

UNITED NATIONS
ECONOMIC COMMISSION FOR AFRICA

REPORT ON A MISSION TO SUDAN
(20 January - 8 February 1983)

By

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Addis Ababa

This report is the sole responsibility of the writer. It has been submitted to the Department of Technical Co-operation, United Nations, which may alter or supplement these findings.

I. INTRODUCTION

1. Summary. The Director-General of Statistics (Census Coordinator) noted that census enumeration is to go ahead from 14 February 1983. It was realised by all concerned, however, that enumeration would not start in the Southern Region (and perhaps elsewhere) on that date as preparatory activities have not been finalised. But it was agreed that the census reference point (midnight 13/14 February) should be kept, even though enumeration would actually start later than this date in some places. Enumeration will therefore be a staggered affair, with each region starting when it is ready and finishing when complete. The Director-General and the Commissioner for Census (Southern Region) estimated that enumeration in the South would not begin before 15 March at the earliest. The provision of sufficient vehicles to undertake the enumeration in the South remains the critical issue.

2. Mission to Khartoum and Juba. The mission was undertaken with the concurrence of the Department of Statistics (Khartoum) and the Division of Statistics (Juba). It follows missions made in November 1980/January 1981, April 1981, November 1981, March/April 1982 and August/September 1982.

3. The schedule of the mission was:

20 January - Addis Ababa to Khartoum
25 January - Khartoum to Juba
3 February - Juba to Khartoum
8 February - Khartoum to Addis Ababa

4. The terms of reference may be defined as:

Khartoum : (a) to assess progress made in census cartographic preparations;

Juba: (a) to assess the state of the rural mapping and to assist where necessary;

(b) to assess preparatory activities for the enumeration of urban areas

(c) to note progress in setting up a census cartographic unit.

II. CONSULTATIONS

5. During the mission discussions were principally held with the persons whose names are given in Annex I.

III. BACKGROUND

6. Census date. The census starting date was changed from 1 to 14 February due to the annual conference of the Sudan Socialist Union being held in Khartoum in the first half of the month.

7. Operations room. An operation centre with Radio Telephone contact to the outer regions has been set up by the Army in the office of the Director-General.

8. Budget. The Director-General noted that sufficient funds for census preparatory activities had been distributed by the Central Government to the regions.

9. Census enumeration. The Ministry of Education (Khartoum) has pledged to the Director-General that sufficient school teachers will be made available for the enumeration. As Enumeration Areas and Supervisors Areas will only be defined in the field immediately prior to enumeration, the exact number required is not known. About 20,000 Enumerators and 4,000 Supervisors are being targeted for, including 4,750 Enumerators and 950 Supervisors for the Southern Region.

10. EA size. EA's and Nomadic Zones will consist of approximately the following number of households:

Urban - Long Questionnaire	200 Households
Rural Settled - Long Questionnaire	150 Households
Rural Settled - Short Questionnaire	300 Households
Nomadic Zones - Short Questionnaire	200 Households

11. Local Costs. Enumerators are to be paid Es. 75 (\$42) and Supervisors Es. 100 (\$56) each. The Commissioner for Census (Juba) noted that he planned to give one third of the payment beforehand to enable officials to meet immediate needs and the remainder on completion of their area. Payment would be subject to the receipt of all materials issued by Census Office.

12. Questionnaires and manuals. Census documents have been printed in Arabic and English, but distribution was still taking place during the mission. The Southern Region had not received sufficient questionnaires, training manuals, training guides, Enumerators Record of Visits etc., to enable the training programme to be undertaken as scheduled. An Army plane and the UNICEF aircraft were, however, helping with distribution to the South. El Obeid in Kordofan Region is the redistribution centre for Western Sudan.

13. Questionnaires have been made up into books as follows:

<u>Long questionnaire</u>	<u>Short questionnaire</u>
200 pages	300 pages
60 ,,	50 ,,
	12 ,,

14. The long questionnaire is being used in the urban areas, except for collective quarters (institutions). It is also being used in 5 per cent of private households in the rural settled areas. The 5 per cent samples are being selected in the Southern Region so as to include at least one Chiefs Area (the equivalent of a Village Council in the North) per Rural Council. The short questionnaire contains only the following particulars; name, relationship to head of household, sex and age. It will be used in the remaining 95 per cent of the rural settled areas and in the nomadic areas. The fact that 95 per cent of rural enumerators will only have to be trained to use the short questionnaire should make their training programme much easier to complete in a reasonable time.

