スーダン国ハルツーム教育病院 プロジェクト実施協議調査報告

昭和60年4月

国際協力事業団

医協 UR 85 - 48

# スーダン国ハルツーム教育病院 プロジェクト実施協議調査報告



昭和60年4月

国際協力事業団

国際協力事業团 育自 '86. 5. 30 415 **全録No. 12727** 40.7 MCF スーダン国では生活環境,風土および気候等の諸条件から消化器,泌尿器および耳鼻咽喉に関する疾病が多発しているが専門医の数が不足し,医療施設も貧弱である。日本の無償資金協力により専門病院の建設が着工されたがさらに充実させるため,スーダン政府はプロジェクト方式による技術協力を日本政府に要請してきた。この要請にこたえてわが国は昭和58年12月スーダン国ハルツーム教育病院に対する事前調査団を派遣した。

当事業団は事前調査の結果を踏まえ昭和59年12月15日より12月30日まで長島秀夫岡山大学医学部内科学教授を団長とする実施協議調査団を派遣し、本プロジェクトの要請内容につき調査を実施するとともに、スーダン国政府関係機関と協議を行い討議議事録(R/D)に署名した。

これに伴い本プロジェクトは昭和60年4月1日より正式に発足することとなった。本報告書は同調査団の調査結果をとりまとめたものである。ここに実施協議調査団員各位並に調査団派遣にご協力を賜わった関係機関の各位に対し深甚なる謝意を表する次第である。

昭和60年4月

国際協力事業団 理事 末 永 昌 介



スータン国保健省にて 左から 山崎団員, Dr. Zaki El Din, 長島団員, 大森団員, 平木団員



左より Abdel Salim Salih 保健大臣, Dr. Zaki El Din



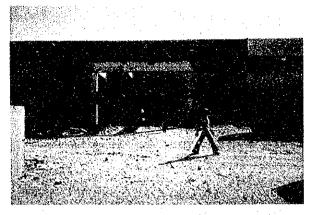
保健大臣を表敬訪問した調査団



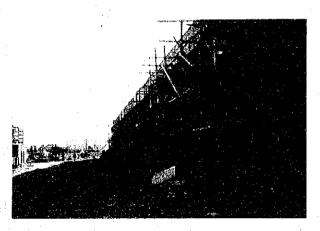
在スーダン日本大使館公邸にて 左より 山野勝由大使,長島団長,小倉団員



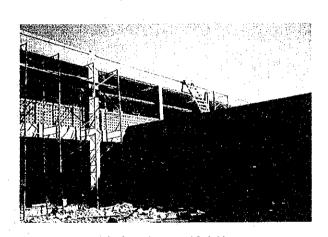
保健省にて討議議事録に署名, 交換した 左より 長島団長, M. Yousif El Award次官



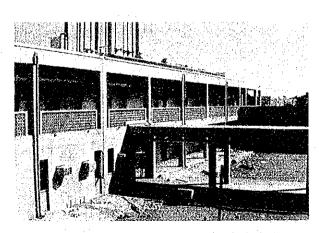
建築中のハルツーム教育病院の正面玄関



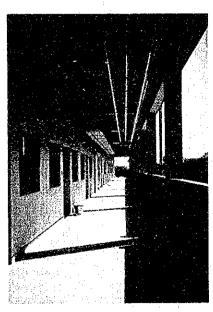
外側よりみた工事中のハルツーム教育病院



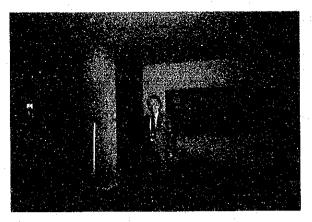
内庭よりみた新病棟



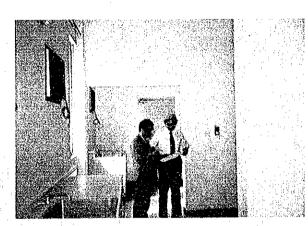
ほぼ完成したハルツーム教育病院病棟



同 左 廊下側よりみた病室



ヘルツーム教育病院(玄関付近) 山崎団員



新病院内診察室を視察する調査団 左より 大森団員, 小倉団員



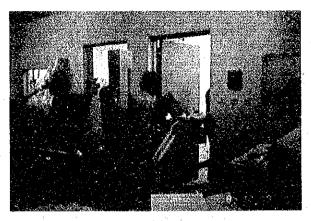
同左



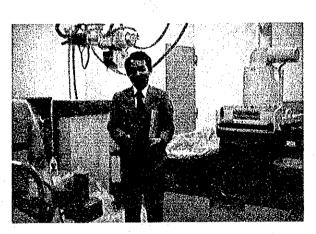
同上 ( 一部器材が搬入されていた臨床検査室 ) 山崎団員, 近藤団員, 平木団員



同 左 近藤団員,長島団員,山崎団員



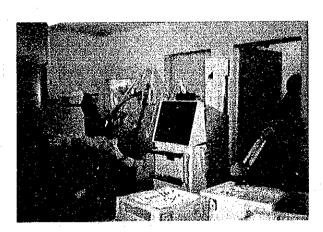
放射線医学診療室 (一部器材搬入中)



