very low level of parasite incidence by the time the DDT resistance developed.

The example of *A. culicifacies* is an endorsement of the foresight shown by the Eighth World Health Assembly when it recommended an urgent endeavour to eradicate malaria before the anticipated development of insecticide resistance in vectors reached such a pitch as to hamper progress severely.

In Table D the expedient categories, “Susceptible”, “Intermediate” and “Resistant”, have again been employed, with the same meanings as in the preceding report. “Resistant” is the designation where tests show that more than half the mosquitos can survive an exposure which would kill them all in a normally susceptible strain; “Intermediate” indicates that a substantial proportion, but less than half, were found to withstand a similar exposure.

### TABLE D. RESISTANCE TO DDT AND TO DIELDRIN IN MALARIA VECTORS

<table>
<thead>
<tr>
<th>Species</th>
<th>Country</th>
<th>Region and district</th>
<th>Reaction to DDT</th>
<th>Reaction to dieldrin</th>
<th>Date of initial evidence</th>
<th>Date of most recent confirmation</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A. aconitus</em></td>
<td>Indonesia</td>
<td>Central Java:</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>March-April 1960</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jogjakarta Subah</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><em>A. albimanus</em></td>
<td>British</td>
<td>Belize</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>Feb. 1959</td>
<td></td>
</tr>
<tr>
<td>(See Map 3,</td>
<td>Honduras</td>
<td>Punta Gorda</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>May 1959</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Costa Rica</td>
<td>Cordoba Norte de</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>Nov. 1959</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Santander</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
**P. berghei**, the possibility of such occurrence in human malaria parasites was generally discounted.

Recently, a *P. falciparum* strain which seems to have originated in Colombia, and which shows a higher degree of tolerance to chloroquine, has been investigated by a team from the National Institutes of Health in the United States of America. This strain was isolated from a non-immune patient who had worked in Colombia, where he had had repeated attacks of *P. falciparum* malaria in spite of frequent treatment with chloroquine. A field epidemiological reconnaissance in the area of the possible focus of chloroquine resistance in Colombia was organized by the Pan American Sanitary Bureau/WHO Regional Office for the Americas, but no evidence has been found of any occurrence of chloroquine-resistant strains in the field.

A recent study showed that the chloroquine-tolerant strain of *P. falciparum* from Colombia is equally tolerant to amodiaquine and hydroxychloroquine.

The conclusions regarding the present status of resistance of human malaria parasites to drugs are as follows. In practice, drug resistance has nowhere become a problem in malaria eradication. Definite resistance has been observed only with two drugs: proguanil and pyrimethamine. Proguanil, on account of its short-lived action, is anyway not recommended in eradication programmes. Resistance to pyrimethamine can easily be avoided if care is taken not to use this drug alone for treatment of established blood infections. In malaria eradication programmes pyrimethamine should be used only for its prophylactic and sporontocidal action, and always in combination with suitable doses of chloroquine or amodiaquine.

A higher tolerance or resistance of certain strains of *P. falciparum* to chloroquine may have serious implications if the occurrence of such strains is confirmed in the field. It is evident that all cases of alleged resistance to chloroquine require to be fully investigated before operational changes are made. As has been said at the beginning of this section, "drug failure” may be due to many circumstances and most often to the fact that the drug has not actually been taken.

### 4.2 Insecticide Resistance

The recognition of physiological resistance of mosquitoes to insecticides as a cause of operational failures became possible with the development by the Organization of standard methods for testing susceptibility. Tests with standard kits supplied by WHO have been carried out on a world-wide basis in recent years, and have played a vital part in telling how far resistance has developed in malaria where malaria eradication programmes are proc. These test methods have also proved to be v tools for basic genetical and biochemical study the nature and origins of resistance.

Insecticidal pressure on a mosquito population produces a behaviouristic as well as physiological in it. Where an apparent change of behaviour a vector to avoid taking up a lethal dose of inse operational problems may result. This develop sometimes called “behaviouristic resistance less amenable to study by means of standardize and further careful study of information gath the field is required before a true appraisal made of its importance.

A revised summary of insecticide resistance in vectors of malaria is given in Table D. T sentation is the same as that used in the rep 1960, but non-vectors and species of doubtful have been excluded for the sake of clarity and l. In the present report Map 3 shows the posi six major vectors. Figures I to VI show the ri ship between the areas of known resistance to insecticide (DDT or dieldrin) and the distribu the species concerned. It will be seen that in case the “areas of resistance” form only a fraction of the “area of distribution”. Three reasons for this may operate: first, that in area sprayed there has been no pressure on the m favouring development of resistance; secondl the general make-up of the mosquito pop precludes, in some areas, the development resistance; and thirdly, that resistance, if prese so far gone undetected. This last reason should underrated, as entomologists are thinly sp in many programmes.

Allowing for all these factors, there appears some trend towards stabilization of the positio the last summary was prepared. This may be part to the increased use of DDT as against d As is well known, resistance to the former is the slower in developing, less dramatic in its festation, and tends to be lost fairly rapidly insecticidal pressure is withdrawn from the ma population. It is thought that this may well partly to the irritant action of DDT, which enables some susceptible mosquitoes to survive decreases the selection-pressure in favour of resi: This appears to be the case with *A. sacharovi* in C. On the other hand there is no room for doul selection favouring resistance in malaria vec particularly intense where larvicides or agric pesticides are used: the larvae cannot escape e even if they are irritated.
<table>
<thead>
<tr>
<th>Species</th>
<th>Country</th>
<th>Region and district</th>
<th>Reaction to DDT</th>
<th>Reaction to dieldrin</th>
<th>Date of initial evidence</th>
<th>Date of most recent confirmation</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A. albimanus</em></td>
<td>Cuba</td>
<td>Camagüey</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>April-May 1960</td>
<td>DDT Dec. 1960</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oriente</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>June-July 1959</td>
<td>Dln March 1960</td>
</tr>
<tr>
<td></td>
<td>Dominican Republic</td>
<td>Barahona</td>
<td>Susceptible</td>
<td>Intermediate</td>
<td>Oct. 1959</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Julia Molina</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>May 1960</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Samaná</td>
<td>Susceptible</td>
<td>Intermediate</td>
<td>Oct. 1959</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>San Rafael</td>
<td>Susceptible</td>
<td>Intermediate</td>
<td>Aug. 1959</td>
<td>DDT July 1960</td>
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<tr>
<td></td>
<td></td>
<td>Trujillo</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>Sept.-Nov. 1959</td>
<td>DDT June 1961</td>
</tr>
<tr>
<td></td>
<td>Dominican Republic</td>
<td>El Oro</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>June 1959</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guayas</td>
<td>—</td>
<td>Intermediate</td>
<td>July 1960</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manabi</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>March-April 1960</td>
<td></td>
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<td></td>
<td>El Salvador</td>
<td>Cabañas</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>Nov. 1958</td>
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<tr>
<td></td>
<td></td>
<td>—</td>
<td>—</td>
<td>Intermediate</td>
<td>Nov. 1959</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Chalatenango</td>
<td>Susceptible</td>
<td>Resistant</td>
<td>July 1958</td>
<td>Feb.-May 1959</td>
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<td></td>
<td></td>
<td>Nueva Concepción</td>
<td>—</td>
<td>Intermediate</td>
<td>July 1958</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>La Libertad</td>
<td>Resistant</td>
<td>Resistant</td>
<td>July 1958</td>
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1 Change of response to DDT definite in these states, but degree of development of resistance doubtful owing to collection of samples for testing from sprayed houses.
2 Condition was "resistant" in October 1958 but "intermediate" in December 1959.
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<td>Aug. 1959</td>
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<td>Intermediate</td>
<td>April 1959</td>
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<td>Sept. 1959</td>
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<td></td>
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<td>July 1959</td>
<td>Aug. 1959</td>
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<td>Puente de Ixtîla</td>
<td>—</td>
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<td>—</td>
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<td>Intermediate</td>
<td>May 1959</td>
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<td><em>A. punctimacula</em></td>
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<td>Chocô: Riosucîo</td>
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<td>—</td>
<td>Feb. 1959</td>
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<td>Tamalîpîas: San Fernando</td>
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<td>Resistant</td>
<td>July 1959</td>
<td>Aug. 1959</td>
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<td>Clark Hill</td>
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<tr>
<td>of America</td>
<td>Maryland</td>
<td>United States Army Chemical Center</td>
<td>Resistant</td>
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<td>Aug. 1954</td>
<td>June-July 1959</td>
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<tr>
<td>(See Map 3, Fig. III)</td>
<td></td>
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<td>Aug. 1959</td>
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<td></td>
<td></td>
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<td></td>
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<td>Intermediate</td>
<td>—</td>
<td>July 1957</td>
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<td>Resistant</td>
<td>June-July 1960</td>
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<td>Species</td>
<td>Country</td>
<td>Region and district</td>
<td>Reaction to DDT</td>
<td>Reaction to dieldrin</td>
<td>Date of initial evidence</td>
<td>Date of most recent confirmation</td>
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<tr>
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<td>A. sergenti</td>
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<td>Nov. 1958</td>
<td>Feb. 1961</td>
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<td>A. stephensi</td>
<td>India</td>
<td>Madras:</td>
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<td>(See Map 3, Fig. IV)</td>
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<td>Salem:</td>
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<td>Oct. 1957</td>
<td>1961</td>
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<td>Muntafiq ¹</td>
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<td>Oct. 1957</td>
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<td>Dahran:</td>
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<td>A. sundaicus</td>
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<td>Central Java:</td>
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<td>Resistant</td>
<td>March-April 1960</td>
<td>Nov. 1960</td>
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<td>Jogjakarta</td>
<td>Intermediate</td>
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<td>Nov. 1959</td>
<td>Sept. 1961</td>
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<td>Intermediate</td>
<td>May 1961</td>
<td>March 1960</td>
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<td>East Java:</td>
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<td>West Java:</td>
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<td>Diakarta:</td>
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<td>1954</td>
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<td>Tjirebon</td>
<td></td>
<td></td>
<td>1954</td>
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</table>

¹ *A. stephensi* completely disappeared from Iraq and the Ahwaz plain of Iran in 1958, following treatment with dieldrin. Its reappearance was reported in 1960 in Iran and in 1961 in Iraq.

² The area was sprayed with dieldrin from 1956 to 1958. The tests in March 1960 showed the *A. sundaicus* population at that time to be DDT-susceptible. It is not known if this came about by gradual dilution of the resistance-factor, or if the original strain was eradicated by the dieldrin and replaced after 1958 by a susceptible strain originating elsewhere.

V. NEW INSECTICIDES

Since the appearance of physiological resistance of anophelines to chlorinated hydrocarbons used in malaria eradication programmes and the recognition that this phenomenon follows a process of selection, the need for alternative insecticides has been felt to be urgent.

As a result of the programme of research, evaluation and testing of insecticides set up by the Organization in 1958, a number of organophosphorus insecticides have been developed and investigated under field conditions. Amongst such products, malathion and fenthion (Baytex) have been shown to be the most...
promising. In 1960, following the work carried out in Greece by a special WHO insecticide testing unit, it could be shown that malathion and fenthion, at the low dosages at which they were applied (0.3-0.6 g/m²), were not effective in controlling mosquitoes, but no toxic effects on humans or animals were noticed from the application of these insecticides inside dwellings.

On the other hand, field trials carried out in El Salvador by another special insecticide testing unit in co-operation with the United States International Co-operation Administration (which has now been succeeded by the Agency for International Development) and the Ministry of Health of El Salvador demonstrated that the same insecticides applied at dosages of 1-2 g/m² produced bioassay mortalities of A. albimanus above 70 per cent. for eight to twelve weeks.

The Organization thus felt encouraged to pursue the study of the effect of these insecticides at higher dosages on a village scale. The investigations carried out in 1961 in the region of Lagos (Nigeria) by the WHO insecticide testing unit have provided enough data to enable a certain number of conclusions to be reached.

In the light of the latest developments, it appears that malathion, because of its safety and its biological effectiveness, can be used as a replacement for DDT against adult anopheline mosquitoes where resistance to DDT has developed. Though malathion is rather quickly inactivated on sorptive surfaces, it is as persistent as fenthion on non-sorptive surfaces and, in addition, it has no, or only a very limited, irritant effect. It has, however, a serious drawback in that its price is at present considerably more than that of DDT per square metre of protected surface.

Fenthion, which has proved to be effective for periods of up to five or six months both on pervious and impervious surfaces, should still not be used without accompanying precautions to test its potential toxicity to operators and householders. For this purpose it will be necessary to carry out pre-spraying and regular post-spraying surveys of blood choline-esterase levels on both spraymen and residents. Owing to its inherent limitations on account of its toxic hazard, a recommendation has been made that fenthion should be assessed, in small-scale trials, only when malathion has proved to be ineffective. However, a malaria eradication field research project is planned for 1962 and 1963 in which the potential value of both insecticides in malaria eradication programmes will be assessed under conditions normally prevailing in endemic malarious areas. The evaluation will be made following the epidemiological criterion of interruption of malaria transmission; parallel entomological observations will also be carried out as a part of the epidemiological assessment and, in the specific case of fenthion, special attention will be paid to the toxicological aspects.

The following minimum technical requirements will serve as a guide for the selection of the field research trial areas:

(a) high or moderate endemicity and long transmission season;
(b) minimal population movements;
(c) minimal outdoor sleeping habits of the local population;
(d) not more than one or two vector species, both known to produce indoor transmission of malaria.

DDVP is an organophosphorus insecticide which differs from the others in that it produces insecticidal concentration of vapour which is lethal to mosquitoes. The potentialities of the residual fumigant technique have already been investigated in limited field-scale trials by the insecticide testing unit in Nigeria, using a solid and a liquid formulation. Results obtained so far are so promising, both with regard to effectiveness against mosquitoes and lack of toxicity to mammals, that the product is envisaged for a future malaria eradication field research project. From investigations carried out so far in various laboratories, the concentration normally required for the effective control of mosquitoes is less than one-fiftieth of that liable to produce detectable depression of blood choline-esterase, thus affording an ample safety margin.

VI. RESEARCH

In reviewing the malaria research activities assisted by the World Health Organization, it will be convenient to deal with the various aspects under three headings: parasitology and immunology, chemothterapeutics, and entomology. Epidemiological research is continuously carried out operationally and is indirectly contributed to by results of research in the three subjects mentioned above.

6.1 Parasitology and Immunology

The culture of malaria parasites in their erythrocytic forms has been possible for fifty years—since 1912. However, existing methods are neither practical enough nor reliable enough to maintain a strain with all its characteristics for an indefinite number of generations. Attempts to grow in vitro exo-erythrocytic forms of P. gallinaceum have been made with
WHO assistance at the Hadassah Medical School of the Hebrew University in Jerusalem. This study may help the development of drugs capable of causal prophylaxis, i.e., of killing the parasites before they invade the red cells.

The limited duration of infection with the various human malaria species is the foundation of the theory of malaria eradication. In spite of the wealth of knowledge produced by malaria therapy in the period between the two world wars, much remains to be known, particularly in the case of African infections with *P. falciparum*, which appear to last longer than those with non-African strains. WHO is supporting an investigation on the duration of *falciparum* infections in immigrants from highly malarious areas who settle in a non-malarious area (the Merseyside in England, the project being carried out by the Liverpool School of Tropical Medicine).

The identification of different strains by the usual *in vivo* or *in vitro* methods is technically complicated, and great hopes are being placed on the use of fluorescent antibodies. The Department of Parasitology of the London School of Hygiene and Tropical Medicine is carrying out a project on these lines with WHO assistance.

So far work with immuno-fluorescent stains has not been extended to *P. falciparum* strains. For this purpose the biologist who has been responsible for this research during the last two years in the London School has been given a grant by WHO to enable him to continue his work on *P. falciparum* strains at the Liberian Institute of the American Foundation for Tropical Medicine.

Many observations on the frequency of sickle-cell haemoglobin (S-haemoglobin) in highly malarious areas seem to indicate that in infants who are carriers of the S-trait, conditions for the multiplication of *P. falciparum* are less favourable, so that their parasitaemia is restricted and they therefore have more chances of survival. WHO has been assisting the Ibadan University College, Nigeria, in work on the relationship between the prevalence of such genetic factors and malaria endemicity. The programme will merge into the chemotherapeutic field, as it is intended in 1962 to compare the haemolytic effects of two 8-aminoquinolines (primaquine and quinocide, drugs widely used in malaria eradication) in subjects showing glucose-6-phosphate dehydrogenase (G-6-PD) deficiency. This enzyme deficiency, which is widespread in tropical Africa, predisposes to haemolytic side-effects from certain drugs, such as the 8-aminoquinolines. The results of the study should make possible the selection of the least toxic drug for malaria eradication programmes. This problem is also being studied by other institutes, among which is the Tel Hashomer Hospital in Israel. WHO awarded a two-week fellowship to one of the staff members of the hospital in order to enable him to come to Geneva to study the documentation available and to correlate endemicities of some areas with the prevalence of the G-6-PD deficiency.