15. A problem that may come up concerns distribution of Arabic and English questionnaires in the Southern Region. Census Office (Juba) noted that Arabic questionnaires would be distributed only to Bahr-el-Ghazal, Jonglei and Upper Nile Provinces, and English questionnaires only to Lakes and Eastern and Western Equatoria.

16. The UNICEF Statistical Survey Adviser thought that in some rural areas of Bahr-el-Ghazal and Jonglei it would be easier to recruit English-speaking enumerators than Arabic-speaking ones. It would be prudent, therefore, that some extra questionnaires of both languages be sent to all the province headquarters so that they can be redistributed locally if the need arises, otherwise difficulties of interpretation and translation may occur.

17. Training. The Director-General noted that the training programme in the North for census officials was proceeding satisfactorily. In the South, Area Council Inspectors and Rural Council Census Officers had been recruited, but training was progressing more slowly due to difficulties of communications and transport to the main training centres of Juba, Wau and Malakal. A fuller account of training aspects will be given by the ECA Regional Adviser in Demographic Statistics (Mr. E.A. Colecraft), who was conducting senior level training classes in Juba during the mission.

18. Vehicles. The highest level census committee, the National Coordinating Committee, held three important meetings on 4, 9 and 19 January in Khartoum. It was stressed that the most important outstanding need for the census was the provision of vehicles, without which the mobilisation of thousands of census officials would be impossible.

19. The government accordingly acted on the recommendation of the committee, and the Director-General noted with satisfaction that 300 vehicles had already been requisitioned or commandeered, and were immediately available to him, and that more were on their way.

20. Unfortunately neither the President of the High Executive Council of the Southern Region nor his representative was able to attend these meetings. This may explain why the provision of an adequate number of vehicles for census operations in the South remained unsolved.

21. A high-level meeting on 5 February in Khartoum between the First Vice-President the President of the High Executive Council, with the Director-General and Commissioner for Census (Juba) in attendance, has resulted in 45 to 60 vehicles being promised to Census Office (Juba). Census Office (Khartoum) noted that a total of 450 vehicles would be needed in the South, whilst the Regional Adviser thought 250 may be adequate. As at the end of January, Census Office (Juba) had only 14 vehicles, including 5 from UNFPA (one crashed) 4 from UNICEF and 2 from GTZ. The Director-General noted that he may be able to send a few more vehicles from the North, but that provision of drivers willing to work in the South due to security difficulties may be a problem. Moreover, it may be difficult to obtain experienced drivers from the South as there may not be any available.

22. UNDP and other international aid organisations would be willing to assist with the deployment of enumerators in conjunction with their own project schedules, but it was felt by UNDP that government resources should be put into operation first, to see how the situation develops.

23. It will be apparent from the foregoing paragraphs that the provision of sufficient vehicles for the South remains the critical issue and one that could spell success or failure to the whole operation. Indeed, without adequate transport the enumeration could take months rather than weeks to complete.

24. Petrol and diesel supplies. The situation regarding fuel supplies is a little brighter, though the distribution of fuel to outlying areas (by vehicle) and its safe storage will be difficult. International agencies however will be able to assist with safe-keeping or giving fuel on account at rural project locations.

25. In the North the Director-General thought that his stocks would be adequate, although specific amounts were not indicated. He has been working at securing supplies at a time when Sudan is experiencing grave fuel shortages.

26. In the South fuel has been supplied from Kenya under the UNFPA budget contribution, and it would appear that present stocks will be adequate for about 70 vehicles during enumeration. The situation is as follows:

Southern Region Fuel Situation - January 1983

<u>Year</u>	<u>Cost</u>	<u>Petrol ordered</u>	<u>Diesel ordered</u>	<u>Oil ordered</u>	<u>Present stocks</u> <u>Petrol</u>	<u>Present stocks</u> <u>Diesel</u>	<u>Present stocks</u> <u>Oil</u>
1982	\$52,000	80 drums	256 drums	-	-	-	-
1983	\$41,655	140 ,,	125 ,,	10 drums	140 drums	195 drums	9 drums

27. Publicity. According to the Demographer-in-charge, the publicity campaign in Khartoum was proceeding well, with extensive poster coverage, radio, cinema and TV spots. In Juba, the Publicity Officer thought his street campaign should take off only a week before enumeration was due to begin. He noted that the loudspeaker cars were in such poor condition that if they were used for an extended period they would break down. The Regional Adviser in Demographic Statistics pointed out that this was not good enough and more efforts would have to be made.

