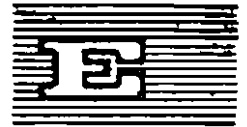


UNITED NATIONS
ECONOMIC
AND
SOCIAL COUNCIL



52504

Distr.
LIMITED



E/CN.14/CAS.5/13
4 November 1967

ENGLISH
Original : FRENCH

ECONOMIC COMMISSION FOR AFRICA
Fifth Conference of African Statisticians
Addis-Ababa, 30 October - 10 November 1967

PRELIMINARY REPORT ON THE STATISTICAL MANPOWER SURVEY
OF AFRICA, 1966

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At the Third Conference of African Statisticians, the ECA secretariat was requested to produce detailed information on the present statistical manpower situation in the Region so that training facilities might be properly adapted to the countries' requirements.

A manpower survey of statistical offices in Africa was carried out between April and June, 1965. Information was collected from the Central Statistical Offices and Government departments on personnel strength, the number of persons to be trained and the 1965-1970 recruitment programme.

At the Fourth Conference of African Statisticians, the secretariat was requested to undertake a more thorough survey which would cover both the public and private sectors and indicate the training needs in each type of specialization. This survey was carried out in 1966 and covered statistical offices in the public and private sectors as well as educational and research institutions. The questionnaire consisted of two parts:

- A series of three tables: one table for the total staff by category; another for the number of persons in training or to be trained; and a third for the budgetary provisions of the last three financial years; and,
- A list of professional and executive class statisticians with detailed information on each person.

As all the data collected have not yet been processed, this preliminary report has been written to state briefly the statistical manpower situation in the countries covered by the survey.

The survey was carried out with the collaboration of the central statistical offices, which received the questionnaires, distributed them to the agencies concerned, and then collected and returned the completed forms to the ECA secretariat.

Table Ie - Personnel of Central Statistical Offices of
English speaking countries - 1966 inquiry.

Country		Professional		Executive (Middle level)		Clerical
		Nation- al	Expat- riate	Nation- al	Expat- riate	
North Africa	Libya	2	..	21	-	86
	Sudan	8	..	50	..	82
East Africa	Botswana	-	..	..	..	..
	EACSO	2	2	10	3	26
	Ethiopia	9	..	23	-	66
	Kenya	9	6	29	-	116
	Lesotho	3	1	2	-	9
	Malawi	-	2	..	-	34
	Mauritius	4	-	8	-	15
	Somalia	2	1	21	-	(15)
	Rhodesia	..	..	..	..	..
	Swaziland	1	-	-	-	3
	Tanzania	2	4	17	-	7
	Uganda	2	2	9	-	12
Zambia	1	12	21	5	52	
West Africa	Gambia	-	..	1	..	1
	Ghana	30	3	33	1	515
	Liberia	9	2	11	-	65
	Nigeria	29	1	74	-	740
	Sierra Leone	6	-	6	-	6
Total		119	36	336	9	1,850

In comparison with the 1965 survey, the separation of personnel into upper-level, middle-level and clerical categories is increasingly pronounced; considerable progress and efforts were made by some offices in collecting information, but several questionnaires are still incomplete while some five countries have not yet responded.

In some cases, it has been possible to supplement these data by information from other sources such as the survey made by the European Economic Community on conditions of service offered to statisticians in Africa.

Although these provisional results cover most of the African countries that are members of ECA, the United Arab Republic and the Republic of South Africa are not included.

Thus, this preliminary report has been prepared for the countries mentioned, i.e., those for whom information has been collected. At this stage, an extrapolation for the whole Region has not been attempted, since the data for the UAR, where personnel strength is the greatest, have not yet been obtained.

In presenting the results, the countries have been grouped by sub-region and language, to facilitate conclusions on the training of statistical personnel. Thus the data have been subdivided into English-speaking and French-speaking countries, except for those on budgetary provisions in which case all the countries have been grouped together.

Although the questionnaire did not include any information on executive class training, some figures have been collected for the French-speaking countries of the Central and West African sub-regions. In the survey, special attention was given to the training of professional statisticians; information was collected on this topic and, in some cases, estimates were made.