同 上 平木団員



同生



同上



来日したカウンターパートとの懇談会 ナイル河の船上にて

	次	we be
1. 派遣の経緯		1
		2
		5
		5
1) 新病院の建設状況		5
2) 討議議事録の作成	* *** *** * * * * * * * * * * * * * * *	
3) 討議議事における 2, 3 の問題点		
4) 医療事情について	***************************************	0
5. 総括と考察	••••••	8
6. 資料編		9
1) スーダン国ハルツーム教育病院プロジェク	<b>†</b>	1 1
2) 討議議事録草案		1 3
0) , , , , , 本本中時訊到		🗠 🗸
4) 討議議事録		2 9
5) TENTATIVE PLAN OF IMPLEMENT		
FOR KHARTOUM TRAINING HOSPI		4 1
6) TECHNICAL COOPERATION BY THE		
OF JAPAN PROPOSAL		4 2
7) LIST OF EQUIPMENT FOR FIVE	VRARS PLAN	
(1985 – 1989) PROPOSAL (7) Ø 1		4 5
8) HEALTH FACILITIES, HEAITH SI		ROONNEL
AND REPORTED CASES OF COMMO		<b> 5</b> 4
SUDAN YEARBOOK, COMPILED A		
Mal, 1983, P.O Box 2651 Khar	toum. The Democratic R	epublic
of the Sudan		

# 1. 派遣の経緯

スーダン民主共和国政府はハルツーム教育病院(Khartoum Training Hospital)の 難設につき日本政府の協力を要請し、事前調査団(昭和57年1月 津田豊和団長)の派遣及びその後基本設計調査団(昭和57年5月)を再度現地に派遣した。

その結果、わが国は無償資金協力による該病院建設の妥当性を確認した。

この要請を受け、日本政府は昭和58年12月スーダン国ハルツーム教育病院に対する事前調 香団(長島秀夫団長ほか5名)を派遣することになった。

その目的は、わが国に対する技術協力の要請内容、優先度、技術移転の成果の活用計画等を具体的に確認すること、また、本計画を実施するために必要な予算、人員計画等を調査することによって、プロジェクト方式の技術協力の深度の限界、妥当性を調査し、わが国の技術協力の最終目標ないし年度別目標を各分野につき設定することにあった。

次いで、昭和59年12月スーダン国ハルツーム教育病院プロジェクトについて先方政府と協議し、討議議事録を作成するため実施協議調査団が派遣されることになった。

# 2. 派 遣 の 目 的

今回の派遣の目的はスーダン国ハルツーム教育病院プロジェクトの要請内容、相手国の優先度、要請の背景と経緯、大使館、JICA事務所の意見を踏えて、消化器、泌尿器、耳鼻咽喉の3科の診断、治療技術の向上を図り、併せて機器の維持管理技術の移転を行うこと、協力期間5年間とすること、専門家の派遣期間は短期とし、counterpartの受入れば年間3名程度とする、機材供与は、消耗品、スペアーパーツを中心とする等について先方政府と協議し、討議議事録を作成することであった。(資料1)

なお、討議はR/D案:

The record of discussions between the Japanese implementation survey team and the authorities concerned of the government of the democratic republic of the Sudon on the Japanese technical cooperation for the Khartoum training hospital project.

によって詳細に検討することにした。(資料2)

# 3. 実施協議調査団の構成と調査日程

#### 1) 調査団の構成

団 長:長 島 秀 夫

(総括,岡山大学医学部内科学教授)

団 員:小 倉 義 郎

(岡山大学医学部耳鼻咽喉科学教授)

団 員:大 森 弘 之

( 岡山大学医学部泌尿器科学教授)

団 員:平 木 祥 夫

( 岡山大学医学部放射線医学助教授)

団 員:山 崎 晟

(岡山大学医学部附属病院事務部長)

団 員:近 藤 芳 久

(国際協力事業団医療協力部医療協力課参事)

### 2) 調查日程

59/12/15(土) 21:30 東京発(KL868)

12/16(日) 07:05 アムステルダム着

12/17(月) 13:35 アムステルダム発(AF913)

14:35 パリ着

17:05 パリ発(AF487)

12/18(火) 01:55 ハルツーム着

11:00 山野勝由大使表敬

13:00 保健省 Abdel Salim Salih 保健大臣表敬 調査日程の打合せ

15:30 R/D案の概略説明

出席者: Dr. Zaki El Din Ahmed, Sanior Consultant of Gastroenterology,

Ministry of Health

Dr. Abudel Gasimel Hadi, Senior Consultant of E. N. T., Ministry

of Health

Dr. Osman Awadalla, Senior Consultant of Urology, Ministry of

Health

長島団長ほか5名

12/19(水) 09:00 ハルツーム教育病院建設現場(Plot No. 1, Block 9R,

Khartoum New Extention) 視察90%以上完成。放射線機 材の据付けを完了し、機器の調整中であった。山下設計及び鴻 の池組所長(上野氏)等の案内をうけ、病院内を詳しく調査し た。

保健省関係者とR/D案の各条項につき、その内容を詳しく説 15:30 明するとともに, 双方の意見の交換を行った。専門家の免税特 権, 期限付医師免許, 住居の諸問題につき討議・検討し, スー ダン側は、原則的に合意したが、各省との関係もあり、念のた め、大蔵省・外務省の了解を取付けることを了承した。

(出席者:前日と同様)

山野勝由大使のレセプションに出席 18:00

SOBA大学病院視察 12/20(木) 08:30

> 消化器科、耳鼻咽喉科、泌尿器科及び放射線医学科に絞って視 察した。

10:30 ハルツーム教育病院視察

> SOBA大学病院と同様の視点で視察した。 医師,技術者,看 護婦の積極的、好意的な対応が印象的であった。

調査団団員との打合せ、資料整理 12/21(金)

12/22(土) 08:00 熱帯病病院視察

Dr. Abdel Gafaar Abdel Rahim Director, Hospital for Tropical diseases, Omdruman

Dr. Abdel Kadaru, Asst Director Physician,

Hospital for Tropical diseases, Omdruman

ハルツーム・ノース病院視察 10:30

> Dr. El Hadiel Zeinel Hahas, Ex. Director, Khartoum North Hospital, (Senior Obstetrician & Gynaelologist)

Dr. Abdel Latif A. Mohamed Director, K. N. H.