No less important than the appraisal of genetic factors in the incidence and severity of malaria infections is the quantitative assessment of acquired malaria immunity, which is being investigated in two research projects assisted by WHO—one at the University of Malaya and the other at the Liberian Institute of the American Foundation for Tropical Medicine.

From this short review of research in the parasitological and immunological field it will be seen that the present variety in existing malaria parasite strains may have some bearing on malaria eradication activities. Hence the need for maintaining a collection of typical or "standard" strains in a reference laboratory. The United States Government has agreed that the Laboratory of Parasite Chemotherapy, National Institute of Allergy and Infectious Diseases, in Bethesda, Maryland, should be designated as a WHO reference laboratory for malaria parasites. The laboratory is under the direction of a member of the WHO Expert Advisory Panel on Malaria; it will maintain a number of strains of different malaria parasites of man and of animals, establish base-lines of susceptibility to drugs of some particular strains, and assess the tolerance levels of the less susceptible strains.

During the last two years the discovery of accidental human infections with the monkey parasite *P. cynomolgi bastianellii* made news, and statements were found in the professional and lay press that monkey malaria might be a great obstacle to malaria eradication. At its eighth meeting, the WHO Expert Committee on Malaria reduced the problem to its proper proportions, but recommended that research on simian malaria and its transmissibility to man be undertaken.1

### 6.2 Chemotherapeutics

There is a great need for new drugs which have a wider spectrum of activity and a more persistent action, but obviously the search for such new antimalarials is normally an extremely costly endeavour beyond the capacity of the Organization. Unfortunately, no pharmaceutical firm or institute has taken up this challenge, which could, of course, only be helped in a symbolic way by WHO grants, and investigations in this field have therefore been limited to applied research.

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A large-scale field trial and mass administration of an antimalarial drug combining 4-aminoquinolines and 8-aminoquinolines was carried out in Tanganyika (with a WHO research grant) in three holo-endemic zones selected on the basis of their similarity. An attempt was made to arrest the existing malaria transmission solely by using the drug. Trained responsible staff administered the drug combination individually to the population (which numbered between 5000 and 7000 in each zone) on a census basis. The dosage of the combined drug per tablet was 75 mg amodiaquine base and 15 mg primaquine base. One such tablet was given to children up to six years and two to subjects above six years of age. In the two zones where treatment was given effectively to 93 per cent. or more of the population at weekly or fortnightly intervals, parasite rates were reduced respectively from 70 per cent. to 3 per cent. and from 87 per cent. to 1.3 per cent., and remained at these levels over the duration of treatment. In the zone where treatment was given at the same and later at an increased dosage at intervals of one month, parasite rates fell only mildly; many of those treated showed a recurrence of parasitaemia shortly before the next treatment was due.

A small experimental trial of medicated salt assisted by WHO is being carried out on 3000 people of a holo-endemic area in East Africa with a view to making a comparison of the effectiveness of medicated salt prepared with three different drugs, i.e., the usual chloroquine diphosphate, amodiaquine base and chloroquine naphthoate. The last two drugs, having a very low solubility in water, have the great advantage of not being subject to leaching and not having any bitter taste—the two main obstacles so far encountered with the use of chloroquinized salt.

Resistance of malaria parasites to antimalarial drugs represents one of the problems in malaria eradication. The mechanism of development of resistance is still imperfectly known; it should be investigated in avian, rodent and particularly simian and human malaria. Such a project has been entrusted to the Malaria Institute of India.

6.3 Entomology

The assessing of susceptibility of vectors to insecticides is nowadays a routine technique which has been made possible by the development and supply of testing kits by the Organization. In 1961, a total of 283 testing kits, either for susceptibility of adult mosquitoes or of larval mosquitoes, or for bioassay tests, were supplied to the various regional offices for distribution. Refills for the kits, consisting of pre-impregnated papers, were also widely distributed.

Since the first news of the appearance of dieldrin resistance by A. gambi 

 resistance by A. gambiae in Nigeria in 1955, the Organization has stimulated and assisted in various ways the study of the mechanism of this resistance in co-ordination with insecticide research, and since 1959 it has assisted the Ross Institute of Tropical Hygiene in London in research on the genetics of dieldrin, and later of DDT, resistance.

Studies are needed to determine the best techniques for entomological evaluation of the effects of insecticide spraying, and WHO has supported such investigations in various ways. It would be highly desirable to propose an entomological index which could give, in all or in most programmes, presumptive evidence of interruption of transmission. WHO field teams are collecting observations and data that will eventually be sifted and appraised so as to contribute to the finding of such an index. The Centre Muraz in Bobo Dioulasso, Upper Volta, has taken up the study of the subject, and has now been working on it with WHO assistance for some time.

One of the factors that will probably prove of great significance in the entomological evaluation of the effect of insecticides is the longevity of the vector population. Investigations on this subject are now being carried out with WHO assistance—on the two major African vectors, A. gambiae and A. funestus, by the East African Institute of Malaria and Vector-Borne Diseases at Amani, Tanganyika, and on A. koliensis, A. farauti and A. punctulatus in New Guinea by the Division of Malariology of the Department of Public Health of Netherlands New Guinea. Studies on the irritability of various insecticides to mosquitoes are also being carried out with the assistance of the Organization.

The insecticide/mosquito relationship is also being studied by the Bernhard Nocht Institute of Ship Medicine and Tropical Medicine, Hamburg, with WHO assistance, in experimental huts in the field.

The South African Institute for Medical Research is studying the genetic differences between the domestic and non-domestic fractions of A. gambiae species which occur in the south-eastern parts of Africa.
VII. TERMINOLOGY

A terminology of malaria was prepared in 1940 by a sub-committee of the Malaria Committee of the League of Nations. A later one was produced separately in English and then in French, by drafting committees, and was published in the WHO Monograph Series, in English in 1953 and in French in 1954.

Since then the introduction of a great number of new epidemiological concepts and operational terms related to malaria eradication theory and practice has rendered the 1953 and 1954 monographs inadequate.

Neologisms were being used with different meanings in different parts of the world; the confusion of terms was becoming a handicap to efforts to standardize eradication procedures, evaluation and reporting. Hence, the Expert Committee on Malaria recommended in July 1960, in its eighth report, that all new concepts and terms be defined and standardized and that the previous terminology be brought up to date.

A drafting committee, composed of four members of the Expert Advisory Panel on Malaria and two members of the Division of Malaria Eradication, was appointed, and a new terminology, entitled "Terminology of Malaria and of Malaria Eradication", was recently completed, and is now being prepared for publication. Like its two forerunners, the terminology consists of a glossary, which is the main body of the work, preceded by a commentary. The purpose of the commentary is to assemble into coherent groups the fundamental concepts and principles pertaining to well-defined fields of malariology and of malaria eradication, and to fit the relevant terms given in the glossary into a fluent narrative. While the 1953 glossary contained some 250 terms, the present one contains about double this number, and gives definitions of over 400 of them, the others being synonyms or terms explained in the commentary. The commentary will consist of about sixty-six printed pages instead of the forty-eight pages of the 1953 monograph. While the latter consisted of three chapters, the commentary of the new terminology is subdivided into seven chapters, two of which are devoted to malaria eradication procedures.

VIII. REGISTRATION OF AREAS WHERE MALARIA HAS BEEN ERADICATED

In 1960 the Thirteenth World Health Assembly in its resolution WHA13.55, paragraph 5, requested "the Director-General to establish an official register listing areas where malaria eradication has been achieved after inspection and certification by a WHO evaluation team". Progress has been made in the implementation of this new task with which the Organization has been charged by the World Health Assembly. The Expert Committee on Malaria, at its eighth meeting in July 1960, clarified and expanded the epidemiological criteria for malaria eradication without departing from the original basic definition of it. In addition, the Expert Committee studied the methods of inspection and certification for registration and made some recommendations on technical principles for this procedure. In February 1961 the Director-General addressed to Member governments a circular letter on this subject, and appended a document entitled "Certification and Registration of Areas where Malaria Eradication has been achieved". In this document the Director-General acquainted Member governments with the technical procedures which will be followed by the Organization and with the administrative arrangements made for opening a malaria eradication register at WHO headquarters and for applications of governments for certification and registration. A government may request the Organization to certify and register the eradication of malaria in its country before this has been achieved over the whole national territory. In that case, however, the area for which certification is requested should not be smaller than 50 000 km²; only in the case of an island or an entire national territory may the area be smaller. At the same time the Director-General issued detailed instructions on the technical and administrative procedures to be followed by the Organization in this matter, including minimum provisions for certification of malaria eradication and for procedures of inspection for the purpose.

During the year under review the first WHO certification and registration of a large area (with over 4 million inhabitants) where malaria has been eradic-
Not enough attention has so far been given to the problem of maintenance of achieved eradication, although the necessity for realistic planning for vigilance activities has already been recognized by a few countries in different regions. The importance of this growing problem has been emphasized by the Organization, and regional offices have taken steps to promote and assist planning in this field. This problem has two major aspects:

(a) The planning for and building-up of maintenance phase activities by national authorities, which must begin at the latest during the early stages of the consolidation phase. It involves early co-ordination with the general public health services so as to make them fully aware of the requirements and responsibilities that will be placed upon them during the maintenance phase in organizing and supervising vigilance for malaria cases. In countries where rural health services and, in general, rural medical facilities are greatly deficient, it also implies the speeding-up of the provision of such facilities to the required degree.

(b) With the steady progress in the global malaria eradication programme and the prospect that the number of countries and areas with achieved eradication of malaria will increase in the near future, it is necessary to study and review the efficiency of the methods that exist or may be introduced against reintroduction of malaria in eradicated areas for as long as malaria persists in any part of the world.

Both aspects were the subject of discussion during the recent meeting of the Expert Committee on Malaria in Geneva (2 to 10 April 1962). The Committee on International Quarantine at its ninth session, held in Geneva from 6 to 10 November 1961, also considered the problem and recommended the convening, at an early date, of an appropriate meeting of malaria and international quarantine experts to review the situation of international protection against malaria.\(^1\)

During 1961 the following events and activities having a bearing on this general problem are worth noting. The WHO inter-country evaluation team in the Eastern Mediterranean Region, which serves Iraq, Jordan, Lebanon and Syria—all countries with considerable areas in the consolidation phase and some of them near to complete eradication—had, as one of its terms of reference during visits to programmes, the function of stimulating the integration of malaria surveillance and vigilance activities into the general public health structure.

In the European Region much attention is paid to this problem within the framework of the Co-ordinated Plan establishing Priority for the Eradication of Malaria in Continental Europe, and the problems of prevention of reintroduction of malaria formed an important subject of discussion in the Second European Malaria Eradication Conference held in Tangier, from 1 to 8 March 1962. In Italy, where eradication was achieved several years ago, the Institute of Malariology in Rome is producing special maps showing the original malarious areas and indicating those in which resumption of transmission would be possible after the importation of cases in view of the present prevalence of anopheline vectors, in order to tighten vigilance activities in such areas.

In Taiwan the National Malaria Institute (which serves as the headquarters of the national malaria eradication service) established in 1961 a special section for the planning and preparation of maintenance activities in close co-operation with the key personnel of the general health services.

In British Guiana complete eradication of malaria had been achieved by 1951 in the coastal belt, which has a population of 450,000, but it was not possible to break transmission in the hinterland, which is of difficult access. In July and August 1961 a small renewed outbreak of malaria, with eighty-five cases,

\(^1\) See Annex 1 of this volume, part 1, section 11.
occurred in a limited area of the coastal plain, with a population of about 24,000. There was definite proof that the outbreak originated from cases imported from the hinterland. The outbreak was rapidly and efficiently brought under control. Its timely discovery was entirely due to the efficient vigilance service maintained through the well-developed network of rural dispensaries, and proved the importance of such facilities. At the same time, the local authorities recognized the permanent danger constituted by the, until recently, uncontrolled hinterland area, and they have instituted a medicated salt programme as the only suitable method of achieving eradication in that part of the country.

X. ADVISORY SERVICES

The successful implementation of malaria eradication projects involves a wide range of activities which must be planned and carried out in accordance with the highest standards. The maintenance and improvement of these standards is dependent upon the efforts of the best available advisory services, which extend from the central planning of global strategy to the day-to-day advice given to an individual programme in the field. The Organization provides these advisory services on three interdependent levels, namely, the headquarters, the regional office, and the country advisory levels.

The headquarters function of overall planning and co-ordination of the world-wide malaria eradication programme is carried out by the Malaria Eradication Division, which continued to function in 1961 with three units.

The Planning and Programme unit, which is responsible for the promotion of malaria eradication programmes in general, has continued to give attention to the development of definitions and terms of reference for the different types of malaria eradication project and the criteria which must be met in the preparation of the respective plans of operation. In this connexion a manual on the preparation of malaria eradication programmes was prepared, as has been mentioned previously (see page 139).

The Epidemiological Assessment unit has continued throughout 1961 to develop methods whereby the uniform reporting of essential results of case-finding mechanisms will enable a realistic evaluation to be made of the changing epidemiological picture. It is only from a critical analysis of these results that the epidemiological criteria for the interruption of transmission, determination of time for withdrawal of spraying and certification of achieved eradication can be continuously revised or developed.

During the year the staffing of the regional office malaria units has been adjusted to fill the need for additional assistance with epidemiological evaluation and assessment of programmes. Technical staff with a suitable background to become advisers on this aspect of the work have been sought. It has been increasingly difficult, however, to recruit men with sufficient background in malaria epidemiology, and it may be necessary to provide special intensive training in epidemiology for certain staff members at present assigned to WHO country projects.

In view of the shortage of sufficiently experienced personnel, referred to above, and the continued and increasing need for advisory staff for field programmes, the Organization has maintained its system of selecting persons on a trainee basis and arranging special rigorous training programmes for them. Efforts have also been made to select medical officers with sound public health administrative experience who, with training in malaria eradication techniques, will be competent advisers. It is anticipated that this type of adviser will be particularly valuable in pre-eradication programmes, in which assistance is required to develop a basic rural health infrastructure on which an eradication programme can be implemented. During 1961, in continuation of the efforts to provide advice to governments on the administrative aspects of their malaria eradication projects, a further training course was organized for ten administrative officers. Seven of these, after successfully completing their training, were assigned to WHO advisory teams at the field project level.

The need for adequately trained personnel in the field is accentuated in a few situations in which the eradication programme is faced with unexplained inability to interrupt transmission. To assist in solving the problems created by such situations, a special epidemiological studies team has been established. In collaboration with the Epidemiological Assessment unit,
malaria eradication programmes with persistent or renewed transmission have been screened and will be investigated according to a plan prepared in collaboration with the regional offices.

The numbers, designations and distribution of international technical staff engaged in the malaria programme of the Organization in December 1961 are shown in Table E. For comparison, the corresponding figures for December 1958 are also given.

**TABLE E. WHO MALARIA ERADICATION ADVISORY STAFF**

<table>
<thead>
<tr>
<th>Project staff *</th>
<th>December 1958</th>
<th>December 1961</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical officers</td>
<td>74</td>
<td>105</td>
</tr>
<tr>
<td>Engineers</td>
<td>19</td>
<td>34</td>
</tr>
<tr>
<td>Entomologists</td>
<td>31</td>
<td>53</td>
</tr>
<tr>
<td>Sanitarians</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>Technicians</td>
<td>31</td>
<td>33</td>
</tr>
<tr>
<td>Administrative officers</td>
<td>—</td>
<td>16</td>
</tr>
<tr>
<td>Others **</td>
<td>21</td>
<td>40</td>
</tr>
<tr>
<td>Regional advisers</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td>Division of Malaria Eradication, headquarters</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>270</td>
<td>423</td>
</tr>
</tbody>
</table>

* Includes project advisers, evaluation and special teams.

** Assistant malariologists, parasitologists, statisticians, health educators, etc.

**NOTE.** The posts are established under the following funds: regular budget, Expanded Programme of Technical Assistance, Malaria Eradication Special Account, and Special Malaria Fund of the Pan American Health Organization.