Only one year has passed between the 1965 and 1966 surveys and there have been no great changes; however, in addition to the government departments, other agencies have been surveyed.

Table If - Personnel of Central Statistical Offices of
French speaking countries - 1966 inquiry.

Country		Professional		Executive (middle-level)		Clerical
		National	Expat- riate	National	Expat- riate	
North Africa	Algeria	11	2	43		
	Marocco	15	8	24	3	106
	Tunisia	26	-	21	-	100
East Africa	Madagascar	12	5	9	-	80
West Africa	Dahomey	4	-	13	-	5
	Guinea	(3)	..	..	..	..
	Ivory Coast	(5)	..	..	..	..
	Mali	(5)	..	(18)	..	..
	Mauritania	-	2	1	-	2
	Niger	2	..	2	..	6
	Senegal	3	3	5	..	15
	Togo	3	2	5	-	19
Upper Volta	2	2	18	1	43	
Central Africa	Burundi	3		2	2	20
	Cameroon	10	4	13	..	27
	Central Africa	-	-	7	1	11
	Chad	-	..	1	..	1
	Congo-Brazzaville	2	2	7	1	3
	Congo-Kinshasa	1	1	14	..	27
	Gabon	-	1	2	..	12
Rwanda	1	..	3	..	(20)	
	Total	108	32	208	8	487

In 1965, almost 3,000 people were enumerated, within the government departments, including 257 upper-level, 637 middle-level and 2,104 clerical staff. In 1966, the total staff of the government departments surveyed was:

295 professional statisticians
561 executive class
2,537 clerical staff

Inevitably, fewer executive personnel were enumerated in 1966 since the figures for Botswana, Malawi, Rhodesia, Guinea and the Ivory Coast were lacking and the distinction between the executive class and the clerical staff was not always clearly made in the 1965 survey.

In 1966, the total personnel of the Central Statistical Offices surveyed was divided as follows:

295 professional statisticians, including 227 nationals and 68 expatriates;
561 executive class personnel including 544 nationals and 17 expatriates; and 2,537 clerical personnel.

Partly to replace the expatriates but more to provide adequate numbers of staff, the following training targets have been fixed for the Central offices between 1966 and 1970:

774 upper-level staff 316 of whom would be English-speaking and 458 French-speaking; and 1,481 middle-level, of whom 579 English-speaking and 902 French-speaking.

Provided there is no lack of applicants and that these plans are carried out, there will be a total of 3,026 persons in these offices around 1970:

1,001 upper-level staff, including 435 English-speaking personnel and 566 French-speaking personnel; and
2,025 middle-level staff, 915 of whom will be English-speaking and 1,110 French-speaking.

Table II Statistical personnel other than in Central
Statistical Offices, 1966 inquiry

Country		Professional		Executive (middle level)		Clerical
		national	expat- riate	nation- al	expat- riate	
North Africa	Libya	-	1	20	-	60
	Sudan	6	4	10	-	68
East Africa	Ethiopia	13	2	39	-	26
	Somalia	2	1	10	-	5
	Tanzania	-	-	3	1	-
	Uganda	..	..	..	..	20
West Africa	Gambia	-	-	1	-	1
	Ghana	21	8	13	-	230
	Nigeria	4	3	5	-	43
	Sierra Leone	2	1	2	-	4
Total, English speaking countries		48	20	103	1	457
North Africa	Algeria	-	-	2	-	10
	Morocco	13	5	3	-	60
	Tunisia	2	-	18	-	4
West Africa	Dahomey	1	-	-	-	..
	Mauritania	-	..	1	..	2
	Togo	1	..	7	-	..
Central Africa	Burundi	2	-	-	-	13
	Cameroun	2	-	18	-	16
	Congo-Brazzaville	-	1	5	-	1
	Rwanda	..	..	..	..	(10)
Total, French speaking countries		21	6	54	-	116
Total all countries		69	26	157	1	573

Table III Personnel of Central Statistical Offices and other organisations - 1966 inquiry

Country	Professional		Executive (middle level)		Clerical
	nation- al	expat- riate	nation- al	expat- riate	
Total English speaking countries	167	56	439	10	2307
of which: North Africa	16	5	101	-	296
East Africa	50	33	192	9	406
West Africa	101	18	146	1	1605
Total French speaking countries	129	38	262	8	603
of which: North Africa	67	15	111	3	280
East Africa	12	5	9	-	80
West Africa	29	9	70	1	92
Central Africa	21	9	72	4	151
Total all countries	296	94	701	18	2910

The 1966 survey enumerated, 253 persons outside the central offices, who had received statistical training, viz.:

95 upper-level staff, comprising 69 nationals and 26 expatriates;
158 middle-level staff, including only one expatriate.

