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TECHNICAL ASSISTANCE ACTIVITIES
OF THE WORLD METEOROLOGICAL ORGANIZATION
IN AFRICA

# TECHNICAL ASSISTANCE ACTIVITIES OF THE WORLD METEOROLOGICAL ORGANIZATION IN AFRICA

1. The WMO Programme in Africa under EPTA is shown in Annexes I and II.

Annex I comprises projects executed in 1%1; Annex II, those which will probably be carried out in 1%2. Each is divided into two parts: experts - fellowship holders. All the projects indicated were drawn up at the request of the Governments concerned.

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- WMO activities in Congo (Leopoldville) are shown in Annex III which is an extract from the draft WMO Annual Report for 1%1. There were 18 experts in 1%1 and there will probably be more in 1%2. Training was one of the main concerns of WMO in the Congo. Six fellowship holders returned from Europe in 1%1 after completing their studies. It is proposed to send a larger number abroad in 1%2. The on-site finishing courses continued. A forecasters' school was set up. Fourteen pupils were admitted to this school after a competition comprising more than 160 candidates. The courses and field-work should come to an end at the close of 1%2. A new course of the same type is envisaged for 1%2. Two instructors devote all their time to training and other experts, who have other main commitments, give part-time assistance.
- 3. The UN Programme in Africa comprised a considerable number of OPEX posts. WMO cooperated in this programme through seeking relevant specialists: experts in general meteorology for Sudan and East Africa, a forecaster for Nigeria, a person to be in charge of aeronautical meteorology in Libya and a Head of Meteorological Service for Togo.
- 4. WMO continues to collaborate with ICAO in meteorological training in order to carry out ICAO Special Fund Projects pertaining to the Tunis and Casablanca centres. It is also to be noted that, in connexion with ICAO Special Fund projects concerning Africa, joint ICAO/WMO training seminars on forecasting for operations of turbine-engined aircraft were organized in Cairo and in Nicosia, to mention only two places; WMO made the technical preparations, while ICAO was responsible for the administrative and financial arrangements. Meteorologists designated by several African countries attended these seminars.
- Pursuant to the directives of the WMO Executive Committee, plans are being elaborated on meteorological training in Africa and on the future WMO training programme. An expert, highly qualified and experienced in the field of meteorological training, was instructed to prepare overall plans on WMO's responsibilities in this field. These plans will be submitted to the appropriate bodies in WMO. It is to be noted in this connexion that the WMO Executive Committee realized that the long-term solution of the training problem, especially in Africa, will require financial resources which extend far beyond the present technical assistance programmes. WMO should play its full rôle in the joint studies which are being made by the United Nations and specialized agencies concerned with this problem and in any new programmes for large-scale training which may be developed.

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Future planning. WMO wishes to do anything in its power to spread meteorological training in Africa. In particular, one or more regional training centres should be set up in Africa.

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ANNEX I.

**E/CN.14/157**Annex I

# WMO TECHNICAL ASSISTANCE TO AFRICA AS IMPLEMENTED IN 1961

# EXPERTS

Country	Project	Duration	Remarks
BRITISH EAST AFRICA	Application of Meteorology to Locust Control	4 months	(\$4,000 for final report)
GUINEA	Met. Adviser and Instructor	2 months	
LIBYA	Meteorological Adviser	12 months	
MOROCCO	Training of Meteorological Assistants	12 months	
NIGERIA	Meteorological Training (2 experts)	each 6 months	will continue through 1962
SUDAN	Meteorological Instruments	3 months	will continue through 1962
TUNISIA	Meteorological Instructor	12 months	(\$4,600 for equipment)
U.A.R.	Meteorological Instruments	6 months	en e
UPPER VOLTA	Wind power utilization	2 months	(\$2,225 for equipment)

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# WMO TECHNICAL ASSISTANCE TO AFRICA FELLOWSHIPS AWARDED UNDER 1961 PROGRAMME

Country	Project	No./Man Mos.	Status
CAMEROUN	Meteorology	1/12 1/10	authorized under Contingency
CONGO (Brazzaville)	Meteorology	1/12 1/10	·
DAHOMEY	Meteorology	2/48	
MADAGASCAR	Meteorology	1/11	authorized under Contingency
MALI	Meteorology	2/24	
NIGER	Meteorology	2/20	
SENEGAL	Meteorology	2/2 <b>4</b> 1/10	authorized under Contingency