Another important aspect of the advisory services given by the Organization is that of supplying workers in all fields of malaria, scattered as they are through almost every country in the world, with up-to-date information on the various advances of techniques, new discoveries and fresh approaches in malaria eradication.

Apart from regular publications of the Organization, such as reports of expert committees on malaria and of scientific and technical groups, and the special issues of the *Bulletin* devoted to malaria, mimeographed documents are issued for limited circulation. These documents are circulated to WHO staff, national institutes, senior officials of national malaria eradication programmes, and to public health and research workers with particular interest in malaria. The papers reproduced are of three types: first, those of immediate interest and importance which deserve to be brought rapidly to the notice of malaria workers before formal publication; second, field reports and other communications which are of particular interest, but which would not normally be printed in WHO publications; and third, summaries of the changing trends of malaria research, of the progress of malaria eradication and the problems encountered. During 1961, forty-four such papers were produced—six on general aspects of malaria, eleven on chemotherapy, twelve on entomology, four on insecticides, two on parasitology and nine on other aspects of malaria eradication.

The types of papers produced in the above-mentioned series of documents are, in the main, original ones under the author’s name. However, a large amount of material of considerable interest to malaria workers is to be found in the various reports and documents received by the Organization from its field staff and others; much of this information concerns the operational aspects of malaria eradication, since the experiences of staff in one part of the world are frequently of considerable interest to staff elsewhere. In order to disseminate this type of information, a supplementary series of documents, containing extracts from and notes on the reports and other material, is issued periodically. Thirteen such issues, containing some sixty notes, were made in 1961.

Apart from staff members of the Organization, over 800 malaria workers receive these two series of mimeographed documents in English, and over 200 in French; and their addresses cover 112 countries and territories. The regional offices similarly issue documents and newsletters of regional interest.

**XI. CO-ORDINATION**

Malaria eradication is a programme that calls for co-ordination of activities at every level. It is an absolute essential at the country level, where the collaboration of many different departments of government as well as of the general public is needed to ensure the successful outcome. Co-ordination between neighbouring countries becomes increasingly important as programmes move into the consolidation phase and, subsequently, into the maintenance phase. The foundation of co-ordination of this type is the free exchange of information on the status of the programme in all countries concerned, for it is only with this background of knowledge that any co-ordinated action can be undertaken. Emphasis on
co-ordination within the country is made in the criteria for malaria eradication plans of operation to which reference has already been made (see section 3.1). The Organization continues to assist in inter-country, regional and inter-regional co-ordination by promoting inter-country co-ordinated programmes and organizing and sponsoring meetings and conferences. Examples of co-ordinated programmes are the Co-ordinated Plan establishing Priority for the Eradication of Malaria in Continental Europe (with the aim of having all malarious countries in the consolidation phase by the end of 1962) and a plan under preparation for a group of countries of the Eastern Mediterranean Region. Instances of co-ordinating meetings and conferences held in 1961 are:

First Indo-Nepal Border Antimalaria Co-ordination Conference
Border Meeting between Mexico and Guatemala
First Meeting of the Antimalaria Co-ordination Board for South-East Africa
Antimalaria Co-ordination Meeting for West Africa
Ninth Annual Meeting of Directors of Malaria Services of Central America, Mexico and Panama
Second Inter-Territorial Malaria Conference for the South-West Pacific
Border Meeting between Argentina, Brazil, Paraguay and Uruguay
Fifth Indo-Burma-Pakistan Border Antimalaria Co-ordination Conference
Meeting of the Antimalaria Co-ordination Board for Burma, Cambodia, Laos, Malaya and Viet-Nam
Intergovernmental border meetings between the national malaria eradication services of Ethiopia and Sudan and of Iran and Iraq.

Co-ordination between the different international and bilateral agencies assisting countries in malaria eradication is also essential to success. The Organization has maintained close collaboration with UNICEF and with the United States Agency for International Development, in order that the best possible use may be made of assistance available from all sources in carrying out the global malaria eradication programme.

The Executive Board of UNICEF has been provided with an exhaustive assessment report prepared by WHO and, on the basis of its consideration of this report, has agreed to maintain for the present the annual ceiling of US $10 million for malaria eradication. The policy concerning the types of malaria eradication programmes eligible for UNICEF assistance in the future, and the conditions under which assistance will be given, have been redefined by the Board. UNICEF assistance may be expected for pre-eradication programmes upon request of the governments concerned, provided that malaria is recognized as a serious menace to the lives and health of the children and that the country is committed to the gradual development of its rural health services.

Co-ordination within the technical services of the Organization is ensured through annual meetings of regional malaria advisers held at headquarters, and through the exchange of reports and correspondence on technical and policy matters, as well as by means of periodic visits to the regions by members of the headquarters staff. In addition to the regional malaria advisers' meeting, a special meeting of senior WHO entomologists was held in 1961. Co-ordination between regional offices and WHO advisory staff in the field is also maintained through travel of regional office staff and, of course, also through correspondence and reports.

XII. STATUS OF MALARIA ERADICATION, BY REGION

12.1 African Region

12.1.1 General Progress and Prospects

In the African Region the policy on malaria eradication underwent a considerable degree of reassessment on the basis of experience accumulated over the last few years.

Following the secretariat meeting on the problems of malaria eradication in Africa, held in Geneva in August 1960, when it was agreed that the evidence available showed that malaria eradication was technically feasible in most areas of Africa south of the Sahara, much of 1961 has been occupied by planning the types of programme most suitable to local conditions.
for the interruption of transmission. *A. gambiae*
continues to be resistant to the dieldrin-BHC group of
insecticides in various areas of West Africa, but
so far no indication of resistance to DDT has been
found.

The acute shortage of experienced professional and
auxiliary national staff is slowing the progress of the
programmes in Africa. Fortunately, the institution of
an imaginative and determined recruitment campaign
promises some improvement in 1962.

The estimated total population for mid-1961 of
over 167 million living in the Region is scattered over
an area of 20 450 000 km² in nearly fifty different
States and territories. Over 90 per cent. of this popula-
tion is exposed constantly to the risk of contracting
malaria. It has been estimated that between 200 000
and 500 000 African infants and children die every
year from the direct effects of malaria alone. The
mortality due to indirect effects of the disease and the
amount of morbidity due to it are so imperfectly
known that even an approximate estimate cannot
be made.

Any doubts as to the technical feasibility of inter-
rupting transmission in West Africa were dispelled
when it had been demonstrated by field studies that
failures were often due to factors other than technical.
Success was achieved when projects were entirely
revised, with emphasis on better planning and organi-
ization. Thus, in 1959, interrupted transmission where
this had not previously been achieved was reported
from Liberia and the district near Yaoundé in Came-
roon, although residual spraying alone had been used
in each case, but with improved organization and
supervision ensuring total coverage. In 1961, encour-
gaging results were reported from Uganda, where
a pilot project combining residual spraying and drug
distribution succeeded in bringing about the inter-
ruption of transmission over part of the area. Never-
theless, it would be dangerous to underestimate some
of the technical difficulties that may delay the inter-
ruption of transmission in certain areas, particularly
in the savannah region.

In Africa, more than anywhere else, the human
problem will need to be taken into due consideration in
malaria eradication. It is increasingly apparent that
not only the instability of the population—the size,
pattern and timing of movements—but also the way
in which the population is distributed, the settlement
pattern, house types, farming practices, communications
and water supply, may be of importance in
a malaria eradication programme.

The former tentative plans for two large inter-
country malaria eradication programmes, one in
south-east Africa (including Mozambique, Southern
Rhodesia, Bechuanaland, Swaziland and the malarious
areas of South Africa), and the other in central west
Africa (including Dahomey, Togo, Ghana, southern
part of Nigeria and eventually Cameroon) had to be
recast in 1961 in the light of sober assessment of
their practicability.

The concept of a pre-eradication programme was
developed with the aim of remedying the short-
comings of a country's public health services before
a malaria eradication programme is implemented.
It should be specified that, under pre-eradication
programmes, antimalaria pilot operations in selected
areas are needed for purposes both of training and
of demonstrating the organizational requirements of
malaria eradication procedures and their administra-
tive implications. The role of the Organization in these
programmes should be clearly defined. At present,
and merely as a promotional incentive, a considerable
proportion of the limited funds available for malaria
country projects in Africa has been foreseen for the
purchase of insecticides and transport—a supply
commitment that would be more properly undertaken
by an agency other than WHO. The requirements
of the malaria eradication programme in Africa
call for the highest priority to be given to the provision
of training facilities and advisory services, and these
also came within the first priorities for WHO assist-
ance. But it must be clearly emphasized that extensive
support in the form of supplies and local costs will
be needed over a number of years if the programme
is to develop successfully throughout the Region.

The Organization, however, cannot divert its limited
funds to the provision of such items without cur-
tailing the technical advisory assistance which is its
first responsibility.

Apart from pre-eradication programmes, there are
in Africa four malaria eradication programmes
(in South Africa, Swaziland, Mauritius and Zanzibar,
including Pemba); a pre-eradication survey and a trial
of methods of surveillance (in Southern Rhodesia);
and, in Ghana, a pilot project to explore the possibility
of using medicated salt in malaria eradication in
Africa. The programmes in South Africa, Swaziland
and Zanzibar are progressing satisfactorily. Mauritius
has suffered a setback, owing to failure in 1960 to
take the proper measures to deal with isolated malaria
foci from which transmission spread in 1961, and
which required the re-establishment of spraying
operations for almost half of the population.

The Third African Malaria Conference, originally
due to take place in 1961, was postponed until July
1962, and will take place in Yaoundé, Cameroon.
The new agenda of this conference covers a wide
ground and deals specifically with many aspects of
co-operation between the malaria eradication services
and the general rural public health services.
The First Meeting of the Antimalaria Co-ordination Board for South-East Africa was held in Salisbury, Southern Rhodesia, on 25 and 26 January 1961. A co-ordination meeting held in Lomé, Togo, from 20 to 22 April 1961 recommended the establishment of a similar co-ordination board for West Africa. The Malaria Committee of the Scientific Advisory Committee of the East African Council for Medical Research was convened early in 1961 and was concerned with co-operation in antimalaria programmes in Kenya, Uganda, Tanganyika and Zanzibar. A meeting of entomologists working in the malaria eradication projects in South-East Africa took place in Lourenço Marques in April 1961. The meeting discussed the problems of vector behaviour in the untreated and treated areas in South-East Africa, the reappearance of endophilic and anthropophilic A. gambiae in Swaziland, the continued malaria transmission in areas where A. gambiae was found exophilic and prevalently zoophilic, the effect of DDT spraying on vectors in Swaziland, Southern Rhodesia and Mozambique, and the problems connected with precipitin testing.

12.1.2 Training and Staffing for National Malaria Eradication Projects

The training of national staff is receiving the highest priority. No campaign can succeed unless it has a capable and qualified national malaria service. For this reason, funds have been allocated for a long-term training programme for junior technical and supervisory personnel both at regional training centres and at country level, and this programme will be vigorously pursued until sufficient cadres have been created in all countries.

With regard to senior personnel, there are already eleven national medical officers employed in malaria eradication activities, one engineer, seven chiefs of operations, and two entomologists who have been trained by WHO. Twenty more senior personnel will be trained during 1962. These figures represent a great advance over the past few years.

In Zanzibar, the WHO staff are running a special training course for eighteen local malaria assistants. In response to requests from team leaders and various governments, local laboratory technicians have been trained by visiting laboratory technicians from neighbouring countries. By this means twenty-two microscopists have been trained in Cameroon, twelve in Togo, ten in Dahomey, sixteen in Ghana, twelve in Nigeria and fourteen in Southern Rhodesia; at present an internationally recruited technician is training six microscopists in Swaziland.

Following the opening of the Malaria Eradication Training Centre in Yugoslavia, it has been possible for French-speaking personnel, both professional and non-professional, to obtain effective training in malaria eradication techniques. A Malaria Eradication Training Centre for English-speaking workers is now being organized in Lagos, Nigeria, thanks to the co-operation of the Federal Government of Nigeria, and another for those who are French-speaking will be set up in Lomé, Togo, in the course of 1962. Courses at these centres will be followed by a period of field work.

A manual on entomology,1 which includes instructions on all aspects of entomological techniques applicable to malaria eradication operations in Africa, has been prepared.

12.1.3 Operational Aspects

During the course of 1961 the Regional Office for Africa made a big step forward in planning. On the basis of experience gained in the various projects in the Region, the full range of problems encountered once operations have started has been the subject of careful study and analysis. The main deficiencies can be expressed briefly: lack of personnel for supervision, finances, public health infrastructure, and demographic records or land surveys. Any one of these deficiencies has so much bearing on the overall problem of planning that it is sufficient for a decision to be taken that only preparatory work or training can be carried out.

Since the majority of the potential eradication areas are under-developed or undeveloped, the activities in the African Region are, in accordance with WHO policy, being mainly directed towards creating the national technical, administrative and operational foundations and facilities and eventually improving them to the level essential for ensuring the effective implementation in due time of every phase of a malaria eradication programme.

In the planning of malaria eradication programmes the greatest attention is given to geographical reconnaissance, because in the African Region the population distribution, house types, settlement patterns, farming practices, communications and water supply, movements of population other than nomadic, social relationships, religious beliefs, economic activities and any other environmental or human circumstances, are of vital importance in such planning.

In all the existing projects the collaboration of the public has been good, but health education activities have been generally insufficient, although in some

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areas, in Ghana for instance, very good work was done in 1961.

The important epidemiological finding of the past two years was the striking results of the introduction of proper surveillance techniques in the island of Mauritius. Previously, conventional cross-sectional surveys had been relied on, and, as a result, very small numbers of cases had been reported each year and a false sense of security had been engendered. In 1960, however, proper surveillance measures were introduced under the supervision of a WHO malariologist. Within three months over a thousand cases had been found and followed up epidemiologically. Large numbers of small foci were found, showing the necessity for reintroduction of spraying in a number of areas. During 1961, 955 additional cases were found, most of them indigenous and coming from a well-defined area in the south-east and east of the island. A relatively large number of P. vivax relapses occurred among the younger age-groups in spite of radical treatment, indicating defective supervision of the fourteen-day drug administration of primaquine.

Owing to the shortage of rural dispensaries and health centres in many parts of tropical Africa, a great deal of reliance has to be placed on active case-detection methods. But in Mauritius, Zanzibar and the northern parts of South Africa, where conditions are rather different, a complete network of dispensaries and clinics has made feasible the use of passive detection. There is no doubt that, where it can be applied, and in places on the outer fringe of transmission in the African Region, where the asymptomatic carrier is not too serious a problem, passive detection gives better results with considerably less expenditure in terms of personnel and money.

Costing of active case-detection in two countries showed clearly the relationship between the per capita cost per annum and the density of population. In Southern Rhodesia, with a population density of 4.3 per km², the cost was US $0.35 per inhabitant, whereas in Mauritius, with a population density of 353 per km², the cost was only US $0.08.

The problem of single dose treatment for immigrants is being studied in the field in several places in the Region. Single doses of chloroquine and primaquine, of amodiaquine and primaquine, and also of chloroquine and pyrimethamine, are being given to immigrants at check points along national frontiers. It must be appreciated, however, that a certain proportion of immigrants, varying in size in different parts of Africa, will always avoid established check points and cross frontiers illegally. In such circumstances it is essential that the surveillance techniques should be sufficiently effective to permit the discovery of these illegal entrants.

12.1.4 Co-ordination

As already mentioned, the first meeting of the Antimalaria Co-ordination Board for South-East Africa took place in Salisbury, Southern Rhodesia, on 25 and 26 January 1961. It was attended by representatives from Bechuanaland, the Federation of Rhodesia and Nyasaland, Mozambique, Swaziland, South Africa, and by WHO representatives.

The Antimalaria Co-ordination Meeting for West Africa, held in Lomé, Togo, from 20 to 22 April 1961, was attended by representatives from Cameroon, Dahomey, Ghana, Nigeria and Togo, and from UNICEF, UNESCO, the United Nations Technical Assistance Board and the United States Agency for International Development.

The Governments of Kenya, Tanganyika, Uganda and Zanzibar have formed an East African Malaria Committee, which meets periodically under the aegis of the Scientific Advisory Committee of the East African Council for Medical Research. WHO is represented at these meetings either by the WHO area representative for Eastern Africa or by a staff member of the malaria unit of the Regional Office.