28. It seemed to us that the Southern Region publicity campaign was not reaching the people, as even government officials we spoke to outside Census Office did not know there would be a census very shortly. Arabic and English posters had not been sent from Khartoum, so Census Office (Juba) drew its own posters (in English) and were arranging to have them printed, but with lengthy delays. It would have been more informative if posters in the local languages (eg Bari, Dinka) had been prepared for Southern Region as relatively few people can read Arabic or English.

29. Secretarial staff. A bi-lingual secretary has been recruited for Census Office (Khartoum) under UNFPA funding. Her main duty is to type English texts.

30. Study tour. The Cartographer at Census Office (Khartoum) went on a 3 week study tour to Morocco in August/September 1982. This was funded by UNFPA. So far he has only written his report in Arabic. It would be useful if he could make an English translation with a copy to ECA.

31. Cartographic fellowship. The 4 month cartographic fellowship for the Southern Region candidate (Head of Cartographic Unit, Census Office, Juba) is included in the UNFPA budget for 1983. In order to strengthen the capability of the Cartographic Unit, it is not considered necessary to send the candidate on a course in pure cartography. A short course that concentrates on the geographical aspects of running censuses and surveys would be more appropriate. The Population Geography Course run during the summer holidays (June-Sept. 1983) by the Overseas Development Group at the University of East Anglia, U.K., would be suitable. This course does not require its candidates to be university graduates, rather it is aimed at the middle-level technical staff of government statistical departments in developing countries.

32. UN Census cartographer. The UN Cartographer (Mr. Jorgen Jensen) left Sudan on 3 February at the completion of his 8 month contract. The Tripartite Review in November 1982, had recommended a six-week extension of his services so that he could finalize the cartographic work in the Southern Region. But the Director-General and the Commissioner for Census (Juba) noted during the mission that they did not consider an extension would serve any useful purpose.

33. Instead of an extension, the Director-General preferred that the funds so saved (about \$12,000) be transferred to budget line 51 (operation and maintenance), in order that more petrol could be purchased for the Southern Region. Permission to do this was later received from UNFPA Headquarters.

34. During my previous mission I had urged the UN Cartographer to stay in Juba for the remainder of his contract, (the Director-General would have readily agreed) but he did not do so other than for two

visits, 28 September - 7 October and 14 - 30 December 1982. Consequently the census maps were printed and distributed in his absence without being checked. Thus they have many mistakes and omissions (eg. no chiefs area names, intermittent boundaries etc). The Director-General also noted that the UN Cartographer had not prepared a final report before departure.

35. For his part the UN Cartographer claimed that he was rarely informed about what was going on, and that anyway, he had arrived two years too late to make any lasting impact. And even if the maps had been checked in Juba, with such poor field work having been done, they could not have been totally corrected in the brief time remaining. But some corrections and tidying up could have been made by the UN Cartographer. As for his final report, I had no opportunity to query the UN Cartographer as he had departed for Europe by the time I returned from Juba.

IV. PROGRESS

(a) Khartoum: Census Cartographic Preparations

36. It is difficult to give a complete picture of the situation in the North as Census Office staff were out on pre-enumeration duties. In the Cartographic Unit, only the lady tracers had remained behind.

37. Before my trip to Juba, the Census Controller was away in Wad Medani, the Cartographer had gone to El Fasher in Darfur Region to conduct training, and the Senior Draughtsman was supervising house numbering and EA formation in Greater Khartoum. On my return from Juba, the Census Controller was busy making final arrangements, the Cartographer had gone to oversee last minute field work, and the Senior Draughtsman was just going off to check on the progress of training in Khartoum North. It is thus apparent that Census Office (Khartoum) is actively making preparations for enumeration to begin on schedule in the Greater Khartoum area.

38. Although progress and readiness for enumeration seems satisfactory in Khartoum itself, there was no news of cartographic activities in the remote areas. Maps for Northern Darfur, Southern Darfur, Northern Kordofan and Red Sea are being actually produced in these areas, and will not be sent to Census Office until after the enumeration. It is unfortunate that the Census Office will not be able to see and assess the usefulness of these maps before enumeration.