Dr. El Gizouli Dafaalla, Senior Physician

Gastroenterology, K. N. II.

Dr. Osman Mahamoud, Gynocologist and Obstetrician, K. N. H.

Dr. Mutsim El Seed, Radiologist, K. N. H.

Dr. Mustafa Ahmed El Seed, Thoracic Surgeon,

K. N. H.

Dr. Omer Mohamed Seed, Surgion in Gasteroenterology, K. N. H.

その他

21:00 Abdel Salim Salih 保健大臣主催のレセプションへ出席

12/23(日) 09:30 ハルツーム教育病院にて R/D 案の専門家派遣及びカウンター

14:00 パートの受入れについて協議し、大枠について双方の合意を得た。

18:00 大使館主催のクリスマスパーティに出席

12/24(月) 09:30 ハルツーム教育病院にてR/D案の供与機材の搬入計画を年度

14:00 別に吟味し、日常多用される機器を先ず揃えることで、協力当初の2年分に限り、大枠について双方の合意を得た。

12/25(火) クリスマス休日にあたり、調査団打合せ及び資料の整備

12/26(水) 08:30 保健省にて, M. Yousif El Awad 次官と長島団長との間で, R/Dの署名・交換した。

09:30 ハルツーム教育病院視察。部屋のレイ・アウト,機材の据付け 位置等の確認を行った。

21:00 調査団主催のパーティ

12/27(木) 10:00 山野大使へ調査結果の報告

15:00 ナイル河船上にて、来日したカウンタパートとの懇談会へ出席

18:00 山野大使主催のレセプションに出席

12/28(金) 07:55 ハルツーム発(AF480)

15:05 パリ着

12/29(土) 12:15 パリ発 AF270 (モスクワ経由)

12/30(日) 10:30 成田着

# 4 調 査 の 概 要

#### 1) 新病院の建設状況

スーダン国ハルツーム教育病院の建築は順調で、昭和60年3月には完工の予定であり、医療機材の搬入も開始され、今後建物の内装工事と共に急速に完成に向って進行するものと考えられる。(資料3)

#### 2) 討議議事録の作成

実施調査団はスーダン国関係者との間で数次に亘り前述の R/D 案 に従い詳細な討議が行な われた。その結果、資料4のような討議議事録を作成し、最終的には日本大使館(山野勝由大 使)と協議し、昭和59年12月26日午前9時スーダン国保健省でこの討議議事録に調印し た。

調印者

日 本 側:スーダン国ハルツーム教育病院プロジェクト実施協議調査団

団長 長島秀夫

スーダン国側:スーダン国保健省

Under secretary

Dr. Mohamed Yousif

調印書2部作成し、1部づつ保存した。

#### 3) 討議議事録における2・3の問題点

前述の合意、調印した討議議事録の趣旨に基づいて今後の技術協力が円滑にいくように相互 の情報の交換が重要と思われた。

討議の結果、特に重要と思われた次項についてその討議の経過や合意点について補遺してお く。

#### (1) counterpart について

日本からスーダン国への専門家の派遣(主として医師)の短期間(1カ月)であるが、スーダン国医師団の要請により前述の3科およびその関連領域の専門家を選ぶことにした。専門家派遣の希望が多いため、各専門領域毎に優先順位をつけ、日本側からの派遣医師等の定数内で合理的な派遣計画を立てるよう配慮し合意をみた。

次に、スーダン国から日本へ派遣するcounterpart については割り当て定数が3名とされており、これも優先順をつけてスーダン国側の希望に従い配慮した。但し、病院の管理・ 運営面からは看護婦や機器の操作に習熟した技術員の必要度が高く、可能ならばあと2名の 追加が強く要請されたことを附記しておく。 スータン国から日本へ派遣する counterpart については、専門別で滞在期間の長短はあるが、3カ月ないし6カ月前後が必要と思われる。充分指導するため受入れ時期についても検討(学会シーズンをさける等)して、能率をあげるよう具体的に配慮したい。

なお、スーダン国から日本へ派遣するcounterpart については、看護婦、技術員については大学卒業資格があることが、岡山大学医学部として受入れるために必要であることについて、スーダン国側もその趣旨について了承した。

counterpart の計画表 (1985-1988) を資料 5 に示す。

わが国からスーダン国への counterpart の派遣については、前もって派遣専門家の教育 実施計画表(個人別)について連絡し、到着後、早々から計画が円滑に進行するようスーダ ン国関係者とその都度確認するようにした。

#### (2) 医療機器について

医療機材については、既に入荷したものを含めて、今回要請された1985年度の医療機器(資料6,7-1,7-2)について検討したが、基本方針としては日常診療で多用される機器を先づ揃えるという観点から検討した。その結果、1年毎に機器購入計画を吟味することで両者の意見が一致した。1985年度分の医療機器については各科別に必要性の強いものから入手出来るよう配慮した。(資料6,7,8) 特に機材については技術員の技術面での能力の良否により機材の故障を来たすこともあるので、この点、特に留意を要するものと考える。また、修理物品等についても円滑に入手可能なルートがあることが望まれる。

#### (3) その他

スーダン国へ派遣した日本の専門家用の宿舎については、保健大臣も同席した席上で、出来るだけ住みよい宿舎を用意すること、宿舎費の一部は日本側で負担することで一応合意を みた。

なお、スーダン国に派遣する医師については、スーダン国の臨時医師の免許証が日本側からの申請によりスーダン国到着時に与えられる等前回の事前調査団の報告書にも確認された 通りである。