12.2 Region of the Americas

12.2.1 General Progress and Prospects

Substantial progress of the malaria eradication programme is reported for the year 1961. The last two countries in the Region without eradication programmes in 1960—Cuba and Haiti—entered the preparatory phase. In Brazil, preparatory phase operations were extended to almost all the malarious states. The population living in areas in the consolidation phase in 1961 increased by 79 per cent. over the 1960 figures, as more areas were withdrawn from the attack phase. Of areas in the maintenance phase, an area of Venezuela of 407 945 km², with a population of 4 271 271, was entered in the register of areas from which malaria has been eradicated.

Progress, however, has not been uniform throughout the Region. Administrative and financial deficiencies have impeded the progress of the campaign in several countries, and have resulted in areas being returned to the preparatory phase in the Dominican Republic and in Paraguay. As the attack phase advances and case-detection activities are increased, technical problems regarding persisting transmission arise which require special attention and which may prolong the attack phase in certain areas.

As far as individual programme appraisal is concerned, the malaria eradication activities by areas of the Americas may be grouped as follows.
12.2.2 Training and Staffing for National Malaria Eradication Projects

The four training centres in the Region continued to operate, although on a reduced scale in two instances, during 1961. The XVII International Course on Malaria and Metazenic Diseases was given at Maracay, Venezuela, during the year. No formal courses were given at the training centre in Mexico, although the centre received a number of visitors, principally from other regions. At Sao Paulo, no formal course in malaria eradication was given during 1961, although the Faculty of Hygiene and Public Health again offered the special course in entomology with the main emphasis on malaria vectors. In Jamaica, at the centre jointly sponsored by the Government, the United States Agency for International Development and WHO/PAHO, three courses for senior officials and one for junior officials were given during 1961 (see Table C, page 138). As in the past, the majority of persons receiving training in Jamaica were from outside the Region.

Each national malaria eradication service provides training for its own staff. Depending upon the size of the effort, a special training section may be established. Inasmuch as most personnel requirements have been filled, in the majority of instances training is limited to new employees replacing those lost during the year; however, re-training of spraying personnel in the interval between spraying cycles is the rule rather than the exception. The largest training effort still requiring attention is that of Brazil, in which a new plan adopted during 1961 has increased the speed of development of preparatory and attack-
phase activities. Most of the professional personnel are expected to be trained at São Paulo, and intensive training activities are being developed within the malaria service itself.

12.2.3 Operational Aspects

New plans for malaria eradication were completed in Cuba and Haiti during 1961, as the preparatory phases of these programmes advanced to completion. In Brazil a reorganization of the malaria service was accomplished, beginning with a presidential decree in July 1961. The increased budgetary support for the service, and additional administrative flexibility, permitted an extension of preparatory-phase activities to almost all the malarious states, and made possible an earlier forecast of attack-phase activities in some of these. In two countries, Paraguay and the Dominican Republic, plans had to be revised in the light of technical and administrative problems, while in Panama administrative difficulties did not permit the completion of spraying on schedule.

Health education received increased attention in the Region during 1961, as a multiplicity of problems arose which required assistance in this field. Reluctance to accept spraying because of failure of the insecticide to control household insects other than anophelines, and because of deaths among domestic animals, were among the problems. More intensive efforts at education were required among certain indigenous groups whose customs of housing and work have impeded total coverage with insecticides in the past.

Special offices charged with the planning, execution and supervision of spraying operations exist in all programmes, except in small programmes where such specialization is not justified. If the programme is large enough to require decentralization of activities to zone offices, these normally have special sections for spraying operations. The proportion of houses sprayed was, in general, above 90 per cent. In the case of British Honduras, although spraying could not be completed, on account of the devastating effects of a hurricane late in 1961, and the percentage of houses sprayed was therefore low, there has been no evidence of the return of malaria. Increasing attention is being paid to assigning spraymen to cover areas of intense colonization at short intervals of time (monthly or less) and to protect new structures and altered surfaces of already sprayed houses. In many cases personnel of this type is trained in evaluation duties as well, so that increased case-detection is also achieved.

An evaluation of pressure regulator units for compression sprayers was performed in 1961 with the co-operation of the Government of Guatemala and the United States Public Health Service Communicable Disease Center.

Trials continue on the effect of different cycles and dosage of insecticides: two field units, one in El Salvador and one in Bolivia, are testing the effectiveness of DDT at different dosages and on different types of wall surfaces.

Malathion was employed in two pilot areas in 1961. In Nicaragua, it was utilized on a sugar plantation in an area in which the vector is resistant to both groups of chlorinated hydrocarbon insecticides. The housing is primarily of wood. In El Salvador, it was employed in the coastal region, also in an area in which the vector is double-resistant. Evaluation of the results is to be both entomological and epidemiological.

An old insecticide, Paris green, was re-employed in larviciding operations around Lake Managua and in several other localities in Nicaragua. Chlorthion was used in Guatemala as a larvicide, with good results in the Sanarate area, where A. albimanus is resistant to both DDT and dieldrin, and at the Finca Mocá, a coffee estate outside the malarious area where imported cases coincided with a high anopheline density and touched off a malaria outbreak. In the Valdeflores River area, Oaxaca State, Mexico, chlorthion was employed experimentally as a larvicide.

The pattern of organization for epidemiological evaluation and surveillance operations in the Americas follows along the general lines described above for spraying operations. As the attack phase progresses, more and more advantage can be taken by epidemiological services of the experience gained during spraying operations in organizing itineraries, deploying personnel, and carrying out an effective supervision. In some instances, personnel with dual responsibilities have been assigned to special areas of persisting transmission which require frequent visits and application of both kinds of techniques. In Mexico, responsibility for the routine case detection activities has been transferred to a field operations department, which was initially charged with responsibility for spraying operations only.

Overall progress in epidemiological operations was reported in 1961. Particular attention has been devoted to the problems of assessment of the origin of infection in areas of reduced or interrupted transmission, and of prompt classification of cases. In some instances, non-professional personnel are employed for initial screening of cases. Efforts are being made to reduce the time interval between the laboratory confirmation of a positive slide and the initiation of an investigation of the case.

An indication of the development of case-detection methods over the past three years is given in Table F,
The efficacy and achievements of the case-detection process vary from country to country. In a number of countries its opportune development has enabled confirmation to be obtained of the absence of transmission and a low level of residual parasite reservoir in all or part of the malarious area in advance of the original plan, thus permitting withdrawal of spraying. In other cases, sufficient evidence has not been accumulated, and spraying has had to continue until such time as the amount and character of the evidence from case-detection activities improve.

Special investigations into failures to interrupt transmission are being carried out by the national malaria services and the Organization. In Mexico close attention is being given to areas in which transmission persists following four years of the attack phase. In Guatemala special studies are being carried out in four areas which, although they constitute less than 2 per cent. of the total malarious area, produced 70 per cent. of the cases detected during 1961. In collaboration with the Government of El Salvador, a special study was begun in 1961 to evaluate the epidemiological factors in an area of continuing transmission. Two study sites were selected; one in an area in which the vector is resistant to both groups of chlorinated hydrocarbons, the other in an area in which it is still susceptible. The studies are expected to span both the rainy season and dry season periods. In Nicaragua, supplementary measures, including larviciding, are being studied in four areas of persisting transmission, while special entomological studies are under way in Costa Rica to elucidate the reasons for persisting transmission in the Pacific coast region. In Venezuela, studies continue in the areas still with refractory malaria, while the Amazon basin in Brazil was the site of a collaborative study by the Government and the Organization to investigate the efficacy of the medicated salt method and the possible existence of a drug-resistant strain of parasite.

As a rule, radical treatment of confirmed cases is attempted in the later stages of the attack phase of the programme. In many, personnel of the epidemiological evaluation service are charged with carrying out radical treatment. Several countries are experimenting with radical treatment by voluntary effort at selected notification posts, although it is too early to draw conclusions as to the efficacy of this technique. In all cases, the amounts of drug and the duration of treatment correspond to recommended schedules.

Surveillance operations in areas in the consolidation phase have been strengthened during 1961, with the purpose of assuring a complete coverage of the areas, and regular visits have been made to components of the passive case-detection network. The full-time personnel of the malaria services are given well-planned itineraries, and supervision has been increased. Variations in the reporting of slides from all sources in areas in the consolidation phase are shown in Table G.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number and source of slides</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active detection</td>
<td>Passive detection</td>
</tr>
<tr>
<td>1959</td>
<td>1 815 845</td>
<td>869 774</td>
</tr>
<tr>
<td>1960</td>
<td>2 533 709</td>
<td>1 306 936</td>
</tr>
<tr>
<td>1961</td>
<td>2 844 099</td>
<td>2 032 953</td>
</tr>
</tbody>
</table>

Table F: Development of Case-Detection Methods, 1959-1961: Region of the Americas

<table>
<thead>
<tr>
<th>Region</th>
<th>Population sampled</th>
<th>Population sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>26</td>
<td>Jamaica</td>
</tr>
<tr>
<td>French Guiana</td>
<td>44</td>
<td>Grenada</td>
</tr>
<tr>
<td>Mexico</td>
<td>58</td>
<td>St Lucia</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>58</td>
<td>Peru</td>
</tr>
<tr>
<td>Guadeloupe</td>
<td>64</td>
<td>Venezuela</td>
</tr>
<tr>
<td>Surinam</td>
<td>8.8</td>
<td>Dominica</td>
</tr>
<tr>
<td>Panama Canal Zone</td>
<td>14.6</td>
<td>Argentina</td>
</tr>
</tbody>
</table>

Table G: Reporting of Slides in Areas in the Consolidation Phase: Region of the Americas (expressed in percentages of population living in the areas in 1961)

In areas in the maintenance phase, cases were discovered both in the United States of America and in Venezuela, but no renewed transmission occurred. In British Guiana, a small outbreak occurred during 1961 in the area in the maintenance phase; remedial measures included resumption of spraying in and around the focus, and administration of antimalarial drugs.

During 1961, following an intensive study of data presented by the Government of Venezuela, as stated above (section 12.2.1), an area of 407 945 km² of that country was registered as an area where malaria has been eradicated. The estimated population of this area, as at 31 December 1961, is 4 271 271. These figures represent respectively 68 per cent. of the originally malarious area and 75 per cent. of the population living therein. The XIII Meeting of the Directing Council of PAHO/WHO Regional Committee for the Americas, which took note of this entry, urged Member governments to intensify surveillance activities during the consolidation phase of
their programmes and to organize their epidemiological data in such a way as to facilitate the future registration of areas. The Directing Council also recommended that adequate rural health services be developed as one of the necessary elements in the maintenance phase of eradication, once eradication has been achieved.

In Brazil, a medicated salt programme was in operation in the Amazon basin until November (see also page 165). It has now been suspended, pending the results of a special study as to the effectiveness of the method, and of possible drug resistance by *P. falciparum*. In British Guiana, a medicated salt programme was begun in 1961; in addition, a combined drug is given by evaluation personnel in house-to-house visits in the north-western area of the country. In Venezuela, several drug schedules are employed in areas of refractory malaria. In Trinidad, although the percentage of persons accepting treatment in the area of *A. bellator* has decreased below 50 per cent., the method is apparently proving its effectiveness, since only a single relapsed case was found in the area in 1961.

Resistance to chloroquine of a strain of *P. falciparum* from the Magdalena Valley of Colombia was reported in 1960. The strain was later shown to be refractory to amodiaquine and to hydroxychloroquine. The results have been confirmed by the National Institute of Allergy and Infectious Diseases, United States Public Health Service, which serves as a reference laboratory for WHO.

Reports of resistance to or increased tolerance of chloroquine by *P. falciparum* in the Amazon Valley of Brazil were the subject of a special co-operative study by the Government and the Organization during the latter half of 1961. A survey was made of twenty-seven localities, and those which showed a significant incidence of *P. falciparum* were revisited, and studies conducted on positive cases.

12.2.4 Co-ordination

The ninth Annual Meeting of Directors of Malaria Services of Central America, Mexico and Panama was held in Guatemala City from 8 to 12 May. A meeting of the Organization's consultant personnel in Zones II and III was held the following week. Border meetings at which malaria problems were discussed were held on 13 and 14 January between Guatemala and Mexico, and from 20 to 24 August, by Argentina, Brazil, Paraguay and Uruguay.

Close co-ordination was maintained with the multilateral and bilateral agencies collaborating in the malaria eradication programme in the Americas.

12.3 South-East Asia Region

12.3.1 General Progress and Prospects

The overall picture in regard to malaria eradication in the South-East Asia Region has improved during the year under review.

Of a population of 570.8 million originally in malarious areas in the Region, 94 per cent. are now in areas where malaria eradication activities are being carried out. Satisfactory progress towards malaria eradication has been reported from a number of countries in the Region, particularly from Afghanistan, Ceylon, and India, where some areas have already reached the consolidation phase, and from Indonesia. In Burma, Nepal and Thailand the progress has been slow, owing mainly to administrative and operational problems.

In Afghanistan, the progress made during the year 1961 has been satisfactory. The pre-eradication surveys carried out during 1960-61 show the population of malarious areas in the country to be 4.26 million. Geographical reconnaissance is being undertaken, and this population is being included for protection by DDT spraying and surveillance during the year 1962. Spraying was withdrawn from areas with a population of 86,000 during 1961, and it is estimated that additional areas with a population of 515,184 will be ready for interruption of spraying in the coming year. The programme in Afghanistan presents no serious technical problems. The short transmission season and the vectors still remaining susceptible to DDT are favourable factors. The problem of nomads will, however, require careful attention, but it is expected that, when total coverage by spraying and surveillance is established, this problem is unlikely to affect the achievement of eradication.

The entire country of Burma, with a population of 21.5 million, is considered malarious, with the exception of urban areas of the dry zone and sparsely populated regions above 4000 feet which have an aggregate population of 2.5 million. During 1961, 10.07 million people were protected by spraying, and withdrawal of spraying was effected in an area with a population of nearly 3.5 million under surveillance. It is not considered advisable to expand this area of consolidation to any great extent before developing an effective surveillance machinery. Although there are no serious technical problems, the presence of insecure areas where eradication activities cannot be effectively implemented makes it difficult to estimate the time required for completion of eradication. A recent assessment of the programme by a WHO short-term consultant has indicated that under existing conditions the standard eradication procedures can be carried out only in the central area of the country,
with a population of 15 million, and the remaining 4 million will have to be tackled later when this area becomes secure.

The implementation of the five-year malaria eradication programme in Ceylon is progressing according to plan. During 1961, areas with a population of nearly 1.4 million reached the maintenance phase and the eradication programme is making satisfactory progress in the remaining areas, with a population of 3.5 million, of which 2.25 million are covered by operations in the attack phase and 1.25 million by operations in the consolidation phase. The prospects of malaria eradication continue to be encouraging, as evidenced by the reported decline in the total number of microscopically confirmed cases from 345 in 1960 to 110 in 1961, and it is felt that Ceylon is nearer malaria eradication than any other country in the Region. Except for a few localized cases, which were detected through surveillance and immediately treated, there has been no recrudescence of malaria. With the strengthening of existing active and passive surveillance, ensuring total coverage, it is expected that during 1962 it will be possible to commence large-scale withdrawal of spraying from the endemic zone. The compact nature of the country, the good communications, effective central direction and the competence of sub-professional staff who are familiar with their respective areas, have greatly contributed to the operational facilities of the programme.

The national malaria eradication programme of India, which aims at the protection of 424 million people (1961 census) living in the malarious areas of the country, entered the fourth year of operation in 1961. All the 390 units were in operation, each designed to protect about a million people. Out of these 390 units, 230 are in originally endemic areas, where two rounds of spraying with DDT were carried out during the year, and 160 in hypo-endemic areas, where only a single round of spraying was carried out. Energetic action taken to improve supervision at all levels has greatly improved the quality and coverage of spraying during the year. In a programme of such magnitude, with fifteen states and seven centrally administered areas responsible for operations, efficiency will naturally vary from state to state; in fact the programme could more appropriately be considered as a federation of twenty-two programmes controlled by the national malaria eradication headquarters. Active surveillance, which has been in operation in 345 units, has in a number of states reached a very high degree of efficiency, and efforts are being made to supplement it by passive surveillance. In Mysore State, although a population of only 1.8 million was actually covered by operations in the consolidation phase in 1961, according to available surveillance and other epidemiological data so far accrued there are good prospects of withdrawal of spraying covering a population of over 125 million in 1962. Most of the areas concerned fall within the original hypo-endemic regions. Increased tolerance of A. culicifacies to DDT has been reported from some areas, and extensive investigations have been carried out for demarcating the affected areas. This increased tolerance in A. culicifacies to DDT has, however, not resulted in failure to interrupt transmission.