39. Throughout census preparations it has been assumed by the Census Office that no news from the outlying areas has meant good news, i.e., that they have the facilities and are proceeding with the work. Given the poor communications network this may have been a dangerous assumption to make. Many more field visits should have been made earlier on, and a regular operational reporting system should have been set up sooner. The Census Consultant also stressed this point, and has devised an information reporting system for the duration of the enumeration.

(a) Juba: Cartographic Preparations for the Rural Areas

40. 1:100,000 Census Mapping. Paras 61-64 of the previous mission report detailed the faults and limitations of the census field work in the South. During this visit the Regional Adviser examined some of the 200 drawings of the 1:100,000 enlargements and the original field sheets. It must be frankly said at the outset that the drawing work simply reflects the standard of the field work, i.e. that it is of very poor quality.

41. In this respect it would not be fair to lay too much blame on the Head of the Cartographic Unit. Indeed, everyone appreciates the amount of work that he had managed to put into the project without receiving any real support from other Cartographic Unit staff. The task was simply too much for one man - a relatively inexperienced field worker thrust into a job that demanded that he quickly become a "jack-of-all-trades", but without receiving any long term on-the-job training from an experienced senior cartographer. In short, he would have made an excellent "Number Two" man. But there is no senior person available, thus the Head of the Cartographic Unit should be encouraged to improve on what he has done, with the available staff, equipment and resources. A lack of discipline and insufficient training of cartographic staff meant that they often failed to carry out his instructions properly; this has left the Head of the Cartographic Unit with insufficient time to correct the errors so made.

42. Thus except for parts of Eastern Equatoria and Upper Nile - where the field work was done by the Head of the Cartographic Unit himself - it is doubtful whether the maps in their present form will be of much use during the enumeration.

43. It is therefore recommended that the Supervisors make up-to-date village and sub-village lists of each Chiefs Area before enumeration begins. Village lists are presently only available for Eastern and Western Equatoria (by Social Monitoring teams) and for Upper Nile, but their present accuracy is doubted.

44. Four copies of each 1:100,000 map have been printed and distributed to their relevant areas. The Area Council Inspectors and Rural Council Census Officers, should, under the direction of the Province Coordinators, be instructed to update these maps during the enumeration and the copies returned to Census Office afterwards.

45. Chiefs Areas Index Maps. Preparation of 4 index maps at 1:1 Million was the main task undertaken during the mission to Juba. Lists of Chiefs Areas for 5 of the 6 provinces were available (the exception being Bahr-el-Ghazal) but their relative locations in the Province, Area Council or Rural Council were not known. It was therefore difficult for Census Office to know exactly where staff should be deployed, and in what numbers, as summary sheets of the estimated population had not been finalised. The names of the Chiefs Areas were thus deduced from the field maps and the names were written onto the index maps, together with the number of villages and estimates of population and number of households in each Chiefs Area.

46. The provinces of Eastern Equatoria and Upper Nile were completed during the mission and Western Equatoria, Lakes and Bahr-el-Ghazal were in progress. The Head of Cartographic Unit will finish off the work and draw up the maps for printing and distribution.

47. Bahr-el-Ghazal proved to be especially difficult as no field mapping was undertaken for much of the province. Estimates were therefore made by counting village names shown on the 40-60 year old maps and using this as the basis for obtaining estimates for the population of villages by reference to comparable information from adjacent areas.

48. Number of Chiefs Areas. The number of Chiefs Areas for the Southern Region may change slightly when more information about Bahr-el-Ghazal comes in, but at present the number of Chiefs Areas for each province is as follows:

<u>Province</u>	<u>Number of Chiefs Areas</u>
Eastern Equatoria	92
Western Equatoria	60
Bahr-el-Ghazal	54
Lakes	65
Upper Nile	56
Jonglei	38
	<hr/>
	365

49. Areas having no estimates. Even in areas where some field mapping was attempted, sometimes no population or household estimates were obtained from chiefs or sub-chiefs, although teams had been instructed to do so in all cases by the Head of the Cartographic Unit. When we asked why no estimates had been obtained, one team leader noted:

- (a) Because all the sub-chiefs and headmen were away in the "toich", (low-lying land liable to inundation by rivers during rainy season);
- (b) Because they knew that UNICEF Social Monitoring teams were supposed to be collecting estimates throughout the South, so why duplicate the work.