#### (4) 医療事情について

スーダン国の医療事情については前回の報告書にくわしくまとめているので重複をさける が、今回の印象を若干のべておきたい。

ハルツームの各病院に共通した印象は医師,専門職の不足とこれに対し患者数の多いことである。受診患者は激症あるいは重篤な状態のものが多いようである。しかも診断,治療用機器か旧式かつ絶対数が極端に不足していることである。

一般臨床検査、X線検査も設備が不充分で、X線関係機器については非常に占いもの(日本の約25年前)がみられる。また、X線の安全管理には若干問題がある。RI関係の機器も殆んど眼につかない状態であった。

超音波診断が実際行なわれている所を見学出来たのは1カ所で普及率は極めて少いものと 考えられた。

耳鼻咽喉科領域ではハルツーム教育病院で独立した聴力検査部、音声言語治療部が併設されていた。この領域の必要性と充実に対する熱意がうかがわれた。一般の耳鼻咽喉科の疾患では炎症性疾患が多く、しかも重症例が多いようであった。

泌尿器科領域でも日常使用頻度の高い機器が少く,機器の部品の円滑な入手の必要性が指摘できるが,全ての領域にも同様なことがいえるようである。疾患では腎石,ビルハルツ住血吸虫の尿路感染,前立腺肥大等が多く,入院患者について交見する機会がえられた。

精密機器の維持管理は天候, 気象条件や停電, 塵埃, 日射, 高温, 乾燥等に対する対策が必要で, 修理部品の供給も必須の条件となろう。

また、基本的に必要な診療機器以外に事務用機器(複写機、タイプライター、コンピューター、スライドプロゼクター、スライドビューアー、紙裁断器、文房具等)も必要性が高いと考えられた。

次に、スーダン国の病院、医師、疾病の最近の状況をあげておく。(資料8)

# 5. 総括と考察

今回実施したスーダン国ハルツーム教育病院(IBN SINA HOSPITAL)プロジェクトに 対する実施協議調査結果を総括し、考察を加えると以下のようになる。

- 1. 病院の建設は昭和60年3月には完工に向けて順調に進行しており、医療機器の一部も搬入され、内装工事が急速に進行中であり、略々予定期日に完成されるものと考えられた。
- 2. スーダン国保健省医師団と数次に亘り慎重にスーダン国ハルツーム教育病院プロジェクト実施計議議事録案に基づいて詳細に討議し、先方政府との間で合意がみられたので昭和59年12 月26日スーダン国保健省にて討議議事録に調印した。
- 3. 今回の調査団には消化器科以外に耳鼻咽喉科,泌尿器科,放射線医学が加わり,夫々の分野においての実状の把握と同時に今後の具体的な運営について討議し今後の見通しについて効果がえられた。
- 4. counterpart については派遣専門家の定数内でスーダン国の最重要な要請に対する合理的な計画を立案した。
- 5. 医療機器の購入計画については基本方針としては日常診療で多用される必要性の高い機器を 優先し、除々に5カ年に亘って整備、充実をはかるとの方針が両者間で確認された。
- 6. 機器の維持管理技術の移転を行うためには技術者(医用エレクトロニクス,放射線医学,透析等)の養成と交流の必要性がより高いものと考えられた。

また,機器の維持,修理(修理部品の円滑な入手)や技術者の技術面での能力の向上等が特に重要な課題と考えられた。

7. 日本国より派遣される専門家のスーダン国へ滞在中の身分の保証や宿舎等についても検討し、 合意した。

以上,今後このプロジェクトの技術協力が円滑に行くためには相互の情報の交換が重要となり, きめ細かい実施計画を両者で検討, 確認することにより効果が上げられるものと考えられた。

# 6. 資料編

## 資料 1 スーダン国ハルツーム教育病院プロジェクト

#### 1. 要請内容

わが国の無償資金協力により建設されたハルツーム教育病院(120 床)の消化器,巡尿器, 耳鼻咽喉の3科の診断治療技術の向上を図り、同国初の専門医養成機関として充実させる。

#### 2. 相手国の優先度

1) 中央計画・調整機関

保健医療分野において、同国では人材不足解消が最優先とされ、その教育人材の養成が自 国内で可能となることが不可欠であるとしている。

2) 実施機関

保健省ハルツーム教育病院

- 3. 要請の背景と経緯
  - 1) スーダン国においては、気候風土、生活慣習等の諸条件から消化器、泌尿器、耳鼻咽喉に関する疾病が多発しており、このための専門医の養成が急務であった。
  - 2) ハルツーム教育病院の開院後、病院の機能を十分果し得るよう技術協力を要請しわが方は 客年12月事前調査団を派遣した(長島秀夫団長岡山大学医学部教授他5名)。
- 4. 大使館・JICA事務所の意見

無償資金協力による病院建設の趣旨・目的を踏え、わが国の技術協力が不可欠である。

- 5. 1) 消化器, 泌尿器, 耳鼻咽喉 3 科の診断・治療技術の向上を図り併せて機器の維持管理技術 の移転を行う。
  - 2) 協力期間は5年間とする。
  - 3) 専門家の派遣期間は短期とし、カウンターパートの受入れは、年間3名程度とする。機材 供与は、消耗品、スペアパーツを中心とする。
  - 4) 上記について先方政府と協議し、討議議事録を作成するため、12月15日-12月30日 の16日間実施協議調査団を派遣する。
- 6. 実施協議調査団

団長 長 島 秀 夫 岡山大学医学部教授 ( 内科学 )

団員 小 倉 義 郎 岡山大学医学部教授 (耳鼻咽喉科学)

団員 大森弘之 岡山大学医学部教授 (泌尿器科学)

団員 平木祥夫 岡山大学医学部助教授 (放射線医学)