In Indonesia, which, according to December 1961 census estimates, has a population of 95.885 million, scattered over many islands, malaria eradication is planned to be accomplished by stages. Priority is given to the expansion of the programme to cover the whole of Java, Bali and South Sumatra, in which 70 per cent. of the population live. During the year under review, fourteen additional zones in Java have been brought under the attack phase, thus making a total of twenty-seven zones in which protection is afforded to a population of 46 million. Surveillance has been started in nine of these zones, with a population of 14 million. The preparatory phase has begun in the remaining fifteen zones in Java, and in 1962 when spraying operations are started in these zones, nearly 65 million persons will be under protection. On the whole, despite setbacks occasioned by temporary shortages of supplies, the new zones have completed the preparatory phase on schedule, and progress towards the objectives is satisfactory. In reviewing the programme, it is necessary to consider the central group (Java, Bali and South Sumatra) apart from the outer group of islands. This central group is relatively densely populated and has fairly good communications; the epidemiology of malaria and the distribution of vectors have already been worked out and there are facilities for training field personnel. The area will be fully under attack in 1962. The major operational problem has been lack of sufficient numbers of trained and experienced personnel. A national training centre has been established in West Java and subsidiary training centres have been functioning in Semerang, Surabaya and Tandjang Kerang. Senior technical staff have been sent for training to the international training centres in Jamaica and the Philippines. As for the outer islands of Indonesia, as a first step pre-eradication activities will have to be undertaken in conjunction with the country's rural health development plans with a view to creating conditions favourable for undertaking eradication of malaria. Preliminary surveys towards this end have been conducted in Kalimantan and in West Nusa Tenggara.

In Nepal, the malaria eradication programme is at present in progress only in the central zone, where a
population of nearly two million has been protected by DDT spraying. Transmission has been interrupted in the plain and hill areas, but some transmission has continued in the previous hyperendemic forest and forest-fringe areas, notably in the Rapti Valley. Several factors have contributed to the failure to interrupt transmission in these areas. The influx of a large number of people from the surrounding unsprayed malarious areas, the construction of new houses and the practice of replastering the existing houses in this area, where \textit{A. fluviatilis} is one of the vectors known to be present during the greater part of the year, have been the main causes of persistent transmission. It is now planned to expand the area of the central zone operations to the west to a range of mountains which forms a natural barrier, and to undertake two rounds of spraying in this \textit{A. fluviatilis} area.

The concept of malaria eradication was accepted by the Government of Thailand in 1958. However, the programme, which had in the past attained considerable success as a control programme, has not yet been transformed to meet the needs of eradication. Out of a total population of approximately 26 million, 16.4 million are known to be in malarious areas and are now included in the programme. Although spraying has been withdrawn from some areas in the past, adequate surveillance measures have not been instituted in these areas to assess the situation. During the year 1961 areas with nearly three million population were considered as in the preparatory phase, and those with the remainder of the population as in the attack phase. The programme is now in the process of reorganization. The malaria eradication programme has been transferred from the Department of Health and placed directly under the Ministry of Public Health and a malaria eradication board has been appointed by the Government.

### 12.3.2 Training and Staffing for National Malaria Eradication Projects

Increasing interest is evinced by all the countries in the Region in providing training for malaria eradicaction personnel. India has its own long-established training centre (the Malaria Institute of India) but the senior staff of the other countries in the Region are trained at one of the international centres under fellowships awarded by the United States Agency for International Development, or by WHO. The training of sub-professional staff is carried out in the countries themselves; this has the advantage that both the theory and the practical aspects of training can be directly adapted to the needs of the locality and instructions given in the mother tongue of the trainees. WHO malaria staff assigned to Afghanistan, Burma, Indonesia and Nepal have assisted in the training of national staff in these countries.

In Afghanistan, the main training centre is the Malaria Institute, Kabul, but, in order to train a large number of paramedical personnel, the training programme has been decentralized and subsidiary training centres have been functioning at Kunduz, Jalalabad, Kandahar and Khost during 1961.

In Burma, the Malaria Institute in Rangoon is responsible for the training of staff for the national programme.

In Ceylon, there is no special institute for training, but the headquarters of the antimalaria campaigns has the facilities for giving training to the personnel required for the programme. In addition, the anti-malaria campaign headquarters also gives lectures and demonstrations to medical graduates and medical undergraduates and general public health workers on various aspects of malaria eradication.

In India, before the start of the eradication programme, training of all technical personnel, malariologists, entomologists, malaria inspectors and others was conducted at the Malaria Institute of India. However, on account of the vast expansion of the programme, these training activities were decentralized, even though the main burden still remained with the parent institute. At present the Malaria Institute of India gives training to medical officers, and courses are also conducted for malaria inspectors and laboratory technicians from the different states. In addition, the six regional co-ordinating organizations and some of the larger states also provide training for laboratory technicians. By the end of 1961, most of the personnel required for the programme had already been trained, but in view of the size of the programme and the turnover of staff on retirement, resignation, etc., there will be a sufficient number of trainees to keep the Malaria Institute and the state training centres busy until the end of the eradication programme.

During 1961 the Government of Indonesia established a national training centre in a mountain resort area between Djakarta and Bandung, where conditions of climate, physical facilities for training, students’ accommodation and proximity to operating zones are good. International assistance is available to this programme both from the United States Agency for International Development and WHO, and it is proposed to reinforce the WHO assistance by providing a short-term consultant during 1962. At present there is a whole-time training adviser provided by the Agency for International Development.

Nepal has no central training institute, and the senior personnel receive their training in the Malaria Institute of India and in the international training
centres. A post of training officer has been established, and it is hoped to create a training section.

In Thailand there are two malaria training centres, one in Chiangmai in northern Thailand, and the other in Prabudabad in central Thailand. Although a large number of personnel have been trained in antimalaria activities a good deal remains to be done.

12.3.3 Operational Aspects

In Thailand and Burma, the Governments have agreed to the creation of high level malaria eradication boards with representatives of important ministries; these boards are expected to meet early in 1962. In Indonesia, the assumption of direct responsibility for malaria eradication by the Minister of Health and the creation of an effective executive machinery with well-defined lines of authority patterned on the army organization have considerably strengthened the operational efficiency of the organization. In India, with its numerous federal states responsible for the execution of the eradication programme, the whole-hearted support of the Central Government to the Director of the national malaria eradication programme and the effective functioning of regional co-ordinating organizations under central authority have served to stimulate effective action by state governments. As already mentioned, in Thailand malaria eradication has been transferred from the Department of Health and placed directly in the charge of the Deputy Under-Secretary to the Ministry of Public Health, thereby considerably shortening administrative procedures. In Afghanistan the whole country has been divided into three regions, each in the charge of a regional malarialogist assisted by WHO staff, to ensure total coverage of operations and better technical and administrative co-ordination among units.

Health education has been the subject of study and attention during 1961 as a joint effort of the malaria unit and the health education unit of the Regional Office. Although the importance of health education for the successful implementation of the programme is well appreciated in all the countries, the achievements in this direction have been very modest.

During the year, 88 per cent. of the population under malaria risk in the Region has been protected by residual insecticide spraying. DDT has been the main insecticide used in all countries of the Region, but dieldrin has been used in some of the coastal areas of Indonesia and Burma, where increased tolerance of A. sundaicus to DDT has been reported.

An epidemiological evaluation unit was set up in the Regional Office in 1961, with the purpose of co-ordinating epidemiological activities, consolidating data on evaluation and assisting the countries in evaluation activities. Particular stress has been laid on the need for correct epidemiological assessment as a continuous process. Special epidemiological sections are functioning at the headquarters of the national malaria eradication programmes of India and Indonesia. In these two countries the methodology of epidemiological evaluation has been established on a sound basis. In Ceylon, the operational aspects of epidemiological evaluation are satisfactorily organized. A full-scale, active case-detection network to ensure total coverage is expected to be fully established during 1962. In Afghanistan, Burma and Thailand an overall revision of methodology of evaluation is needed. Nepal has yet to have a proper organization for epidemiological evaluation, as so far evaluation has been based on routine malarialogic surveys.

Of the total population under malaria risk in the Region, 78 per cent. is at present under case-detection operations. Of this, 71 per cent. is constituted by the Indian programme, in which approximately 400 000 000 people are covered by case-detection. In general the outstanding problem in epidemiological evaluation is the inadequacy of fever case-detection, measured in terms of proportion of population examined per annum. The total of positive cases detected in India works out at approximately 0.1 per thousand of the population per annum. In Afghanistan, the rate of detection of positive cases was 0.19 per thousand population in 1961. The surveillance of fever cases in this country needs considerable improvement if the number of slides is to meet the minimum requirements of evaluation. In Burma, the coverage, the frequency of visits and the supervision of surveillance leave much to be desired to meet the needs of eradication. It was noted that the intervals between house visits varied from one month to three months. Epidemiological investigations of positive cases have also been below standard. In Ceylon passive case-detection is carried out by paid surveillance agents who attend medical institutions for the collection of blood-slides from fever cases. The network of 328 medical institutions co-operating with the national malaria eradication service provides a passive surveillance post for every 19 500 persons in the formerly hyperendemic and endemic areas.

In all countries of the Region except Ceylon, which has a well-developed health service with numerous hospitals and dispensaries, active case-finding has been the mainstay of surveillance. In Indonesia a passive case-detection system was tried out as an experimental measure, but the results could not be considered satisfactory, and it was therefore decided to change to active surveillance supplemented by passive case-detection methods. In India active case-detection has reached a very high degree of efficiency in a number of states.
In all countries in the Region the fourteen-day course for treatment of confirmed cases of malaria is followed, except in India, where a five-day course with primaquine is adopted for radical treatment of *P. vivax* and *P. malariae* cases. In *P. falciparum* cases radical treatment consists of a three-day course of 4-aminoquinolines, giving a total dosage of 1500 mg base.

An investigation team has been working for the past three years in Gujarat and Maharashtra States, in India, where interruption of transmission has been achieved and maintained in spite of the vector's having developed resistance to DDT. Investigations so far have shown that irritability to DDT persists in spite of resistance, and this factor may be sufficient to reduce contact between man and the vector, and so prevent transmission. The preliminary findings of the investigation have also shown a reduced lifespan of the resistant vector, but this needs further confirmation. Another entomological team in India is engaged in investigating the role of secondary vectors in an area in Assam, where persistence of transmission of malaria after some years of spraying has been reported.

In Indonesia, an important investigation, in which a short-term consultant is assisting, is in progress to study the dynamics of resistance (the effect of insecticide pressure on the selection of vector strains resistant to one or other of the main insecticides used in malaria eradication). Although this is a long-term project aimed at providing guidance on the choice of insecticide for avoiding or delaying the development of resistance, it may also throw light on allied problems of immediate practical concern—for example, the efficacy of DDT against *A. sundaicus* in areas where dieldrin is contra-indicated because of confirmed or suspected resistance.

In Indonesia and Nepal, investigations have been in progress for determining the dosage cycle of insecticide application. In Indonesia, this was assessed mainly on data from monthly infant parasite surveys, and the results so far indicate that 1 g/m² of DDT applied every six months does not totally interrupt transmission in this experimental area, where *A. aconitus* was the vector. In Nepal, entomological observations have confirmed the epidemiological finding that 2 g/m² of DDT once a year is adequate against *A. minimus*. In *A. fluviatilis* areas, however, entomological findings indicate that a second round of insecticide spraying is required to counteract the effects of replastering of houses and to deal with this vector, which is present during most of the year. In Indonesia, entomological data bearing on the question of DDT dosage/frequency against *A. sundaicus* are already appearing as an incidental part of resistance dynamics studies. Observations in the new zones in East Java are being carried out with regard to the effects of the first round of DDT spraying on the behaviour, density, resting and feeding habits of *A. sundaicus*.

12.3.4 Co-ordination

The following inter-country co-ordination meetings have been held during the year for the mutual exchange of views and for co-ordinating activities in the border areas:

- First Indo-Nepal Border Antimalaria Co-ordination Conference, Lucknow, India 3-5 Jan. 1961
- Fifth Indo-Burma-Pakistan Border Antimalaria Co-ordination Conference, Aijal, Assam State, India 27-29 Nov. 1961
- Meeting of the Antimalaria Co-ordination Board for Burma, Cambodia, Laos, Malaya and Viet-Nam, Phnom Penh, Cambodia 12-15 Dec. 1961

In a programme of the size of that of India, which has twenty-two component parts, co-ordination of inter-state activities has assumed a great deal of importance. The Organization has provided financial support for the establishment of five out of the six inter-state co-ordinating organizations in the Indian programme. WHO also sponsored two inter-state meetings of national malaria eradication workers during 1961.

12.4 European Region

12.4.1 General Progress and Prospects

The data available on the general development of the malaria eradication programme in the European Region are given in Table J in the Appendix to this report. A summary of the position is given in Table H.
On studying these figures, it can be seen that the quantitative advance of the programme has been limited. During 1961 there were very few passages from one phase to another, but progress was made qualitatively.

In examining the malaria eradication programme in the European Region, it is more logical to consider separately the geographical entity represented by continental Europe, where eight countries are carrying on an eradication campaign—namely Albania, Bulgaria, Greece, Portugal, Romania, Spain, the Union of Soviet Socialist Republics and Yugoslavia. Success is near, as is shown by the figures in Table I.

In this part of the Region there are practically no operational or administrative problems, and few technical ones. Certain programmes have arrived at a critical point—the advanced stage of the consolidation phase, where there is a risk that the governments and public may lose interest in a campaign which does not produce any obvious results. However, the governments of the countries concerned have continued to support the programme.

In Albania, the campaign is advancing very satisfactorily. 1961 was the fourth year of complete insecticide coverage in the last areas in the attack
phase, and it may be expected that in 1962 these areas will pass on to the consolidation phase. In Bulgaria, the eradication programme is approaching its end. In 1961 only a limited area with a small number of inhabitants (55 000) was regarded as being in the consolidation phase, which should be concluded in 1963. Spain had only six small areas still in the consolidation phase in 1961. Throughout the rest of the country malaria is stated to have been eradicated; 1962 will be the last year of consolidation, and the whole country should pass on to the maintenance phase in 1963. In Greece, the campaign is advancing steadily, and 45.7 per cent. of the population of the originally malarious areas is covered by the consolidation phase. All the other areas have reached the maintenance phase. The consolidation phase will have to continue until at least 1963. In Romania, the attack phase continued during 1961, covering 16 per cent. of the population in the originally malarious areas; the remainder have been in the consolidation phase for at least two years. It is expected that in 1963 the last area will enter the consolidation phase, and that the greater part of the originally malarious area will have reached the maintenance phase. In the USSR, 99 per cent. of the population of the malarious area was covered by the maintenance phase by the end of 1961. In Yugoslavia, the attack phase continued in 1961 in areas with 43.5 per cent. of the population of those originally malarious, 51.6 per cent. of the population of the latter being in areas in the maintenance phase and 4.9 per cent. in areas in the consolidation phase. The attack phase in the last area will come to an end in 1962. Although little information has reached the Regional Office regarding the position in Albania and Portugal at the end of 1961, there are reasons to believe that the whole of these countries will reach the consolidation phase in 1962.

The countries of the European Region situated outside continental Europe are Turkey, Algeria and Morocco. In Turkey, the eradication programme was energetically continued in 1961. The attack phase, which has lasted for four years, was still covering, at the end of 1961, 52.1 per cent. of the total population of the malarious region, the remainder of this population being in areas in the consolidation phase. The attack phase will have to continue in 1962 in the same areas, and the consolidation phase, too, will continue in 1962 in the same areas as in 1961. In this country, the progress of the programme has been held up by budgetary and operational difficulties. With the assistance of WHO, these are being gradually overcome, and definite advances were made in 1961. The political situation in Algeria has made it impossible to implement the eradication programme planned by the Government. In the meanwhile, malaria surveys are being carried out as far as possible, and personnel are being trained. In Morocco, a pre-eradication programme began in 1961, concentrating on training of personnel and the development of the public health infrastructure. It is thought that the preparatory phase can start in 1964 and the attack phase in 1965.

