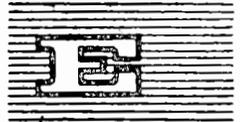


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Third Conference of African Statisticians  
Addis Ababa, 2 - 11 October 1963

REPORT ON  
STATISTICAL TRAINING CENTRES

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## STATISTICAL TRAINING CENTRES

1. The Statistical Training Centres established and/or assisted by the UN to meet the needs for training statisticians in Africa, will go into their third year of operation around the middle of October 1963. The following paragraphs will:

- a) recall the basic principles guiding the activities of the Secretariat in this field; and
- b) bring the picture up-to-date.

2. At both the First and Second Conferences of African Statisticians, training was recognized and emphasized as one of the principal factors determining the speed at which statistical services could be developed. It has been felt that intensive training programmes were required to cope with the situation characterized in many African countries by:

- a) ~~an~~ an urgent necessity to replace departing expatriate staff with local personnel;
- b) a general shortage of middle level, sub-professional statistical assistants; and
- c) a persistent need for rapid expansion of statistical services geared to meet the increasing demands for information required for economic development and planning.

3. The Conference of African Statisticians recommendations included basically the following:

- a) the creation of adequate facilities in Africa, on regional and sub-regional basis, for training statisticians at the professional and middle levels;
- b) The adaptation of the training to specific conditions prevailing in Africa;
- c) The co-ordination of training activities among the existing and newly established institutions, so as to avoid costly duplication of efforts;

- d) The standardization, in as far as possible of the levels of training throughout Africa, particularly in respect of mathematics and statistical methods at the middle level.

4. Acting on these recommendations, the Secretariat has set into motion machinery that led to the establishment, in co-operation with host governments, of three training Centres, at Achimota (Ghana), Addis Ababa (Ethiopia) and Yaoundé (Cameroun). It also made the necessary arrangements for the support of two national institutions, at Abidjan and Rabat. With the exception of the Rabat Institute, which offers a two year course at the professional level, these Centres cater to the need of training middle level of statistical assistants and provide for a one academic year course. The following tables show the enrollment at each of these Centres for the years 1961/62 and 1962/63.

<u>Country</u>	<u>Achimota Centre</u>	
	<u>Number of Trainees</u>	
	<u>1961/62</u>	<u>1962/63</u>
Ghana	15	12
Nigeria	4	8
Liberia	4	6
Sierra Leone	2	2
Gambia	-	1
Total	25	29

<u>Addis Ababa Centre</u>		
<u>Number of Trainees</u>		
<u>Country</u>	<u>1961/62</u>	<u>1962/63</u>
Ethiopia	7	7
UAR	5	3
Sudan	4	4
Libya	2	3
Basutoland	1	-
Total	19	17

<u>Yaoundé Centre</u>		
<u>Number of Trainees</u>		
<u>Country</u>	<u>1961/62</u>	<u>1962/63</u>
Cameroun	6	6
Congo-Leopoldville	4	6
Congo-Brazzaville	4	1
Central African Republic	3	-
Gabon	2	2
Chad	1	-
Dahomey	1	-
Togo	-	2
Mali	-	1
Niger	-	1
Total	21	19

<u>Country</u>	<u>Abidjan Centre</u>	
	<u>Number of Trainees</u>	
	<u>1961/62</u>	<u>1962/63</u>
Ivory Coast	4	10
Mali	6	4
Upper Volta	3	-
Togo	2	-
Mauritania	1	-
Guinea	-	16
Dahomey	-	2
Total	16	32

<u>Country</u>	<u>Rabat Centre</u>		
	<u>Number of Trainees</u>		
	<u>1963 Class</u>	<u>1964 Class</u>	<u>1962/63<sup>1/</sup></u>
Morocco	22	20	10
Tunisia	19	17	2
Algeria	-	-	13
Guinea	-	-	5
Cameroun	-	-	3
Mali	-	-	1
Total	41	37	34

5. Total enrollment at these five Centres has therefore increased from 122 trainees in the first year to 168 during the second year. To this should be added, to complete the picture, another 20 trainees following instruction at the Lagos national statistics training Centre. Similarly, the number

1/ First year students

2/ Second year students

of UN fellowships awarded for training at these Centres has been stepped up from about 60 in 1961-62 to 100 this year.

6. The pattern of UN-Government co-operation followed in establishing the three international Centres, (Achimota, Addis Ababa and Yaoundé) was simple, convenient and functional. The UN made provisions for the appointment of the directors of the Centres, for Library, laboratory equipment, field work, sundry expenses as well as for a number of fellowships. The UN further enlisted the co-operation of the Specialized Agencies, FAO, ILO, UNESCO and WHO, in delegating members of their field staff to deliver sets of lectures at the Centres in their specific fields of statistics. The host governments on their part provided in general for physical requirements of classrooms and hostel facilities, clerical and administrative staff, office equipment and part-time lecturers.

7. The structure of the training course in these Centres consists of three parts, i.e., basic courses, technical courses and laboratory and project work. Appendix I, attached, sets out details on these and the approved curriculum for the operative subjects.