団員 山 崎 晟 岡山大学医学部附属病院事務部長

団員 近藤芳久 国際協力事業団医療協力部医療協力課医療協力課参事

#### 7. その他

1) 無償資金協力額:30億

- 2) 建 設 完 了:昭和60年3月見込
- 3) 国内支援機関:岡山大学医学部

(draft)

THE RECORD OF DISCUSSIONS

BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM

AND THE AUTHORITIES CONCERNED

OF THE GOVERNMENT OF THE DEMOCRATIC REPUBLIC

OF THE SUDAN ON THE JAPANESE TECHNICAL COOPERATION

FOR THE KHARTOUM TRAINING HOSPITAL PROJECT

The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Professor & Dr. Hideo NAGASHIMA visited the Democratic Republic of the Sudan from 15th to 30th of December, 1984 for the purpose of working out the details of the technical cooperation programme concerning the Khartoum Thraining Hospital Project in the Democratic Republic of the Sudan.

During its stay in the Democratic Republic of the Sudan, the Team exchanged views and had a series of discussions with the authorities concerned of the Government of the Democratic Republic of the Sudan in respect of the desirable measures to be taken by both Governments for the sucessful implementation of the above-mentioned project.

As a result of the discussions, both parties agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Khartoum. December 20,1984

Professor & Dr. Hideo Nagashima, Leader Implementation Survey Team Japan International Cooperation Agency, Japan

Director General, Department of Health, Ministry of Health Democratic Republic of the Sudan

#### THE ATTACHED DOCUMENT

#### I. COOPERATION BETWEEN BOTH GOVERNMENTS

- 1. The Government of Japan and the Government of the Democratic Republic of the Sudan will cooperate with each other in implementing the Khartoum Training Hospital Project (hereinafter referred to as "the Project") for the purpose of upgrading the level of techniques for diagnosis, treatment and clinical research in the fields of gastroenterology, urology, and otorhinolaryngology (hereinafter referred to as "E. N. T.) at the Khartoum Training Hospital newly constructed by the grant aid programme of the Government of Japan.
- 2. The Project will be implemented in accordance with the Master Plan which is given in 1 of the Annex.

#### II. DISPATCH OF JAPANESE EXPERTS

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in II. of the Annex through the normal procedures under the technical cooperation scheme of the Government of Japan.
- 2. The Japanese experts referred to in 1. above and their families will be granted in the Democratic Republic of the Sudan, the privileges, exemptions and benefits no less favourable than those accorded to experts of third countries or of international organizations performing similar missions in the Democratic Republic of the Sudan, which will include the following:

- (1) A local license in medicine shall be issued to experts who are well qualified in accordance with the prevailing laws and regulations in formce in Japan upon arrival in the Democratic Republic of the Sudan, and whose medical services to the Sudanese people shall be fully guaranteed by the Ministry of Health, the Democratic Republic of the Sudan during the performance of their duties without gross negligence.
- (2) Exemption from income tax and charges of any kind imposed on or in connection with the living allowances remitted from abroad in relation to the implementation of the Project.
- (3) Exemption from import and export duties and any other charges imposed in respect of personal and household effects including one motor vehicle per each expert which may be brought into from abroad or taken out of the Democratic Republic of the Sudan.

#### III. PROVISION OF MACHINERY AND EQUIPMENT

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in III, of the Annex through the normal procedures under the technical cooperation scheme of the Government of Japan.
- 2. The Equipment referred to in paragraph 1 above will become the property of the Government of the Democratic Republic of the Sudan upon being delivered c.i.f. to the Sudanese authorities concerned at the port(s) and/or airport(s) of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in II. of the Annex.

#### IV. TRAINING OF SUDANESE PERSONNEL IN JAPAN

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Sudanese personnel connected with the Project for technical training in Japan through the normal procedures under the technical cooperation scheme of the Government of Japan.
- 2. The Government of the Democratic Republic of the Sudan will take necessary measures to ensure that the knowledge and experience acquired by the Sudanese personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

#### V. SERVICES OF SUDANESE COUNTERPART AND ADMINISTRATIVE PERSONNEL

- 1. In accordance with the laws and regulations in force in the Democratic Republic of the Sudan, the Government of the Democratic Republic of the Sudan will take necessary measures to secure at its own expense the necessary services of the Sudanese counterpart and administrative personnel as listed in IV. of the Annex.
- 2. The Government of the Democratic Republic of the Sudan will allocate the necessary number of suitably qualified personnel corresponding to each Japanese expert to be dispatched by the Government of Japan as specified in II. of the Annex for the effective and successful transfer of technology under the Project.

# VI. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE DEMOCRATIC REPUBLIC OF THE SUDAN

- 1. In accordance with the laws and regulations in force in the Democratic Republic of the Sudan, the Government of the Democratic Republic of the Sudan will take necessary measures to provide at its own expense:
  - (1) Land, buildings and facilities as listed in Annex V. of the Annex;

- (2) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;
- (3) Transportation facilities and travel allowance for the official travel of Japanese experts within the Democratic Republic of the Sudan;
- (4) Free medical services and facilities to the Japanese experts and their families.
- (5) Suitably furnished accommodations for the Japanese experts and their families.
- 2. In accordance with the laws and regulations in force in the Democratic Republic of the Sudan, the Government of the Democratic Republic of the Sudan will take necessary measures to meet:
  - (1) Expenses necessary for the transportation within the Democratic Republic of the Sudan of the Equipment referred to in III above as well as for the installation, operation and maintenance thereof;
  - (2) Customs duties, internal taxes and any other charges, imposed on the Equipment in the Democratic Republic of the Sudan;
  - (3) All running expenses necessary for the implementation of the Project.