Under the Co-ordinated Plan establishing Priority for the Eradication of Malaria in Continental Europe, interruption of transmission is scheduled to be attained by the end of 1962. Analysis of the data for 1961 indicates that this aim may be achieved within the time-limit laid down. Three of the eight programmes for continental Europe—those in Albania, Romania and Yugoslavia—include areas in the attack phase. In Albania and Romania, the reservoir of parasites is already extremely small and there were no indigenous cases during 1961 in the areas in the attack phase. In Yugoslavia, a few rare cases of indigenous malaria occurred in Macedonia, but the total number of cases was small.

12.4.2 Training and Staffing for National Malaria Eradication Programmes

In the European Region, requirements in personnel for eradication programmes obviously vary according to the stage reached by the programmes, and also according to whether the eradication service is autonomous or part of the public health services.

In continental Europe, where the programmes are particularly advanced, the need to organize special courses on malaria eradication for training personnel, particularly professional personnel, has not arisen, and consequently there are no national courses intended specifically for such training in any of these countries. In this part of the Region, the only training centre which functioned in 1961 was the inter-regional centre in Belgrade, organized jointly by the Government of Yugoslavia and WHO. At this centre, courses in French lasting three months were given by Yugoslav experts, with the assistance of lecturers supplied by WHO, in order to train professional and assistant personnel in malaria eradication. (See also Table C.) WHO trainees have also attended these courses.

In Morocco, there is a project for a malaria pre-eradication programme linked with a plan for the provision of rural health facilities. The future organization of the eradication service is to be of the "integrated" type, so that the personnel who will participate in the campaign will be mainly the medical officers, nurses and assistant health workers of the rural districts. Under the plan for the provision of rural health facilities, there will not be enough of such personnel to allow the malaria eradication campaign to be organized until 1964, which is the date envisaged for
its preparatory phase. Before that date it will be necessary to give these personnel the essential training to enable them to take part in the campaign. A plan of operations has been established to organize such training, with the collaboration of WHO. In 1961, under this plan lectures were arranged for eighty-eight district and health service medical officers, and a course was held for twenty instructors. Also, practical training courses, specially organized for the practical demonstration of eradication methods in the field, were held for qualified nurses and assistant health workers of the five rural centres. In 1961, 253 assistant health workers and 135 nurses took part in these courses, in which training was given mainly by Moroccan teachers and instructors, WHO assistance being two short-term consultants who gave lectures and collaborated in the preparation of manuals. Fellowships have also been provided to the Government to enable an entomologist and four Moroccan instructors to take courses at Belgrade.

In Algeria, no course has so far been organized for the personnel of the future campaign, but WHO has offered fellowships to the Government for the courses at the Belgrade centre.

In Turkey, the extent of the programme made it necessary in 1960 to organize further courses to train various categories of personnel. In 1961, annual courses for the training of doctors, microscopists and entomological technicians were given at the Adana Malaria Institute by Turkish experts and by the members of the WHO malaria team in Turkey. Fifteen doctors, twenty-five microscopists and ten entomological technicians were trained. One doctor was awarded a WHO fellowship to attend the courses at Belgrade, and two others to attend those in Jamaica. A statistician also obtained a fellowship for further training in the course given at Beirut.

In continental Europe, needs for personnel of all categories are in general being satisfied, but professional staff specialized in entomology are rare. Because of the advanced stage of the programmes sanitary engineers are now rarely needed. Outside continental Europe, serious personnel problems arise at present only in Turkey, where there is a chronic shortage of personnel of all kinds (there are only about 22 per cent. of the required number of doctors, 26 per cent. of the assistant health workers, no entomologists or sanitary engineers). The main reason for this shortage is the lack of adequate budgetary resources to provide for the necessary number of posts and high enough salaries to attract and retain personnel.

It is time to consider what personnel specialized in malariology will be required during the maintenance period in countries where eradication has nearly been achieved. In most countries of the Region where eradication is considered to have been achieved, there are malariologists who belonged to the former eradication service or malaria control teams, but whose posts are being abolished. In each country the special functions of malariologists after their incorporation into the general public health services should be defined so as to maintain a nucleus of specialists, ready to cope with any possible reintroduction of malaria.

### 12.4.3 Operational Aspects

In the European Region, apart from the North African countries, the stage of advancement and maturity of the eradication programmes is such that any considerable changes in their planning and administration are now rarely necessary. Nevertheless, in 1961 a few improvements of this nature were introduced into some programmes.

In Spain, where active case-detection in 1960 covered only three consolidation areas out of the six existing ones, the remaining three areas (about 62 000 population) have now been covered. In Yugoslavia (Macedonia), after an administrative reorganization involving less decentralization of the administrative and technical aspects of eradication, the programmes of the various communes were better co-ordinated and the operations better supervised. In Romania, better co-ordination between the Ministry of Health and the Ministry of Agriculture made it possible to plan spraying in the silkworm breeding areas more satisfactorily. In Turkey, amendments to the 1960 plan were made in 1961. They concerned, in particular, a fresh count of those benefiting by the campaign. This figure rose considerably as a result of better geographical reconnaissance. Other changes in the plan concerned the passage of areas with a population of 1 379 000 (zones of Bursa and Çanakkale) from the attack phase to the consolidation phase, and the entry of the Van region (478 000 inhabitants), which had been excluded from the programme until 1961, into the attack phase.

Health education directed specifically towards malaria eradication developed only to a limited extent in 1961 in the European Region. WHO sent a consultant to Turkey to assess health education requirements and suggest a plan of organization for this purpose. Following her recommendations, a pilot health education section will be organized. A plan for a health education programme in connexion with the pre-eradication programme is under study in Morocco.

During 1961, four countries in the Region—Albania, Romania, Turkey and Yugoslavia—had areas in the attack phase. In all four countries the spraying operations were carried out within the scheduled...
The effectiveness of spraying was not impaired by technical problems in any country of the Region. In Turkey, where *A. sacharovi* is resistant to DDT in a region in the south (Adana), DDT has been replaced by dieldrin, to which the vector is still susceptible. In Greece, where *A. sacharovi* shows a certain resistance either to DDT or to dieldrin in several areas, a change of insecticide and an increased number of applications have resulted in the insecticide retaining sufficient effectiveness. In Romania, in silkworm breeding areas, spraying carried out before the commencement of breeding was applied only to premises serving as animal quarters, and experience showed that treatment of human dwellings was unnecessary. In other countries where silkworm culture is carried on, sprayings were merely deferred.

Following the recommendations of the Expert Committee on Malaria at its eighth meeting, attempts to interrupt transmission using DDT or dieldrin at doses lower than the customary ones were carried out in Turkey in 1961. Doses of 1 g/m² of DDT and of 0.30 g/m² of dieldrin were tried out under field conditions in an area which is at present endemic. The experiment was based essentially on the use of outlet window-traps to check the effect of these dosages on the vectors. It was organized by the Government, which paid the expenses. Unfortunately it failed because of the difficulty of obtaining real collaboration from the inhabitants of the houses chosen for the experiment, and because of the lack of adequate supervision of the personnel responsible for the experiment.

Three countries in continental Europe—Albania, Romania and Yugoslavia—had areas still in the attack phase during the last two years. By the end of 1961, transmission could be considered as interrupted in those areas in the first two countries, as no indigenous malaria cases occurred during the year. In Yugoslavia, a few indigenous cases occurred in the Republic of Macedonia in 1961, and in comparison with previous years there was a spectacular fall in transmission in this area. In all three countries, the reservoir of parasites in the attack phase areas at the end of 1961 was at a very low level and the annual morbidity rate was less than 0.5 new cases per thousand persons.

In countries in continental Europe with areas moved into the consolidation phase at the beginning of 1961 (Albania, Bulgaria, Romania and Yugoslavia), interruption of transmission continued in those areas throughout the year. In Romania, out of twenty-five cases detected in 1961, eighteen were induced. In Spain, a single very limited and well-defined focus still exists in the province of Cáceres. The presence of this focus appears to arise from failure to employ primaquine for radical treatment in 1960 (use of the drug was adopted only in June 1961). In Greece, foci of varying size persist in several districts in the consolidation phase. Most of these foci existed in 1960, but in 1961 were considerably reduced in extent. The persistence of these foci is thought to be due mainly to migrations of agricultural workers, which are difficult to control.

In areas stated to be in the maintenance phase, the epidemiological position has remained everywhere calm and, despite the presence of a few rare cases classified as indigenous (Greece, Spain), no resumption of transmission has been observed.

It has not been possible to analyse the situation in the USSR, as this country has not submitted the epidemiological assessment data as recommended by the Thirteenth World Health Assembly (resolution WHA13.55). From what is known, however, it may be presumed that the epidemiological position is progressing favourably there.

Outside continental Europe, Turkey still presents many epidemiological problems. In several areas in the attack phase, situated mainly in the south-east and south-west of the country, transmission is continuing, and in the areas in the consolidation phase an improved case-detection system has led to the discovery of extensive residual foci. This situation arises from administrative and operational difficulties; however, the continual improvement in administrative methods and operations was very evident in 1961.

The organization of surveillance in countries where the national malaria eradication service forms part of the general public health services (Albania, Bulgaria, Romania and the USSR) differs from that in the countries where these services are more or less autonomous (Greece, Portugal, Spain, Turkey and Yugoslavia). In the first group of countries, the medical officers of health in charge of districts bear direct responsibility for the operations carried out by the "polyvalent" health assistants of the district. Surveillance work is co-ordinated, however, by specialized bodies, namely, the antimalaria stations or, in their absence, the anti-epidemic stations (Sanepids). This system has proved very satisfactory. The number of surveillance agents engaged in active case-detection is particularly high (Albania—one agent per 2200 persons; Bulgaria—one agent per 540 persons; Romania—one agent per 1185 persons). In these countries passive case-detection has reached a high degree of efficiency: not only is the density of notification posts very high, but the doctors who are most directly concerned in passive case-detection (district medical officers) are those locally responsible for surveillance operations as a whole.
Active case-detection is also carried out, the frequency of visits being every ten days in many places.

In the second group of countries (Greece, Portugal, Spain, Turkey and Yugoslavia), surveillance operations are carried out, supervised and co-ordinated by personnel of the national malaria eradication service, except in Greece, where the personnel carrying out the work belong to the national malaria eradication service, but where supervision and co-ordination are exercised at the district level by the district medical officer of health (nomiate) and two malariologists act as inspectors for the whole country. In this second group of countries the personnel engaged in active case-detection is less numerous, on the average, in proportion to the population to be kept under surveillance, than in the first group (one agent to every 7253 persons in Greece, one to every 5000 in Yugoslavia, and one to every 6900 in Turkey). Passive case-detection is not so effective and in some countries its results are unsatisfactory. Nevertheless, these countries have a well-developed rural health infrastructure and an adequate number of units which can serve as notification posts. In general, these health units are not supervised and controlled by the national malaria eradication service, whereas notification posts should be organized, encouraged and supervised by this service. In Turkey, passive case-detection, which was non-existent in previous years, is being organized, but its development is restricted by the scarcity of rural dispensaries and use is being made of voluntary collaborators.

Radical treatment of confirmed cases is carried out in all countries. Treatment consisting of fourteen daily doses of primaquine (15 mg base) or of a corresponding 8-aminoquinoline was adopted in 1961 by all countries except Romania, which continued to treat malaria sufferers as in previous years with primaquine (15 mg base) and chloroquine daily for three days, followed throughout the epidemic season by suppressive treatment consisting of a 300 mg dose of chloroquine every week and 25 mg pyrimethamine every three weeks. This treatment seems to have given rise to relapses, so that the Government proposes to adopt the usual radical treatment in 1962, and to apply it to all patients detected since 1959. The Spanish Government has adopted the same regimen since June 1961.

Surveillance operations are proceeding satisfactorily, except in the few parts of Turkey where there is a shortage of personnel. In continental Europe, where transmission generally extends over six months of the year or less, and where malaria is usually hypo-endemic, the percentage of the population examined each year varies from 3 per cent. (Spain) to 5 per cent. (Romania). In Turkey, the number of slides examined in 1961 represents 10.6 per cent. of the population.

In the maintenance phase areas of continental Europe, vigilance is exercised by establishments belonging to the general public health services (dispensaries, hospitals) and by means of case notification, which is compulsory in all these countries. In countries where the national malaria eradication service forms part of the general public health services, the same personnel who carried out passive case-detection are now participating in vigilance operations, the difference being that examinations of fever cases are now restricted to specific malaria suspects, with a corresponding reduction in the work. In other countries, the former malaria stations or antimalaria dispensaries still exist (Spain, Portugal) with a part-time staff who carry out blood tests on suspects and send to the central antimalaria service a weekly report indicating the number of slides examined and those found positive. In Greece, each chief medical officer of health of districts in the maintenance phase forwards a monthly report on the number of slides collected in the different health units of the district, as well as on positive cases and those notified by physicians.

Most countries are showing more concern for the future of the specialized personnel taking part in eradication than for the organization of vigilance proper. In countries where the malaria eradication service is combined with the public health services, no problem arises, for vigilance will succeed passive case-detection without any transition stage. Of the remaining countries, one (Portugal) intends to transform the former malaria stations into rural health stations, with the same personnel. Few countries have so far given a precise definition of their vigilance policy, but all are aware that vigilance must be organized in order to prevent the reintroduction of malaria, or to deal with such a contingency; the necessary infrastructure exists in all these countries, but it remains to be decided how it should be used.

12.4.4 Co-ordination

The co-ordination of the regional programmes was ensured by the Regional Office, by visits by its officials to the various countries and by the distribution of information to the countries in the Bulletin d'informations sur l’état d'avancement des programmes d'éradication du paludisme dans la Région de l'Europe, which appears on an average twice yearly (in French only).

The Co-ordinated Plan establishing Priority for the Eradication of Malaria in Continental Europe can be cited as an example of inter-country co-ordination involving commitments for a specific target date, a standardization of evaluation procedure and regular submission of operational information (essentially the standard quarterly report on surveillance which is
being compiled by all countries except one of continental Europe).

12.5 Eastern Mediterranean Region

12.5.1 General Progress and Prospects

The Eastern Mediterranean Region comprises twenty-five countries and territories with a total population of 209.5 million, among whom 172 million (82 per cent.) lived originally in malarious areas. Malaria eradication projects or programmes involve fourteen countries. Kuwait is naturally free from malaria and eradication has already been achieved in Cyprus and three other countries. Yemen and five other countries have malaria control activities. It is gratifying to note that Pakistan, which has about 94 million population living under malaria risk (55 per cent. of the total population under risk in the Region) started implementing its programme early in 1961. The whole northern block of the Region is now undertaking eradication, either by stages as in Iran and Pakistan, or over the whole country, as in Iraq, Israel, Jordan, Lebanon and Syria.

Of the three countries of northern Africa that are in the Region, Libya is implementing an eradication programme to eliminate the minor malaria problem in the Fezzan Oasis; Tunisia and the United Arab Republic have already extensive malaria control activities, and the authorities prefer to strengthen the rural health structure, which is under intensive organization and development, before launching a full-scale eradication programme. The Organization's new policy of recommending pre-eradication programmes in developing countries is being implemented in both Ethiopia and Somalia, and is being planned for Saudi Arabia and Sudan.

During the period under review malaria has demonstrated again its catastrophic impact on health and overall economic development — in Somalia, following the floods that hit the country late in 1961. The emergency help provided by WHO and other agencies saved thousands of lives and proved the most worthwhile assistance that can be given in such a situation.

Aden Colony, Cyprus, French Somaliland, and the Gaza Strip have reached the maintenance phase and are ready to be considered for certification that malaria has been eradicated.

Israel has over one-third of its total population covered by operations in the maintenance phase. The country has a good network of basic health services, and the development of passive surveillance in areas under consolidation will eventually permit the country to apply for malaria eradication certification. In Lebanon, the entire country is covered by consolidation phase operations, consisting mainly of active surveillance. The network of rural health services is not yet complete or adequate, and efforts are now being made to develop these services, integrating into them the malaria surveillance agents, so that a smooth change-over to the maintenance phase can be made within the next two years.

Iran has almost 40 per cent. of the total population under risk in areas in the consolidation phase, and another 40 per cent. covered by operations in the attack phase; this population is mainly located in the northern half of the country. The future prospect for eradication in this area is very promising. It is anticipated that within three or four years almost the whole of the area will enter the maintenance phase. The acute problem, however, is the lack of sufficient network of basic health services, which are now under active review and planning. The position in the south is not so promising; double resistance of one vector species, and the elusive habits of another, together with extensive nomadism and lack of operational facilities, have hindered the implementation of the programme in this area. A pre-eradication programme is being recommended to help in building up the operational facilities and at the same time in developing the basic health services in the southern belt of the country.