50. Reason (a) indicates that no attempt at call-backs were ever made, nor attempts at doing physical household counts or population quick-counts. Reason (b) indicates a lack of appreciation of the work done by census teams and Social Monitoring teams, even though the personnel often overlapped. Census mapping was started because Social Monitoring was taking much longer to complete due to their extensive questionnaire on socio-economic matters and because they were not using maps. Unfortunately a lack of government field allowances - to be received before the teams go out to the field - delayed the completion of Phase I (the Village Survey) of the Social Monitoring project, in the very areas for which census mapping teams made no estimates.

51. Thus by the time of my departure from Juba, there were no up-to-date village lists or population and household estimates for vast areas of Bahr-el-Ghazal, and yet this is one of the most densely populated areas of the Southern Region. This will make deployment of census officials and documents for their use most difficult.

52. Two Social Monitoring teams, however, are presently working in Wau Area Council and Aweil, Gogrial and Twic Rural Councils of Bahr-el-Ghazal. But whether they will have obtained estimates before census enumeration begins is not known. In any case the Social Monitoring teams are still not plotting their information on maps, despite many efforts to get them to do so. The reasons for this have also been detailed in past reports.

(b) Juba: Urban Areas in the Southern Region

53. The number of census urban areas has been increased from 9 to 16 following a reassessment by the Census Office (Juba). These are as follows, with the province headquarters being the first named in each case:

<u>Province</u>	<u>Urban Areas</u>	<u>Province</u>	<u>Urban Areas</u>
Eastern Equatoria	Torit-(new EE headquarters) Juba-(SR capital) Yei	Bahr-el-Ghazal	Wau Aweil Raga
Western Equatoria	Yambio Nzara Tambura	Lakes	Rumbek Yirol Tonj
Upper Nile	Malakal Bentiu Renk	Jonglei	Bor

54. Household numbering and "encircling" (formation of Quarter Councils, sub-quarter councils, wards, Supervisors Areas and EA's) is supposed to be taking place in these areas, but the actual situation is not known outside Juba due to communications difficulties. Household numbering is to be carried out in the larger of the centres (+10,000 pop) which will possibly exclude Raga, Bentiu, Renk and Bor.

55. Juba. Household numbering is being carried out in Juba and at the end of January 3 wards out of 23 had been completed. There was however a shortage of white paint in the local market with which to paint "Begin", "End", "Continue", "Turn Right" and "Turn left" arrows on the walls for encirclement purposes. The Field Supervisor noted, however, that paints of differing colours would be used to distinguish one EA from another. The EA number is also being painted on the walls underneath each arrow.

56. Urban maps and sketches. Maps (at 1:10,000 or 1:5,000) are only available for Juba, Wau, Malakal, Yambio, Rumbek and Bor, and apparently no attempt has been made to update them before hand due to the shortage of time. But the maps should be updated and the EA boundaries and EA numbers indicated by the Supervisors during enumeration.

57. Elsewhere, sketches will have to be made. These should show the main thoroughfares, buildings, markets, housing areas and schools, and should also indicate EA boundaries and numbers. In all urban areas, whether there are maps or sketches, written boundary descriptions should be made for each EA.

(c) Juba: Setting Up the Cartographic Unit

58. Undoubtely one of the main reasons for the low level of standards and productivity at the Cartographic Unit (Juba) has been the lack of drawing office furniture, equipment and materials. Para 53 of the Regional Advisers previous report noted that "the Cartographic Unit is still not fully operational due to the non-arrival of half the UNFPA cartographic equipment ordered in December 1980 by air-freight". It was further noted that "the drawing tables, chairs and map filing cabinets in particular are badly needed". This is still the case.

59. During the mission yet another urgent plea was sent from UNDP Juba to UNDP Khartoum as to the whereabouts of the missing equipment. The answer received from the UNFPA National Programme Officer noted, amongst other things, that Purchase order N°1-21-12081 (Drawing tables and map cabinets) had been cancelled in March 1982.

60. During a later meeting in Khartoum, the UNFPA National Programme Officer informed the Regional Adviser that the decision was made at the Tripartite Review in January 1982, at the national level. The Director-General noted, however, that he was not aware of this decision and regretted that it had been made.