# ANNEX II. WMO TECHNICAL ASSISTANCE TO AFRICA

# EXPERTS PLANNED FOR 1962

Country	Project	Duration	Remarks
BRITISH EAST AFRICA	Hydrometeorologist) preparatory Hydrologist ) survey Lake Victori	3 months 3 months	authorized under Contingency
CENTRAL AFRICAN REPUBLIS	Climatology	12 months	authorized under Contingency
DAHOMEY	Meteorological Equipment	1 month	(\$10,000 for equipment)
ETHIOPIA	Meteorological Adviser Aerological Instruments	12 months 6 months	authorized under Contingency
GHANA	Meteorological Training	12 months	(6 months of which authorized under Contingency)
GUINEA	Radiosonde	2 months	,
LIBYA	Meteorological Adviser	12 months	present expert expected to continue
NIGERIA	Meteorological Training (2 experts)	12 months	authorized under Contingency present experts expected to continue
SUDAN	Meteorological Instruments	12 months	present expert will continue
TUNISIA	Meteorological Training	12 months	present expert expected to continue (\$5,200 for equipment)
	Agricultural Meteorological Adviser	3 months	authorized under Contingency (\$1,000 for equipment)
U.A.R.	Meteorological Instruments	6 months	• •

# WMO TECHNICAL ASSISTANCE TO AFRICA

# FELLOWSHIPS PLANNED FOR 1962

Country	Project	No./Man Mos.	Status
CAMEROUN	Meteorology	1/6	continuation of a 1961 fellowship authorized under Contingency
CENTRAL AFRICAN REPUBLIC	Meteorology	1/11	authorized under Contingency
CONGO(Brazzaville)	Meteorology	1/12 1/12	continuation of a 1961 fellowship
ETHIOPIA	Hydrometeorology	1/10	
IVORY COAST	Meteorology	4/48	
LIBYA	Meteorology	1/12	
MADAGASCAR	Meteorology	2/48	authorized under
MALI	Meteorology	2/12 1/12	Contingency continuation of 1961 fellowships
NIGER	Meteorology	2/24	
BENEGAL	Meteorology	2/24	continuation of 1961 fellowships authorized under Contingency
SUDAN	Application of Electronics to Meteorology	1/12	mireon consumptioned
U.A.R.	High Level Forecasting	6/30	(6 fellowships of 5 months each)
UPPER VOLTA	Meteorology	4/48	) Wolfollo edottà

### ANNEX III

5.3

ASSISTANCE TO THE CONGO (Leopoldville)

5.3.1

# Introduction

In 1960, WMO had taken, at the request of the Secretary-General of the United Nations, urgent steps to collaborate in the UN Assistance Programme in the Congo. In 1961, this collaboration was continued and extended in various ways. Experts were supplied to the Congo Meteorological Service; service was provided to aviation; Congolese citizens received professional training. These various forms of assistance, as set forth in the paragraphs below, required the simultaneous presence in the Congo of 16 experts from ten Member countries of WMO: Denmark, France, Ireland, Italy, Lebanon, Mauritius, Spain, Switzerland, Tunisia and the United Kingdom.

The experts were placed under the authority of the Senior Representative of WMO at Leopoldville who acts as liaison officer between the UN Mission in the Congo and the Congolese authorities in regard to meteorological matters.

5.3.2

# Expert missions

The Senior Representative of WMO also provided technical advice to the Congolese Administrative Director of the Meteorological and Geophysical Service. Another expert was especially appointed to study the problems involved in maintaining and putting into order the observing network. A third expert dealt with synoptic meteorology and meteorological telecommunications.

5.3.3

### Service to aviation

Eleven experts recruited by WMO took direct charge of operational work - notably, forecasting - in order to ensure the safety of aviation. Nine worked at the Leopoldville airport (N'Djili) and two at Stanleyville airport. The number of flights for which service was provided by the N'Djili centre was, at an average, above 700 per month.

5.3.4

### Training programme

Six fellowship holders studied in Europe during 1961. Four studied the protection of aviation in France. A fifth studied upper air observing techniques in Germany. The sixth specialized in solar radiation in Switzerland. They all returned to the Congolese Meteorological Service to be employed according to their qualifications. The first four were assigned to the N'Djili Centre in order to acquire practical experience in local forecasting.

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A forecasters' school began its work at the Binza Meteorological Institute. Fourteen pupils are attending its courses. Some of them, lacking adequate basic training, had previously attended preparatory courses especially organized for them. Two instructors were especially assigned to the school; other experts give part—time assistance according to their qualifications.

5.3.5

# Future planning

It is hoped that the number of experts in service can be appreciably increased during 1%2. An expert on geophysics is required for helping the Congolese Service to resume its activities in this important branch, which were slowed down due to local events, mainly in the fields of gravimetry and seismology. Additional forecasters will increase the safety of aviation over the entire territory of the Congo.

Professional training will continue. The theoretical courses and the field work of the first pupils of the Binza forecasters' school will come to an end at the close of 1962. During that year, a like course will commence and then come to an end at the close of 1963. It is proposed to grant fellowships for study abroad. Schools for observers should soon be set up in several places.

All these measures will enable the Congo to maintain and develop its meteorological activities while, at the same time, gradually preparing to take on the full responsibility at a later date.