In Iraq, nearly three-quarters of the population under risk in the country are in areas in the consolidation phase, and one-quarter is still under attack operations. Certain administrative shortcomings are hampering progress according to the operational schedule. The appearance of resistance to dieldrin in A. stephensi in 1961 might have been considered ominous; however, the area in which it developed is already malaria-free and under the consolidation phase, and measures, including inter-country co-ordination activities with Iran, have been taken to strengthen the consolidation efforts and to prevent any reintroduction of infection. Otherwise, the prospects for the future are good. During 1962 the entire country, with the exception of 11 per cent. of the population under risk in certain areas in the north, will be in the consolidation phase. These latter areas need a longer period of attack in view of the shifting habits of the population during the summer months.

In Jordan, the progress of the consolidation activities in West Jordan, which has half the total population under malaria risk in the whole country, is highly satisfactory, as both the public and medical services are co-operative; it is expected that this area will enter the maintenance phase within the next two years. In the Jordan Valley and East Jordan, attack operations will be terminated in 1962.
The malaria problem in Libya is very limited. Of the population of 31,000 originally under risk, almost half are now covered by operations in the consolidation phase and the other half will be so covered in 1963. The Government’s interest in providing financial support and in boosting the training activities for all malaria personnel, together with the fact that there is no technical problem, make the future prospects for eradication very promising.

The programme in Pakistan is well planned and organized, and has a national malaria eradication service board with full administrative and financial autonomy. With WHO support during 1961 in meeting most of the supply requirements, the plan of action was carried out very satisfactorily. The possible difficulty in obtaining adequate financial support during 1962 from the international or bilateral agencies may be an obstacle to the carrying out of the original plan of action. The country is undertaking an eradication programme by stages over fourteen years, and rural health development is in the meantime being extended. No major technical difficulty is being met; the coordination of this programme with those of Afghanistan, Burma, India and Iran is receiving full attention by the Government and the regional offices involved.

In Syria, over two-thirds of the total population under risk are in areas in the consolidation phase, and the population covered by attack operations will be further reduced in 1962 to less than one-fifth of the total population under risk. The successful development of an extensive passive-surveillance system is an important factor in guaranteeing a successful issue of the programme and a smooth change-over to the maintenance phase, especially in the absence of any technical problems. The development of rural health services in areas not yet covered is being stimulated.

Tunisia and the United Arab Republic have extensive malaria control activities, which have contributed to making their malaria problems of low priority in the concept of the health strategists of these countries. However, the interest in developing an efficient rural health service such as the one now being set up in the United Arab Republic, involving the establishment of a rural health unit manned by a medical officer and paradermal personnel for every 5,000 population, will make the implementation of an appropriate eradication programme easier.

Pre-eradication programmes are being developed in Ethiopia, Saudi Arabia, Somalia and Sudan. The purpose of these programmes will be to build up the operational facilities and to help to expand the network of basic health services, so that a malaria eradication programme can be started within the next few years. Of these countries, Saudi Arabia, Somalia and Sudan may reach the level of acceptability for malaria eradication programmes shortly. Ethiopia, however, owing to its topography and other factors, will not be ready to start its eradication programme until later.

Interruption of transmission has successfully been achieved in almost all countries in the Region in which there are eradication programmes, and covers about 15 per cent. of the total population under risk in the Region. In two instances, however, the interruption of transmission could not be maintained. The first of these is in the southern A. stephensi areas of Iran, where the resistance of this species to DDT and later to dieldrin caused a return of transmission in the affected areas. The second instance is the hilly areas of northern Iraq, where the problem of transhumance occurs. A similar problem exists in the southern hilly parts of Iran, where nomadic tribes come to settle during the summer months.

The consolidation phase now covers the whole of Lebanon, two-thirds of Israel, half of Jordan, three-quarters of Syria, three-quarters of Iraq and almost half of Iran’s total population under risk. During 1961 over 12 million inhabitants were covered by malaria eradication programmes in the consolidation phase. In addition to Aden Colony, Cyprus, French Somaliland and the Gaza Strip, and a part of Israel which are in the maintenance phase, large areas at present under consolidation in the north of Iran, Iraq, Israel, West Jordan, Lebanon and Syria, are expected to enter this phase within the next two or three years.

12.5.2 Training and Staffing for National Malaria Eradication Projects

Apart from the Regional Malaria Eradication Training Centre in Cairo, which is also used for the training of national personnel of the United Arab Republic, there are three other WHO-assisted national malaria eradication training centres in the Region. Of these, the two training centres in East and West Pakistan are attached to the national malaria eradication programme and are providing senior and junior courses similar to those given at the Regional Malaria Eradication Training Centre, Cairo, as well as other courses for auxiliary personnel, in conformity with the international standards. The third, the Malaria Training Centre in Ethiopia, offers training to junior staff of the malaria service, giving them five months of theoretical and field training. The Institute of Parasitology and Malariology of Teheran University provides training in malaria eradication to national senior and junior staff as well as to specialized categories of personnel, including entomologists, microscopists, sector chiefs and chiefs of malaria laboratories.
Seven senior and thirteen junior courses were organized during the year in the above training centres; forty-five senior and 621 junior personnel of the national malaria eradication services were thus trained. In addition to these training facilities, which are provided at the central level of the malaria eradication services, training activities are carried out within the zones for the subordinate field staff such as surveillance agents, squad leaders, etc.

The Regional Malaria Eradication Training Centre in Cairo has helped to improve the teaching curricula for junior and senior personnel and has prepared a manual for the training of malaria eradication entomologists, as well as developing a pattern for effective management and demonstration of a field training area attached to the training centre, where all eradication measures are applied. This centre, since its establishment in 1959 and during the period 1959 to 1961 inclusive, has given eleven courses (six junior, three senior, one in entomology, one for sanitarians), and has trained 114 professional personnel (fifteen WHO staff members, twenty-three WHO fellows from seven countries, and seventy-six students of the United Arab Republic) and 138 junior personnel (fifty-eight fellows from eleven countries and eighty students of the United Arab Republic).

12.5.3 Operational Aspects

Revised planning of the eradication programmes, based on the experience gained by the countries during the previous five years, has been carried out in Iraq, Israel, Jordan, Lebanon and Syria. All these countries have now comprehensive plans of operation comprising the twenty-two basic requirements developed by WHO and giving the details of each year’s plan of action, and the requirements in personnel and supplies until the end of the consolidation phase. A plan of operation is being developed for Iran following the expiry of the previous agreement at the end of 1961.

Administrative reforms in the management of eradication programmes have been well covered in the new plans of operation and form an integral part of them. The provision by WHO of malaria administrative officers has helped a great deal in strengthening the administrative machinery of the malaria eradication services. Such officers are now assigned to Iran, Iraq, Pakistan and Syria.

Geographical reconnaissance has received most serious attention. In new programmes and in any new extensions in the current programmes, geographical reconnaissance was completed before the start of the attack phase. In the operating programmes use was made of the surveillance agents wherever possible to complete this activity; in certain countries, however, there are areas where this geographical reconnaissance has not yet been completed.

Trials were made during 1961 with reduced dosage of DDT in three countries (Iran, Pakistan and Saudi Arabia). In Iran—in Khorassan Province, where the climate is extremely dry—one gram of DDT sprayed on mud walls remained effective for the entire transmission season of four months.

In both Lebanon and West Jordan, where surveillance systems are more developed than in other countries of the Region, reaching almost 60 to 70 per cent. of the population in areas in the consolidation phase, the epidemiological situation seems to be very bright and no problems are being encountered.

One of the outstanding epidemiological problems is the failure to interrupt transmission of malaria in double-resistance areas of *A. stephensi*, especially in southern Iran. Even under these circumstances, this problem would not have reached any appreciable dimensions if there had been operational facilities for effective surveillance activities, including adequate geographical reconnaissance followed by a satisfactory drug distribution system, and some focal remedial measures.

As more areas come progressively under consolidation, it has been found that in some programmes with only an active surveillance system all the cases cannot be detected even if the surveillance is done on a monthly basis, and the development of passive surveillance, whether through collaboration of the rural health units, through hospitals or through voluntary collaborators, has to be stimulated to contribute to the efficiency of case-detection. In Syria, for example, passive surveillance through over 1500 voluntary collaborators has been extended to all parts of the country.

Epidemiological investigations in consolidation areas have been carried out by routine and have accounted for detection of the origin of positive cases. In Lebanon during 1961 seven cases were recorded, of which five were of imported origin; in West Jordan during 1961 thirty-two positive cases were detected, of which thirteen were imported from abroad and seventeen from the area in the attack phase. Epidemiological investigations in the areas where nomadic populations exist—for example in Iran and Jordan—may prove difficult.

Radical treatment is now an established routine for all cases in areas in the consolidation phase. In Jordan the treatment is given in hospital, while in other countries patients receive ambulatory treatment. Positive cases are usually followed monthly, for a whole year, by the surveillance agents, and regarded as suspected cases eligible for blood examination and treatment every time they are visited.
Presumptive treatment is given to all fever cases and suspected malaria cases when blood samples are taken. All positive cases receive radical cure treatment: in the case of *P. falciparum* 1500 mg (adult dose) of chloroquine or amodiaquine is given, and in the case of *P. vivax* and *P. malariae* this is followed, except for infants, by a fourteen-day course of 15 mg of primaquine daily (adult dose). Certain variations of the regimen occur in individual countries; for example, in Syria only pyrimethamine (50 mg adult dose in suspected cases), and no chloroquine, is used for presumptive treatment. In Israel the radical cure of *P. falciparum* malaria is effected by the recommended three-day course of 1500 mg amodiaquine, followed by 100 mg of pyrimethamine given on the fourth day. No chemoprophylaxis is practised in the countries of the Region except in Israel, where students and visitors from African countries are given 25 mg of pyrimethamine weekly, and the residents of the Dead Sea area receive 400 mg of amodiaquine weekly and 25 mg of pyrimethamine once a month during the period from April to December. Mass drug distribution is used in areas in Iran where double resistance is found in *A. stephensi*, a drug distribution programme to reduce malaria morbidity having been implemented late in 1961. Chloroquine and pyrimethamine were given to the whole population during the first round of visits, but this treatment was restricted in subsequent visits to fever cases only. Also in Iran, wherever local transmission is detected, a single dose of 50 mg pyrimethamine (adult dose) is given to the whole population of a village and mass blood surveys are made.

In preparation for a study of the feasibility of applying the medicated salt method in Fars and Kerman Provinces in Iran, surveys to investigate salt sources and food habits of the people are being carried out, promising results having been obtained in preliminary field trials among a small group in 1961. A similar study has been recommended for the nomadic population of Somalia.

In all countries approaching the maintenance phase effective liaison exists between the national malaria eradication services and the overall health establishments of the country, whether at ministerial, provincial or district levels. Unfortunately, certain districts in some countries are not covered by any health service, and active-surveillance work has to be maintained until the health infrastructure in these districts has been established.

The WHO inter-country evaluation project, which has its duty station in Lebanon and which also serves Iraq, Jordan and Syria, has been strengthened by the addition of an entomologist and a laboratory technician to assist countries approaching the end of the consolidation phase to fulfil the criteria for claiming eradication before integration of the national malaria eradication services into the general public health structure of the country.

*A. stephensi*, which was reported as having double resistance to chlorinated hydrocarbons in Kerman, Iran, in 1960, has now been found to be similarly resistant in Abadan and surrounding areas. *A. stephensi* was reported to have disappeared in Iraq and Saudi Arabia since the residual spraying of premises with dieldrin, which was adopted after the discovery of resistance of the vector to DDT in 1958. In August and September 1961 it was reported that this mosquito had reappeared in Basrah Province, Iraq, and in the eastern province of Saudi Arabia. The susceptibility tests conducted on *A. stephensi* in these three areas revealed that this mosquito is becoming highly resistant to dieldrin, but that its previous resistance to DDT has become diluted. In the United Arab Republic, *A. pharoensis* was reported to be resistant to dieldrin in 1959, and this has been confirmed by the susceptibility tests carried out in 1960 and 1961. The gradual increase of tolerance of this mosquito to DDT has been noted since 1959. The data recorded from susceptibility tests conducted at the end of the *A. pharoensis* season of 1961 is very suggestive of resistance to DDT, but during the first two months after spraying with this insecticide a good killing effect has been observed among specimens captured from outlet window-traps installed in sprayed houses or experimental huts.

12.5.4 Co-ordination

The Malaria Eradication Co-ordination unit of the Regional Office has stimulated intergovernmental border meetings between the national malaria eradication services of Ethiopia and Sudan, and of Iran and Iraq. These proved very successful, and decisions were taken to exchange information on border activities and to continue the meetings at regular intervals.

Saudi Arabia, at the suggestion of the Regional Office, sent a malaria team to Yemen to survey border areas. Upon request from the Government of Yemen, the Saudi Arabian team extended its activities to many areas in the hinterland.

Pakistan participated in the Fifth Indo-Burma-Pakistan Border Antimalaria Co-ordination Conference sponsored by WHO late in 1961.

Preparations are being made for the third regional technical meeting on malaria which will take place in two sessions, one serving the eastern countries, which have the same vectors and common problems, and the second serving the rest of the countries of the Region, including those on the African continent.
12.6 Western Pacific Region

12.6.1 General Progress and Prospects

On the whole there has been a noticeable advancement in 1961 from the point of view of operational expansion and improvement of technical standards and administrative facilities. Out of a total population of 75 million people living in currently or formerly malarious areas from which information is available, 14.2 million (18.9 per cent.) are now living in areas where malaria has been eradicated, while over 16 million (21.3 per cent.) are covered by malaria eradication programmes.

For purposes of review, it may now be convenient to classify countries according to the following five groups:

(a) Countries with malaria eradication programmes

The eradication programme in China (Taiwan) continued during 1961 to be the most promising project in the Region, and accomplishment of eradication is already in sight. Nevertheless, well-defined small foci of transmission were discovered in that year. Reintroduction of malaria cases, mainly through immigrants from abroad, is also threatening the success of eradication; however, well-planned countermeasures are in operation to cope with this problem. During 1961 the emphasis has been laid on building up an adequate passive case-detection mechanism.

In North Borneo, intensive epidemiological assessment carried out during 1960 and 1961 has confirmed the technical feasibility of interrupting transmission under the local conditions, with the measures which have been in operation during the past years. The technical feasibility having been established, operational facilities were provided and the project was converted into an eradication programme as from 1 July 1961. Periodical assessment of operations has been carried out and results so far indicate good prospects of achieving eradication as planned.

In the Philippines, the eradication programme suffered a severe setback following the discontinuation of spraying operations in 1957 and 1958. The effect of the new decentralization policy of the public health service, implemented since 1959, which failed to take into consideration the malaria eradication programme, has adversely affected operations. In addition to the administrative difficulties due to the transition from a centralized to a decentralized scheme, certain technical problems—including the development of resistance to dieldrin in the local anopheline vector, Anopheles minimus flavirostris, and population movement from the malaria-free coastal plain to the hinterland—have favoured continuation of transmission. Under these circumstances, a reappraisal of the programme was made early in 1961 by a group of national experts and international experts from WHO and the United States Operations Mission to the Philippines of the Agency for International Development. The recommendations of the group are now being studied by the Government.

Sarawak launched its malaria eradication programme in 1961. There is now evidence that the interruption of transmission has been obtained in many areas. At the end of 1961, 571 000 people were covered by operations in the consolidation phase.

In the Ryukyu Islands, improvements in surveillance activities and epidemiological assessment are required. However, the prospects of achieving eradication soon are good, since the population is comparatively small and the local vector, A. minimus, is highly susceptible to the insecticide.

(b) Countries with preliminary malaria eradication activities

In Cambodia, Netherlands New Guinea, the Republic of Korea and the Republic of Viet-Nam, on the whole the feasibility of interrupting transmission with available methods has been shown. However, a recent reappraisal has revealed a general inadequacy of administrative and operational facilities. Therefore, pre-eradication programmes will have to precede the implementation of full eradication programmes in these countries.

In Cambodia, the pre-eradication programme is to be implemented during 1962 and 1963. If, on its completion, an adequate administrative structure and the necessary operational facilities are available, a malaria eradication programme may be started in 1964.