These figures deserve particular attention because the private sector in Africa has not yet reached a stage of development that calls for a large number of statistical staff, and also because this survey is considered to have covered only some of the establishments in the region.

In the absence of estimates for the establishments that were not surveyed and forecasts for staff increases by 1970 for those that did reply to the questionnaire, it is to be assumed that the figures of 95 upper-level and 158 middle-level staff outside the central statistical offices will represent the minimum strength around 1970.

Table IVe Professional Statisticians to be trained (1966/70) for
Central Statistical Offices of English speaking countries
1966 inquiry

Country		1965 inquiry Persons to be trained 1966/70	1966 inquiry Persons to be trained 1966/70	National and expat of CSOs in post in 1966	Estimates		
					Require- ments 1966/70	under train- ing in 1966	to be train- ed 1967/ 1970
North Africa	Libya	20	19	2	19	3	16
	Sudan	54	..	8	54	-	54
East Africa	Botswana	..	..	..	..	..	..
	EACSO	6	22	4	22	4	18
	Ethiopia	6	9	9	9	5	4
	Kenya	36	3	15	3	-	3
	Lesotho	1	3	4	3	2	1
	Malawi	16	..	2	16	-	16
	Mauritius	..	..	4	..	..	..
	Somalia	..	..	3	..	..	..
	Rhodesia	10	..	..	10	-	10
	Swaziland	..	9	1	9	2	7
	Tanzania	7	..	6	7	-	7
	Uganda	43	..	4	43	-	43
Zambia	..	2	13	2	2	-	
West Africa	Gambia	..	..	-	..	..	..
	Ghana	49	24	33	24	13	11
	Liberia	..	12	11	12	8	4
	Nigeria	23	55	30	55	23	32
	Sierra Leone	..	8	6	8	8	-
	Total	271	166	155	296	70	226
	Botswana, Gambia, Mauritius and Somalia				20	..	20
	Total				316	70	246

Therefore, in 1970, there will be a minimum of:

- 1,096 professional class;
- 2,183 executive class;
- and 3,110 clerical class personnel;

at least in the countries covered by this survey.

Taking this figure of about 6,400 persons as a minimum target for 1970, and in the expectation that the data to be collected in the next few years will make it clearer what are the present strengths and the desired targets, it is now possible to consider a middle-term training programme to satisfy personnel needs from now until 1970, by country, and a long-term programme to replace serving statistical staff.

From 1966 to 1970, 774 upper-level staff should be trained, i.e., 316 English- and 458 French-speaking, or, over a period of four years, classes of new students or graduates totalling 194 annually, comprising 79 English- and 115 French-speaking persons. In 1966, 242 persons were undergoing training for professional diplomas, i.e., 70 English- and 172 French-speaking, but it has not been possible to break these down by year of study through lack of detailed information. Apparently, the current programme is to be maintained and even stepped up so that the 1970 targets can be achieved.

On the assumption that, once these targets are met, the services covered by the survey will have reached their optimum strength, only 35-45 upper-level staff (20 English- and 25 French-speaking) will be needed each year to replace inevitable losses and retirements.