8. A serious effort is made to relate the content of the training course to specific conditions in Africa. Practical applications for projects and field work are designed and implemented with a view to involving trainees in actual and detailed experience in the handling of common problems they are apt to meet in statistical operations.

9. The course is open to personnel of statistics offices and other government and semi-public bodies in Africa. Candidates proposed by their governments are accepted within the limits of available facilities when they qualify for the course, i.e., if they have reached the level of school leaving certificate with sufficient command of the language of instruction and basic knowledge in mathematics, and pass the admission tests and/or interviews set by the directors of the Centres.

10. The Abidjan Centre, though completely national from the administrative point of view, is being brought to conform, by the approval and efforts of the Ivory Coast authorities, to the standards that are being established at the other three Centres, especially so in respect to training in mathematics and statistics.

11. The course at the Rabat Centre offers, as mentioned before, a two academic years programme and aims at producing junior statisticians, (ingénieur des travaux statistiques). Its curriculum includes primarily mathematics, statistical methods, sampling theory, economics, rural economics, economics of under-developed countries, demography, national accounts, mecanoigraphy, economic geography, sociology, administration, accounting, agricultural and industrial technology and languages. Practical training and field work is provided for and emphasized through the duration of the course.

12. Trainees are selected on the basis of an entrance examination of the second baccalaureat in mathematics level or on the strength of higher academic qualifications. Physical and administrative arrangements are handled by the Moroccan Government. Technical staff is provided by the University of Rabat and Moroccan Government Departments including the "Service de la Statistique" (Statistical Office). The UN assistance consists of an appointment of a director of studies and a deputy director, part-time Technical Assistance lecturing and the award of fellowships to non-Moroccan trainees.

13. During the current year, the interest and assistance of some agencies has been enlisted to expand, on a bilateral basis, the availability of fellowships at some of the Centres. Thus, thirteen fellowships have been awarded by EEC and FAC for training at Yaoundé, and similarly assistance has been offered by EEC, FAC and USAID to other Centres.

14. With a view to clarifying and projecting policies relating to Statistical Training Centres, and acting in particular on recommendations of the Conference of African Statisticians in respect to co-ordination and standardization of Training Courses, the Secretariat convened during

the past year two sub-regional meetings of Heads of Statistical Offices, one for West and the other for North and East Africa. The results of discussions in these meetings are submitted to the Conference as document E/CN.14/220. In addition a meeting of all directors of the Centres was held in Addis Ababa in April this year for consultations with the Secretariat on the same topics. The report of this meeting is being submitted to the Conference as document E/CN.14/CAS.3/4.

15. It is felt that the training activities, through the launching of these Centres, have gone a long way towards meeting the major specific needs in the region. During their two years of operation, the Centres have functioned successfully in spite of various administrative and organizational difficulties relating to stages of initiation.

16. Encouraging as this effort may seem, the magnitude of needs will require that these Centres continue to operate for at least four or five years, and that additional facilities be established as and when they become required. On the basis of the present size of operation, which provides for the training of about 40 junior statisticians and 160 assistants every year, one would expect that, at the end of a five year period, a reasonable number of assistants would be trained; but the number of professionals would be still below requirements. At its fifth session in Leopodville the Commission stressed the need to continue the vital function performed by the statistical training centres and recommended that the executive secretary should seek the expansion of these operations and arrange for the provision of more training facilities and fellowships.

APPENDIX I

Structure and Curriculum  
of Training Course  
at Middle-level Centres

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- A. Structure: The course is composed of the following three parts:
- a) Basic courses in English and/or French language, Mathematics and Principles of Economics, meant to refresh knowledge in these subjects and/or bring it up to the level required for pursuing instruction in the main part of the course;
  - b) Technical courses in Statistical methods, Statistical Organization and Procedures and Applied Statistics, geared to improve the level of knowledge and capabilities of sub-professional middle-grade assistants and to train them in handling the problems of collection and processing of statistical data required for social and economic policy-making;
  - c) Statistical Laboratory and Project work, consisting of drills on design of operations, budget planning, computation and presentation of data.
- B. Curriculum: The approved curriculum for the operative subjects includes the following:
- a) Mathematics: Revision of secondary school mathematics, logarithms, permutation and combinations, elementary probability, binomial theorem, sigma notation, co-ordinate geometry, graphs, elementary differential and integral calculus, rates, gradients limits of summations, areas, simple treatment of normal distribution;

- b) Statistical Methods: Attributes and variables, frequency distributions and curves, measures of central tendency, dispersion, regression and correlation, time series, index numbers, sampling techniques, accuracy and error.
- c) Statistical organization and procedures: Types of statistical systems, organization of a national statistics office, procedures for collection processing, presentation and analysis of data, organization and procedures used in field investigations.
- d) Applied Statistics National and international statistical standards, agricultural statistics, demographic, labour, wages and prices, industrial statistics, trade and transport, health, education, financial statistics, utilization and interpretation of statistics.