# VII. ADMINISTRATION OF THE PROJECT

- 1. The Ministry of Health of the Democratic Republic of the Sudan will bear overall responsibility for the implementation of the Project.
- 2. The Director of the Khartoum Training Hospital, as the Head of the Project, will be responsible for the administrative and managerial matters of the Project.
- 3. The Japanese experts will give necessary technical guidance and advice to the Sudanese counterpart personnel on matters pertaining to the implementation of the Project.

4. For the effective and successful implementation of the Project, a Coordinating Committee will be established with the function and composition as referred to in VI. of the Annex.

#### VIII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Democratic Republic of the Sudan undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occuring in the course of, or otherwise connected with the discharge of their official functions in the Democratic Republic of the Sudan except for those arising from the willful misconduct or gross negligence of the Japanese experts.

#### IX. MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with this Record of Discussions.

#### X. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be, in principle, five (5) years from April 1, 1985. However, there will be a general review by the Coordinating Committee on the progress of the implementation of the Project during the third year of the cooperation period in order to assess whether the term of cooperation should be modified for the successful implementation of the Project.

#### ANNEX I. MASTER PLAN

#### 1. Objective of the Project

The Project aims at contributing to the improvement of health of Sudanese people through the upgrading of the level of techniques for diagnosis, treatment and clinical research in the fields of gastroenterology, urology, and E.N.T., at the Khartoum Training Hospital newly constructed by the grant aid programme of the Government of Japan.

## 2. Activities under the Projec

The activities will include the following:

- (1) To upgrade the technical levels of diagnosis and treatment of the gastro-intestinal, urological and E.N.T. diseases.
- (2) To improve the capabilities in clinical research in the fields of gastroenterology, urology, and E.N.T,
- (3) To reinforce the clinical laboratories of the above-mentioned fields as national referral centres.

#### 3. Implementation of the Technical Cooperation

The Government of Japan will cooperate with the Government of the Democratic Republic of the Sudan in carrying out the Project through the dispatch of Japanese experts, acceptance of Sudanese personnel for training in Japan and provision of equipment.

#### ANNEX II. JAPANESE EXPERTS

The Government of Japan will dispatch the following personnel;

- 1) Experts in the fields of:
- (1) Gastroenterology (internal medicine)
- (2) Gastroenterology (surgery)
- (3) Urology
- (4) E.N.T.
- (5) Radiology
- (6) Microbiology
- (7) Clinical laboratory
- 2) Coordinator, and
- 3) Others mutually agreed upon as necessary

#### ANNEX III. LIST OF EQUIPMENT

- Equipment for diagnosis and treatment in gastroenterology, urology,
   E.N.T., and others mutually agreed upon as necessary.
- 2. Equipment for clinical laboratory research in gastroenterology, urology, E.N.T., and others mutually agreed upon as necessary.
- 3. Mobile clinical examination vehicle, and other vehicles mutually agreed upon as necessary.
- 4. Other materials mutually agreed upon as necessary.

## ANNEX IV. LIST OF SUDANESE COUNTERPART AND ADMINISTRATIVE PERSONNEL

- 1. Head of the Project:
  Director, Khartoum Training Hospital
- 2. Directors in:
  - (1) Gastroenterology(internal medicine)
  - (2) Gastroenterology(surgery)
  - (3) Urology
  - (4) E.N.T.
  - (5) Radiology
  - (6) Microbiology
  - (7) Clinical laboratory medicine
  - (8) Others related departments mutually agreed upon as necessary
- 3. Engineers & technicians for:
  - (1) Medical equipment
  - (2) Clinical laboratory equipment
  - (3) Radiological equipment
  - (4) Other equipment mutually agreed upon as necessary
- 4. Nurses in the departments of:
  - (1) Outpatients
  - (2) Operating theatre
  - (3) Ward
  - (4) Other mutually agreed upon as necessary
- Administrative personnel:
  - (1) Administrative staff
  - (2) Accountant
  - (3) Others mutually agreed upon as necessary

## ANNEX V. LIST OF LAND, BUILDING AND FACILITIES

The Government of the Democratic Republic of the Sudan will make available to the Project and Japanese experts the existing Khartoum Training Hospital and its facilities (including electricity, gas, water, sewerage system, telephone, and furniture) necessary for the implementation of the Project.