In the Republic of Korea, the malaria project started in June 1959. During 1961 the operations were still preliminary and were mainly for the purpose of identifying the size of the problem. Results show that malaria is widespread with definite foci of transmission. A pre-eradication programme is to be carried out during 1962 and 1963. Antimalaria operations after 1963 will depend on achievements of the objectives of the pre-eradication programme.

In Netherlands New Guinea, antimalaria activities, including spraying operations, case-detection and the use of medicated salt, continued on a large scale throughout 1961. In that year, out of 400 000 people living in malarious areas, 200 000 were under protection. The technical feasibility of interrupting transmission has been established in some areas but not in others, and the administrative and operational facilities need to be improved before an eradication programme is undertaken. The pre-eradication programme will be started in 1962. It is considered that a malaria
eradication programme may not be implemented before 1965.

In the Republic of Viet-Nam the malaria problem is complicated by the inaccessibility of some areas. Large-scale spraying operations were carried out in 1961. Interruption of transmission appears to be feasible with present techniques in A. minimus areas but not in A. balabacensis areas. The pre-eradication programme will be started in 1962 in order to define the problems and establish necessary administrative and operational facilities before an eradication programme can be implemented. Should these conditions be fulfilled and security obtained, the implementation of a fully-developed malaria eradication programme could be considered in 1964.

In two countries in the Region—the British Solomon Islands and the Federation of Malaya—malaria eradication pilot projects are now in operation. In the former, malaria, which is the largest single cause of hospital attendance, is transmitted by vectors of the A. punctulatus group. The malaria eradication pilot project began in late 1961 and is intended to cover the islands of Guadalcanal and the New Georgia group, which have a total population of 35,000. In the Federation of Malaya the malaria eradication pilot project was in its second year of operation in 1961. The progress during the year has been encouraging.

(c) Countries with malaria projects in the planning stage

In Brunei and the New Hebrides Condominium it is expected that pre-eradication survey projects may start in 1962 and in 1963 respectively. Malaria control activities have been going on in Brunei for some time and it is expected that an eradication programme can be carried out as soon as a comprehensive plan of operation for eradication has been obtained, and following the implementation of a pre-eradication survey project. No antimalaria activities have been undertaken so far in the New Hebrides Condominium; however, the Government has expressed its eagerness to embark on eradication in the near future.

(d) Countries where some government antimalaria activities are being undertaken

In Laos, a widespread malaria control programme, using residual indoor spraying, started in 1957, but had to be suspended in 1961 owing to the conditions in the country. In Papua and New Guinea the Government undertakes large-scale control measures. On the other hand, the possibility of eradicating malaria from Hong Kong and Macao depends to a great extent on the success of malaria eradication on the neighbouring mainland.

(e) Countries where malaria is disappearing without specific antimalaria programmes

Australia and Japan may be considered together, for, although the disease previously existed on a wider scale, it has slowly regressed in the last few years and has now become a problem of negligible importance, without any systematic and organized antimalaria programme having been undertaken.

Interruption of transmission was achieved after from two to four years of residual indoor spraying in China (Taiwan), the Ryukyu Islands and most parts of North Borneo and Sarawak. On the other hand, in some countries interruption of transmission has not yet been achieved in all parts of the areas in the attack phase in spite of the fact that spraying operations have lasted for four or even more years, as in Netherlands New Guinea and the Philippines. In the Philippines, the failure to achieve the interruption of transmission was mainly due to administrative deficiencies, whilst in Netherlands New Guinea it was mainly due to technical difficulties. Also in some parts of Cambodia and the Republic of Viet-Nam, where A. balabacensis is the local vector, it has not been possible to confirm the interruption of transmission after several years of residual spraying. In this case, technical factors seem to be responsible for the failure, and a special study of epidemiological and entomological aspects in relation to the control method is indicated. Furthermore, there is still a technical difficulty to be solved in interrupting transmission in the case of malaria transmitted by the mosquitoes of the A. punctulatus group in the South Pacific (Netherlands New Guinea and the British Solomon Islands). In the British Solomon Islands the main objective of the malaria eradication pilot project is to find a means of interrupting transmission.

The population living in areas in the consolidation phase in the Western Pacific Region is now over six million, and is distributed among the following countries: China (Taiwan), North Borneo, the Philippines, the Ryukyu Islands and Sarawak. The larger part of China (Taiwan), with a total population of 10 million, has now entered the maintenance phase.

12.6.2 Training and Staffing for National Malaria Eradication Projects

Twenty-three WHO fellowships were awarded in 1961 to fellows from the Region for attendance at regular courses in malaria eradication training centres. Also, travel grants of limited duration were awarded to ten candidates for visits to selected eradication programmes.
A malaria eradication training centre was established in 1959 at Tala in the Philippines (see also page 138). From late 1959 to 1961 one senior course for professional staff (malarialogists, entomologists, engineers and public health educators) and five junior courses for sub-professional staff (senior technicians, field supervisors, etc.) were given for students coming from the Western Pacific and from other regions. Altogether twenty-one senior and sixty-six junior students were trained in the above-mentioned courses at Tala. Following an evaluation made in 1961, it was decided to discontinue the Tala centre temporarily, and it is planned to move the centre to Manila, where it will be re-established in 1962.

Fellows from the Region were sent also to training courses held in other malaria eradication training centres, such as those in Jamaica and Belgrade. Special study tours were organized in China (Taiwan) to provide training for both senior and junior candidates from other countries of the Region.

In 1961, training courses of limited duration for national malaria staff were held in some countries of the Region. Short courses were given mainly for sub-professional staff of Cambodia, China (Taiwan), Netherlands New Guinea, North Borneo, the Republic of Korea, the Republic of Viet-Nam, and Sarawak. In the Philippines, refresher courses for the project malarialogists and engineers, and, in Sarawak, a training course for entomological technicians, were also held with the assistance of WHO field and regional office staff.

A general shortage of professional staff in national malaria services is still a common problem in many malaria projects in the Region. The Philippines is the only country in the Region which has a large number of trained malarialogists. In the Republic of Viet-Nam the critical shortage of physicians was largely overcome in late 1961, when a group of army medical officers was seconded to the national malaria service. Among the professional group, the shortage of entomologists and public health engineers is even more acute. In the absence of qualified professional staff, duties of entomologists and engineers had to be delegated to field technicians and field supervisors. Health educators are practically absent, except in two privileged projects (in the British Solomon Islands and the Federation of Malaya).

12.6.3 Operational Aspects

Autonomy of the national malaria eradication service has been achieved fully, or almost so, in China (Taiwan) and in the Republic of Viet-Nam. There is unified and central control of personnel, equipment, supplies, transport, budget, etc. In other countries this autonomy is only partial and, depending on local circumstances, it may or may not allow for efficient operations. In the British Solomon Islands, the Federation of Malaya, Netherlands New Guinea, North Borneo, the Ryukyu Islands and Sarawak, it appears to be adequate for operations to be conducted efficiently. In Cambodia and the Republic of Korea improvement is required, as also in the Philippines, where serious organizational difficulties have been experienced.

Legislation is a particular aspect deserving mention. Special provisions exist in the British Solomon Islands, Cambodia, Netherlands New Guinea, North Borneo and the Republic of Viet-Nam to allow national malaria eradication staff certain facilities in the performance of their duties. On the other hand, a number of countries have obsolete regulations which, in some instances, are inadequate for the effective performance of operations.

In some countries, such as the British Solomon Islands, Cambodia, Netherlands New Guinea, North Borneo and Sarawak, difficulty of terrain makes logistics very complicated. In some places the means used include helicopters, air drops and sea vessels.

No special health education facilities exist, except in the British Solomon Islands and the Federation of Malaya, which have special units in their national malaria eradication service with qualified and trained national health educators.

Much emphasis has been given to geographical reconnaissance. In the current programmes, steady progress has been attained in bringing the required information up to date. Budgetary limitations have made it very difficult to complete the work in certain countries. In the proposed new plans of operations, geographical reconnaissance is carefully provided for.

The case-finding programme is generally carried out by both active and passive case-detection activities. In the Philippines, a special group of 400 canvassers was organized in 1961 and assigned to the frontier areas in order to detect new infections among temporary settlers from the more developed parts of the country. In Sarawak, the number of active case-detection canvassers increased considerably during 1961, but at the same time efforts have been made to increase the number of passive case-detection posts and to improve their efficiency. In the Republic of Korea, where the national malaria service is not yet fully developed, passive case-detection through government dispensaries and general health services has made an important contribution to the detection of malaria throughout the country.

One of the noteworthy epidemiological events in 1961 was the mass importation of parasite carriers into China (Taiwan) from abroad. Some 5000 Chinese were evacuated from the Burma-Thailand border.
areas to Taiwan early in 1961, and 506 parasite carriers were found among them on arrival. At the present stage of the eradication programme, this large number of parasite carriers constitutes a great threat to the success of the final eradication of the disease from Taiwan: however, well-planned surveillance measures and their strict enforcement on immigrants have prevented spread of the disease.

The blood-slide examination rate per year in the consolidation areas in China (Taiwan), North Borneo and Sarawak reached over 10 per cent. of the population. More slides are collected by active case-detection methods than by passive case-detection, the former probably producing more than three-quarters of the total number of slides collected in 1961.

In several malaria eradication programmes, such as those in China (Taiwan), North Borneo and Sarawak, radical treatment is given to all confirmed cases of malaria. The drug scheme adopted in many projects in the Region is three days’ treatment with chloroquine, followed by administration of primaquine for fourteen days for the treatment of P. vivax and P. malariae patients, and three days’ chloroquine plus five days’ primaquine administration for the treatment of P. falciparum malaria. The results obtained in Taiwan with the above-mentioned treatment scheme have proved to be very satisfactory. In general, single doses of 4-aminoquinolines are given for presumptive treatment. The use of combined drugs, such as chloroquine-pyrimethamine, is also followed in certain projects (Sarawak). As an emergency measure in foci of residual transmission discovered in areas in the consolidation phase in China (Taiwan), in addition to residual indoor spraying mass drug administration is applied to the entire population living in the focus area. Here also, the combination of chloroquine and pyrimethamine is used; the adult dose, given either monthly or fortnightly, is 450-600 mg of chloroquine and 50 mg of pyrimethamine.

In Netherlands New Guinea, a special drug scheme was carried out on an experimental scale in a selected area with a population of about 6000 where transmission was particularly intense. Antimalarial drugs were given weekly for five weeks as follows: first week—adult dose of 450 mg of chloroquine plus 50 mg of pyrimethamine; second to fourth weeks—450 mg of chloroquine only each week; fifth week—as first week. Assessment of results indicated a decline in parasite rates, although transmission could not be stopped.

Trials with medicated salt are being carried out in two countries in the Region—Cambodia and Netherlands New Guinea. In Cambodia the project covers a population of 20,000 in the Battambang area. In Netherlands New Guinea the medicated salt project is being conducted in four different localities with a total population of about 10,000.

12.6.4 Co-ordination

The Second Inter-territorial Malaria Conference for the South-West Pacific was held in Hollandia, Netherlands New Guinea, from 31 July to 5 August 1961. It was attended by representatives of Netherlands New Guinea, Papua and New Guinea, British Solomon Islands and the WHO Regional Office for the Western Pacific. The New Hebrides Condominium was not represented.

The Fifth Meeting of the Antimalaria Co-ordination Board took place in Phnom Penh, Cambodia, from 12 to 15 December 1961. It was attended by representatives of Burma, Cambodia, the Federation of Malaya, Laos and the Republic of Viet-Nam. Thailand was not represented. The meeting was also attended by WHO staff members from the Regional Offices for South-East Asia and for the Western Pacific, and by malaria field staff assigned to Cambodia, the Federation of Malaya and the Republic of Viet-Nam.

A WHO malariologist, stationed in Saigon, was originally assigned full-time to the position of secretary of the Board. However, with the increase in the number of WHO staff in the countries on the Board and in the Regional Offices for South-East Asia and for the Western Pacific, it is felt that the services of a full-time secretary will no longer be required, and the post will be disestablished in 1962.
## Appendix

**TABLE J. DETAILED STATUS OF MALARIA ERADICATION AS AT 31 DECEMBER 1961**

### AFRICAN REGION

*(population in thousands)*

<table>
<thead>
<tr>
<th>Country or territory</th>
<th>Total population</th>
<th>Population in areas</th>
<th>with eradication programme in</th>
<th>Other antimalaria programmes in operation</th>
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<td>attack phase</td>
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a Provisional mid-1961 estimate.
b Supplied by government.
c 1959 estimate.
d 1960 estimate or census.
e 1956 estimate.
f 1958 estimate.

1 Since the terms "preparatory", "attack" and "consolidation" are applied specifically to malaria eradication programmes, the figures shown in the relevant parts of this table do not include the antimalaria activities, often considerable, of those countries and territories in which eradication programmes as such have not yet been implemented.

The population figures in the second column are based on the best information available at the time the table was prepared, but some are estimates of questionable reliability.
<table>
<thead>
<tr>
<th>Country or territory</th>
<th>Total population</th>
<th>where malaria never indigenous or disappeared without specific antimalaria measures</th>
<th>where eradication claimed (maintenance phase)</th>
<th>with eradication programme in</th>
<th>Other antimalaria programmes in operation</th>
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<td>attack phase</td>
<td>prepara-</td>
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<td></td>
<td>tory phase</td>
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1 Mid-1961 estimate, unless otherwise indicated.
2 The distribution of the population among areas in the attack phase, etc., reflects the status of malaria eradication as at 30 September 1961.
3 Mid-1960 estimate.
4 Mid-1959 estimate.
5 Spraying is suspended in some areas in large cities, which are not considered as being in the consolidation phase.
6 135,000 protected during three months, included under preparatory phase.
7 4,771,271 in area from which malaria has been eradicated, registered with the Pan American Health Organization.
8 Figure included in attack phase.
9 Not applicable or none.
### SOUTH-EAST ASIA REGION

*(population in thousands)*

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<th>Country or territory</th>
<th>Total population</th>
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| Totals                       | 616 222          | 45 463 | 570 759 | 1 427 | 6 646 | 501 322 | 20 870 | 538 838 | 40 494 | — |

* a 1960 estimate.
* b 1959 estimate.
* c 1961 estimate or census.
* d Including population of large urban areas (1 471 000) where no spraying is undertaken.
* e Stated to be under maintenance; no case-detection carried out.

FRP = Field research project.
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1 1959 estimate, unless otherwise indicated.

a Latest 1961 figure supplied by government.

b 1960 estimate.

c Excluding the Byelorussian SSR and the Ukrainian SSR, which are tabulated separately.

- = Not applicable or none.
PES = Pre-eradication survey.
PEP = Pre-eradication programme.
## EASTERN MEDITERRANEAN REGION

*population in thousands*

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<th>Country or territory</th>
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<th>Population in areas where malaria never indigenous or disappeared without specific antimalaria measures</th>
<th>Population in areas which were originally malarious</th>
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--- = Not applicable or none.

PEP = Pre-eradication programme.

PES = Pre-eradication survey.

a 1959 estimate.
b 1960 estimate or census.
c 1961 estimate or census.
## WESTERN PACIFIC REGION
(population in thousands)

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<th>which were originally malarious</th>
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No information has been received for the following countries, with a total population of 6,947,220,000: China (mainland), North Korea, North Viet-Nam and Mongolia (which was assigned to the South-East Asia Region by the Fifteenth World Health Assembly).

1 1959 estimate, unless otherwise indicated.
a 1961 estimate or census.
b 1960 estimate or census.
* Under 500.

= Not applicable or none.
PP = Pilot project.
PEP = Pre-eradication programme.
FRP = Field research project.
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a Date of the start of a control programme that resulted in interruption of transmission in the Provinces of Santiago del Estero, Tucumán, Catamarca, La Rioja, Córdoba, San Juan and San Luis, which are now in the maintenance or consolidation phases. Attack by total coverage with insecticides was begun in the remaining malarious areas in August 1959.

b The first areas in the consolidation and maintenance phase are the result of the former control programme, before 1959.

c Attack with DDT began in 1959.
d Part of the country reverted to the preparatory phase in 1960 and 1961.
e Malaria reimported and new attack began in 1954.
f Attack with DDT began in 1958.
g Former programme suspended; new programme being planned.
h In 1961, an area of 407 945 km² was entered in the register of areas where malaria has been eradicated.
i Since the inception of the eradication programme in 1958, there has been no case of malaria in Tobago; malaria is now considered eradicated from Tobago.
<table>
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\[ j \text{ Date of beginning of phase in first area.} \]
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