61. It is appreciated that due to UNFPA budgetary constraints, some cut-backs have had to be made, but as ECA has been back-stopping the project due to the absence of UN international staff, it would have been helpful if ECA had been informed of the decision, and useful if Census Office (Juba) and UNDP Juba had been informed, so that alternative arrangements could have been considered.

62. It is recommended therefore that the issue of cartographic furniture, for the Census Office (Juba) - cost \$3,000 - be reconsidered by UNFPA, as it would help enormously in the smooth running of the Cartographic Unit and its long-term capability.

63. It is acknowledged that Paragraph (f) of the recommendations for the November 1982 Tripartite Review report notes:

"The Government is urged to strengthen the present communication system (UNDP and UNICEF radio systems could be used), field organisation, storage facilities and providing the census offices (with) electricity power generators".

64. This implies that locally-made storage facilities, (i.e. cartographic furniture) should be made available by the government. It is considered, however, that locally-made furniture, and particularly map cabinets, which should be made of steel, (for strength and against fire) would not be strong enough to withstand constant use. Restoration of the original Purchase Order, therefore, would be most appreciated by all concerned.

65. Outstanding Items. The following equipment and materials (excluding the cartographic furniture) have also not been received in Juba:

<u>Purchase Order N°</u>	<u>Items</u>	<u>Approx. Value</u>
1-21-10283	Nashua 1215/1218 photocopier, accessories and paper	\$ 4,692
1-21-12073	Pentel pens and other draughting supplies	\$ 1,065
1-21-12076	Liquid cement, blades and Standardgraph stencils	\$ 90

V. CONCLUSION

66. Khartoum. As can be seen from the aforementioned, it appears that preparations for enumeration in Greater Khartoum are well underway, with Census Office staff having worked overtime in the evenings since September 1982.

67. North-Rural Areas. But outside Khartoum little information is available about the true situation. One such area is Red Sea province where sketches are being drawn up by local personnel and not by the Census Office (Khartoum). During a visit to Sudan Survey Department (SSD) it was noted that some progress had been made on the new 1:100,000 map series in Red Sea province; this is a joint project between SSD and Directorate of Overseas Surveys. On request to SSD more accurate and up-to-date information could have been made available to Census Office (eg. on location of wells). Closer liaison with SSD would have been desirable throughout the operational period.

68. Nomads. As far as nomadic areas are concerned, a map had been produced of nomadic movements in the North, but no information was available as to the nomadic situation in the South.

69. Southern Region. Census Office (Juba) still has a lot of preparatory work to finalise. For example:

- (a) As 1:100,000 film enlargements were never made of the Hofrat-en-Nahas area of Bahr-el-Ghazal, 1:250,000 paper copies should be used during the enumeration;
- (b) Geocoding for urban areas needs to be done, and geocodes at a lower level than Rural Council would be useful;

- (c) If enumeration is to be over an extended period, then some priority may have to be given to Upper Nile province, where the rainy season begins in early April and movement quickly becomes impossible;
- (d) Census Office needs to ensure (by actually having them delivered to Census Office) that adequate supplies of pencils, rubbers and pencil sharpeners are available in Juba.
- (e) Efforts be made to secure the assistance of Mr. Bill House, ILO Demographer stationed in Juba. His participation was a recommendation of the November 1982 Tripartite Review of his project, "SUD/76/P06, Population and Human Resources Development and Planning in the Southern Region". Mr. House has indicated his willingness to assist if requested by Census Office (Juba).

70. It would seem that one problem in having two Census Offices (Khartoum and Juba) has been that no definite policy was decided upon as to which topics the North would assist the South with, and which the South would tackle on its own. So the South has perhaps waited too long for guidance in certain areas, whereas they could have got on with the work by themselves, using a methodology more suitable for the South. For example:

- (a) Basing the 1:100,000 maps on graticule lines instead of Chiefs Areas which would have been much simpler for the South. This would have avoided the complicated numbering system (-eg. NC-35-J 7/8) which only the Cartographic Unit understands. Thus maps sent to the field for enumeration may never be used because Census Officials will have difficulty in joining sheets up.
- (b) No field mapping forms were produced in the South because they thought Khartoum would be sending them. Much field information has since been lost through being written on scraps of paper which have become mislaid.