With regard to executive personnel, 1,481 persons should be trained from 1960 to 1970 - 579 English- and 902 French-speaking. In the French-speaking countries of the Central and West African Sub-regions for which details have been obtained, 443 middle-level staff should be trained by 1970, i.e., about 110 new trainees each year, or 48 for West and 62 for Central Africa. In 1966, the Abidjan and Yaoundé training centres together had 53 West African and 69 Central African trainees, a total of 122 persons. As the course for statistical officers lasts two years and there should be

Table IVf Professional Statisticians to be trained (1966/70) for
Central Statistical Offices of French speaking countries
1966 inquiry

Country		1965 inquiry Persons to be trained 1966/70	1966 inquiry Persons to be trained 1966/70	National and expat. of CSOs in post in 1966	Estimates		
					Require- ments 1966/70	Under train- ing in 1966	To be train- ed 1967/ 1970
North Africa	Algeria	70	..	13	70	(23)	47
	Morocco	124	..	23	124	(52)	72
	Tunisia	35	..	26	35	(2)	33
East Africa	Madagascar	19	..	17	26	20	6
West Africa	Dahomey	10	5	4	5	2	3
	Guinea	..	..	(3)	..	(11)	..
	Ivory Coast	..	..	(5)	..	(16)	..
	Mali	..	..	(5)	20	(8)	(12)
	Mauritania	11	..	2	11	(2)	9
	Niger	6	..	2	3	..	3
	Senegal	..	..	6	12	6	6
	Togo Upper Volta	11 6	7 14	5 4	16 14	8 2	8 12
Central Africa	Burundi	..	..	3	..	..	..
	Cameroon	15	16	14	16	16	..
	Central Africa	10	..	-	7	1	6
	Chad	6	..	-	6	-	6
	Congo-Brazzaville	3	..	4	4	1	3
	Congo-Kinshasa	33	..	2	33	..	33
	Gabon	4	3	1	7	-	7
	Rwanda	..	..	1	7	2	5
Total		363	45	140	416	172	274
Guinea, Ivory Coast and Burundi					40	..	13
Total					456	172	287

Table Vf Middle level statistical personnel to be trained(1966/70) for French speaking countries of West African
and Central African sub-regions

Country		1966 inquiry persons to be trained 1966/70	National and expat. of CSOs in post in 1966	Estimates		
				Require- ments 1966/70	Under train- ing in 1966	to be trained 1967/70
West Africa	Dahomey	11	13	11	4	7
	Guinea	..	..	..	-	..
	Ivory Coast	..	..	..	(7)	..
	Mali	23	(18)	23	6	17
	Mauritania	..	1	..	(2)	..
	Niger	..	2	..	(3)	..
	Senegal	50	5	50	15	35
	Togo	15	5	19	4	15
	Upper Volta	..	19	..	(10)	..
Central Africa	Burundi	..	4	..	(1)	..
	Cameroon	..	13	..	(27)	..
	Central Africa	31	8	31	3	28
	Chad	..	1	..	(4)	..
	Congo-Brazzaville	14	8	14	9	5
	Congo-Kinshasa	..	14	..	(11)	..
	Gabon	35	2	35	3	32
	Rwanda	90	3	90	11	79
Total		269	116	273	120	218
Guinea, Ivory Coast, Mauritania, Niger and Upper Volta				90	..	68
Burundi, Cameroon, Chad and Congo-Kinshasa				80	..	37
Total				443	120	323

30 trainee statistical officers in each class of 110 trainees, it is necessary to have 140 persons under training if the needs of executive class personnel expressed by the French-speaking countries of these two sub-regions are to be satisfied by 1970.

Once the target of 2,025 executive class personnel for all the countries surveyed has been achieved, 35 additional English-speaking and 45 additional French-speaking trainees, i.e., 80 more persons, will have to complete their training annually to maintain the strength at that level. However, by that time, needs are sure to be better known, the offices will have higher targets and these figures will no longer be appropriate.

From the data collected in this survey, differences in personnel structure may be seen from one country to another. For example, taking the countries covered as a whole, the ratio of upper-level to middle-level staff is 1:2 and that of middle-level to clerical staff is 1:4. In the English-speaking countries, the ratio of upper-level to middle-level staff, is 2:5 and that of middle-level to clerical is 1:5, while in the French-speaking countries, the respective ratios are 2:3 and 2:5.

The structure varies according as to whether the central office has staff permanently in the field or not; thus, this structure reflects the stage of development of statistical activities that has been attained in the country in question and is linked to the difficulty experienced by some offices in finding applicants who meet the enrolment requirements of statistical training centres.