## ANNEX VI THE COORDINATING COMMITTEE

## 1. Functions:

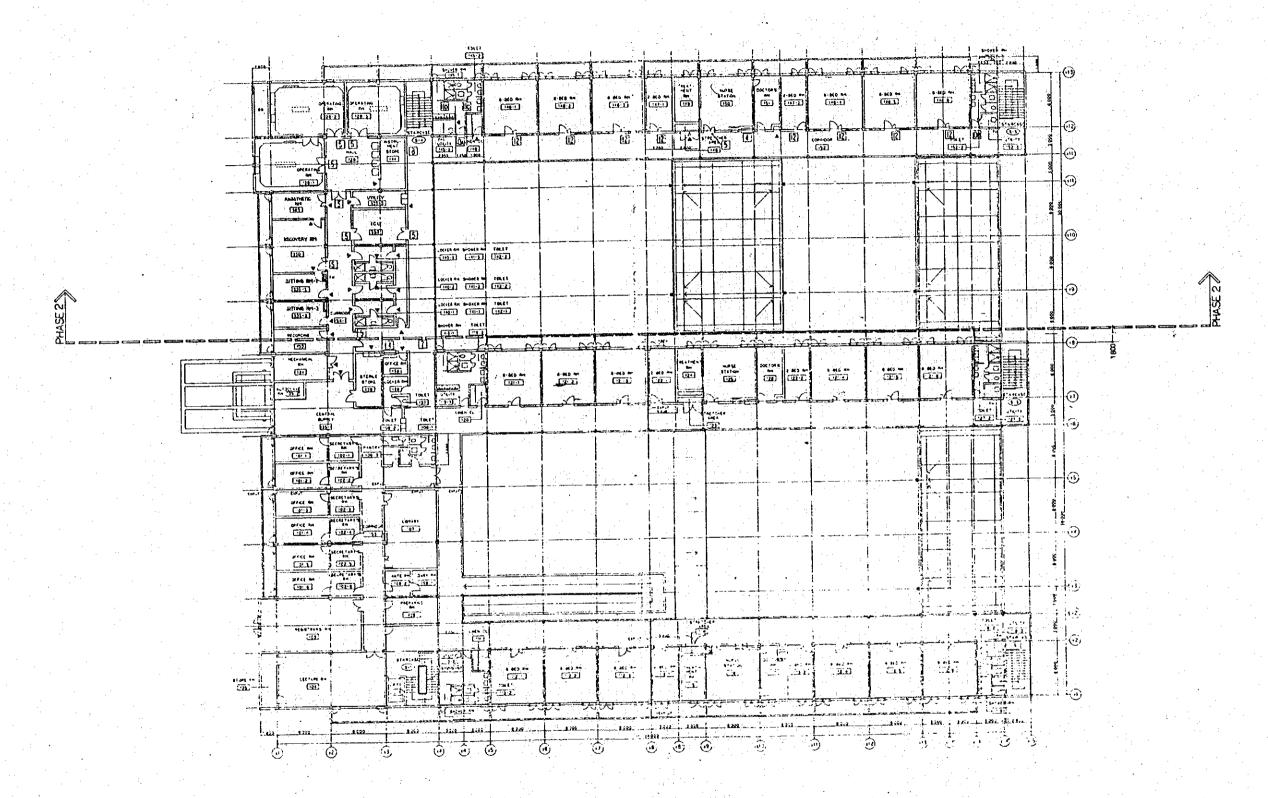
The Coordinating Committee will meet at least once a year and whenever necessity arises, and work as follows;

- (1) To formulate an annual work plann of the Project in line with the tentative schedule of implementation formulated under the framework of this Record of Discussions:
- (2) To review the overall progress of the technical cooperation program as well as the achievements of the above-mentioned annual work plan;
- (3) To review and exchange views on major issues arising from or in connection with the technical cooperation programme.

## 2. Composition:

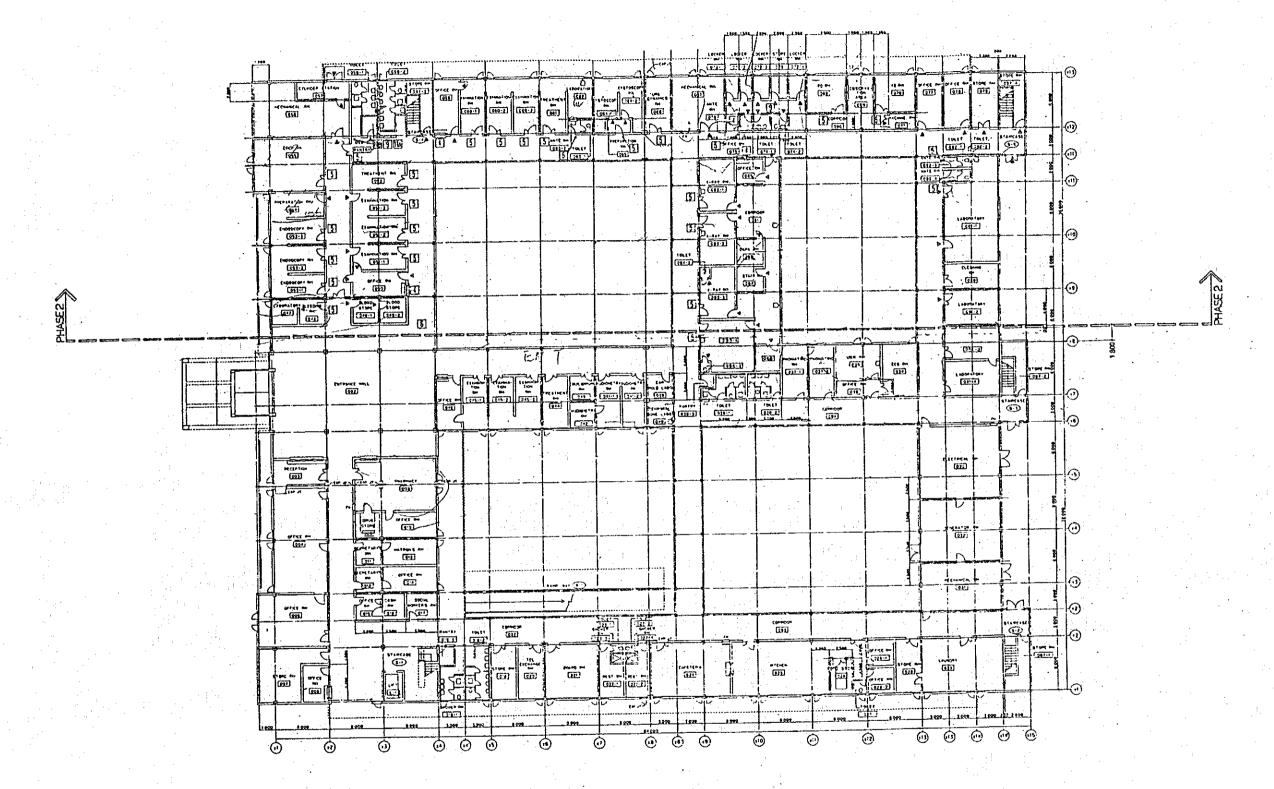
- (1) Sudanese side:
  - a. Chairman: Director General, Department of Health, Ministry of Health
  - b. Members:
    - b-1 Director, Khartoum Training Hospital, Ministry of Health
    - h-2 Deputy Director, Khartoum Training Hospital, Ministry of Health.
    - b-3 Senior Consultant on gastroenterology, Khartoum Training Hospital, Ministry of Health
    - b-4 Senior Consultant on urology, Khartoum Training
      Hospital, Ministry of Health.
    - b-5 Senior Consultant on E.N.T., Khartoum Training Hospital, Ministry of Health.
- (2) Japanese side:
  - a. Experts
  - b. Coordinator
  - c. Members of a team to be dispatched by JICA