71. It would also seem that there is a duplication of effort in Juba with Census Office headquarters being less than one kilometre away from the Census Office for Eastern Equatoria. There is possibly overlapping, rivalry and a lack of coordination between the two units. In this respect it may have been better to site the Eastern Equatoria office in Torit, the provincial headquarters.

72. Although the Peoples Local Government Act 1981 defined Area Councils and Rural Councils, it did not reach the level of Chief Areas, which are traditional. Thus there are different opinions as to what is a Paramount Chief's Area, a Chief's Area and a Sub-Chiefs Area, with a different system in operation in different parts of each province. This has made the naming of such areas and putting boundaries around them quite a problem.

73. All leave in Division of Statistics (Juba) has been suspended until after the census, thus some efforts are being made to accelerate activities. But one has to conclude that Census Office (Juba) which had never instituted any overtime work, as in the North - is still not fully operational, due to the organisation being too loose, with little division of labour and insufficient control of staff and vehicles. A more serious attitude earlier on would have paid dividends today.

74. The lack of vehicles is a major worry, but local buses may have to be used more fully. Another problem will be the proper allocation of areas to enumerators so that overlaps and omissions do not occur, and the distribution of questionnaires to the right places in the correct amounts.

75. The South will go into the census with an incomplete and shaky geographical frame, thus results will be patchy and of varying quality. The area around Juba itself will probably cause few problems due to its proximity to the capital.

76. The Regional Adviser feels that there is a need for a further mission later in the year to the Southern Region in order to assist in the tieing-in of the Social Monitoring Phase I village lists with the census maps. The maps themselves will have to be extensively revised and drawn up according to Chiefs Areas. Further training would be given to drawing office and field staff in this respect, which would be part of preparations for the forthcoming household survey. But first, the census has to be undertaken, the results of which are eagerly awaited.

ANNEX I

LIST OF PERSONS WITH WHOM DISCUSSIONS WERE HELD

Government - Census Office - (Khartoum)

Syd. Omer El Tay - Director-General (Census Coordinator)
 Syd. Abdel Wahab Ali Modawi - Census Director
 Syd. Abdel Aziz Farah - Demographer
 Syd. Mahmoud El Khidir Rizgalla - Demographer
 Syd. Ismael Bakheit - Field Organiser
 Syd. Ahmed El Amin El Mousharraf - Senior Draughtsman

Sudan Survey Department - (Khartoum)

Mr. John Wilks - ODA Cartographer
 Syd. Salah Ed-dein Sayed Sabir - Senior Cartographer

Government - Census Office - (Juba)

Syd. Gino Gama - Commissioner for Census
 Syd. Samuel Chang Jwok - Head, Census Office
 Syd. Samuel Andugga - Head, Cartographic Unit
 Syd. Julius Hitler Apollo - Field Supervisor
 Syd. Bathwel Duku - Census Coordinator, E. Equatoria Province
 Syd. Albert Dimo - Census Coordinator, Bahr-el-Ghazal Province
 Syd. Jim Lemi Milla - Publicity Officer
 Syd. Salim Saleh - Rural Council Census Officer, E. Equatoria Province
 Syd. George Kenyi - Statistical Assistant
 Syd. Martin Madut - Transport Officer
 Syd. Wilson Ochiti* - Statistical Assistant

* With regret I have to report the death of Wilson Ochiti after a domestic quarrel.

United Nations - Khartoum

Mr. Tony Carter - UNICEF Planning Officer (Statistics and Zonal Development)
Mr. Mohamed El Khodary - UN Census Consultant
Mr. Jorgen Jensen - UN Census Cartographer
Syd. Faisal Mohamed - UNFPA National Programme Officer
Mr. Robin Mills - UNFPA Adviser on Population Studies

United Nations - Juba

Mr. Whitney Foster - UNDP Deputy Resident Representative
Mr. P. Balasubramaniam - UNICEF Programme Officer
Mr. Balan Kurup - UNICEF Statistical Surveys Adviser
Mr. Isaac Kenyi - UNDP Administrative Officer
Ms. Lael Stabler - UNICEF Social Surveys Officer (UNV)
Mr. Bill House - ILO Demographer

ECA

Mr. Emmanuel Colecraft - Regional Adviser in Demographic Statistics