The survey questionnaire also covered budgetary provisions for the years 1964-1966. Taking the countries surveyed together, expenditure on statistical work within and outside the central offices rose from \$6.20 million in 1964-65 to \$8.02 million in 1965/66 and \$10.93 million in 1966-67.

As the figures in Table VI indicate, some countries that usually make limited allocations, because they have limited staff, occasionally make large appropriations, which probably correspond to large-scale national

Table VI Budgetary provisions (1964/67) for Statistical Offices
reported in the 1966 inquiry

unit: US \$ 1,000

Country		1964/65	1965/66	1966/67 (Allocated or forecast)
North Africa	Algeria	638.7	778.7	1,292.4
	Libya	808.3	289.6	262.2
	Sudan	610.3	783.9	1,038.9
	Tunisia	265.7	287.8	441.5
East Africa	EACSO	99.1	131.0	135.7
	Ethiopia	171.0	416.4	660.3
	Kenya	226.8	308.0	308.0
	Lesotho	15.0	72.9	167.8
	Madagascar	..	626.3	855.3
	Mauritius	57.8	71.0	72.7
	Swaziland	..	19.6	117.0
	Tanzania	80.1	128.5	312.6
	Zambia	1.6	78.8	364.3
West Africa	Dahomey	138.3	191.7	49.3
	Ghana	1,329.0	1,405.7	1,964.7
	Liberia	202.7	197.3	214.3
	Mauritania	..	94.0	133.3
	Nigeria	1,005.2	1,355.2	1,517.6
	Sierra Leone	35.9	603.7	522.6
	Togo	102.6	116.2	125.0
	Upper Volta	137.2	67.0	59.5
Central Africa	Burundi	75.0	58.2	60.6
	Cameroon	137.7	160.8	143.7
	Central Africa	16.9	21.6	28.1
	Congo-Brazzaville	37.5	45.5	54.3
	Gabon	2.4	66.8	28.4
Total		6,204.8	8,025.5	10,930.1

surveys, while in countries where the national offices have almost reached their optimum size, appropriations are constant at a high level.

In conclusion, after this second survey, knowledge of statistical offices and manpower is much improved; however, further investigations and the continued co-operation of the central statistical offices are needed to confirm or correct the estimates and forecasts derived from the data that have now been collected.

- by 1970, the statistical staff of the countries surveyed in 1966 will be made up as follows:

1,096 upper-level staff (senior statisticians and statisticians);

2,183 middle-level staff (statistical officers and assistant statistical officers);

3,110 clerical staff;

- Training requirements will be:

Middle-term view: 774 upper-level staff at the rate of 194 a year (79 English- and 115 French-speaking), and 1,481 middle-level staff at the rate of 370 a year (145 English- and 225 French-speaking);

Long-term view, according to figures available now: 45 new upper-level staff needed each year (20 English- and 25 French-speaking), and 80 new middle-level staff (35 English- and 45 French-speaking) to maintain the 1970 strength, assuming a career lasting 25-30 years.

Of course, these estimates and forecasts are based on the data supplied by the central statistical offices; at the present stage, it should be pointed out that it will be necessary to take into account also, when the figures are well known, the daily increasing needs of the private sector and transfers of upper-level staff from government service; in fact, professional statisticians usually stay for less than 25-30 years in the central statistical offices.

Country

STAFF OF CENTRAL STATISTICAL SERVICE

(1) Number of personnel employed, November 1967

	Professional		Executive (middle level)		Clerical
	National	Expatriate	National	Expatriate	
Head Office:					
Statistics					
Data processing					
Administration, etc					
Branch offices					
Field organisation					
Total					

(2) Training of statistical personnel, 1967-72

Grade	Under training, Nov 1967		To begin training, 1968-72	
	Included in (1)	New Staff	Included in (1)	New Staff
Professionals				
Executive staff (middle level)				

(3) ARRANGEMENTS FOR NEXT POPULATION CENSUS

Probable date of census	
Total number of staff to be sent for training (5 weeks course)	

Proposed duties of persons to be sent for training
(indicate number in each category)

General census administration at sub-National level	Geographical and cartographical	Processing	Finances, supplies and transport	Other (specify)

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Branch offices					
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