Note: Officials of the Embassy of Japan to the Democratic Republic of the Sudan may attend the Coordinating Committee as observers.



1 1ST ELOOR KEY PLAN

THE ESTABLISHMENT PROJECT OF ST FLOOR KEY PLAN A2-004 THE KHARTOUM TRAINING HOSPITAL PHASE 2 - 1, 200



GROUND FLOOR KEY PLAN

	· ·	· · · · · · · · · · · · · · · · · · ·			
			والمراجع والم	ITITLE	DWG NO REY NO
	D3704444	eign court - 1 5 5	PROJECT NAME	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A2-003
			THE ESTABLISHMENT PROJECT OF THE KHARTOUM TRAINING HOSPITAL	GROUND FLOOR KEY PLAN	72 CO3 V
YAMASHITA ARCHITECTS & ENGINEERS, INC.	CHECKED SAFE		PHASE 2 -		
	DR4 and		, a Phase 6 4	1:200	
	YY 97.11. I MO I REVISIONS	DATE			

## THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE DEMOCRATIC REPUBLIC OF THE SUDAN ON THE JAPANESE TECHNICAL COOPERATION FOR THE KHARTOUM TRAINING HOSPITAL PROJECT

The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Dr. Hideo NAGASHIMA visited the Democratic Republic of the Sudan from 18th to 28th of December, 1984 for the purpose of working out the details of the technical cooperation program concerning the Khartoum Training Hospital Project.

During its stay in the Democratic Republic of the Sudan, the Team exchanged views and had a series of discussions with the Sudanese authorities concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the above-mentioned project.

As a result of the discussions, both parties agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Khartoum. December 20th, 1984

长 的 秀 夫 鼠

Dr. Hideo Nagashima,

Leader

Implementation Survey Team

Japan International Cooperation

Agency, Japan

Dr. Mohamed foosif El Awad

Under Secretary

Ministry of Health

Democratic Republic of the Sudan

## THE ATTACHED DOCUMENT

## I. COOPERATION BETWEEN BOTH GOVERNMENTS

- 1. The Government of Japan and the Government of the Democratic Republic of the Sudan will cooperate with each other in implementing the Khartoum Training Hospital Project (hereinafter referred to as "the Project") for the purpose of upgrading the level of techniques for diagnosis, treatment, clinical research in the fields of gastroenterolog, urology, and otorhinolaryngology at the Khartoum Training Hospital which will be constructed by the grant aid program of the Government of Japan.
- 2. The Project will be implemented in accordance with the Master Plan which is given in I of the Annex.

## II. DISPATCH OF JAPANESE EXPERTS

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in II of the Annex through the normal procedures under the Technical Cooperation Scheme of the Government of Japan.
- 2. The Japanese experts referred to in 1. above and their families will be granted in the Democratic Republic of the Sudan, the privileges, exemptions and benefits no less favourable than those accorded to experts of third countries or of international organizations performing similar missions in the Democratic Republic of the Sudan, which will include the following:



RZ-P

- (1) A temporary license in medicine shall be issued to experts who are qualified in accordance with the prevailing laws and regulations in force in Japan upon arrival in the Democratic Republic of the Sudan, and whose medical services to the Sudanese people shall be fully guaranteed by the Ministry of Health, the Democratic Republic of the Sudan during the performance of their duties.
- (2) Exemption from income tax and charges of any kind imposed on or in connection with the living allowances remitted from abroad in relation to the implementation of the Project.
- (3) Exemption from import and export duties and any other charges imposed in respect of personal and household effects including one motor vehicle per each expert which may be brought into from abroad or taken out of the Democratic Republic of the Sudan.
- (4) Free medical services and facilities to the Japanese experts and their families.

## III. PROVISION OF MACHINERY AND EQUIPMENT

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in III of the Annex through the normal procedures under the Technical Cooperation Scheme of the Government of Japan.
- 2. The Equipment will become the property of the Government of the Democratic Republic of the Sudan upon being delivered c.i.f. to the Sudanese authorities concerned at the port(s) and/or airport(s) of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in II of the Annex.

长的

152m

## IV. TRAINING OF SUDANESE PERSONNEL IN JAPAN

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Sudanese personnel connected with the Project for technical training in Japan through the normal procedures under the Technical Cooperation Scheme of the Government of Japan.
- 2. The Government of the Democratic Republic of the Sudan will take necessary measures to ensure that the knowledge and experience acquired by the Sudanese personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

## V. SERVICES OF SUDANESE COUNTERPART AND ADMINISTRATIVE PERSONNEL

- 1. In accordance with the laws and regulations in force in the Democratic Republic of the Sudan, the Government of the Democratic Republic of the Sudan will take necessary measures to secure at its own expense the necessary services of the Sudanese counterpart and administrative personnel as listed in IV of the Annex.
- 2. The Government of the Democratic Republic of the Sudan will allocate the necessary number of well qualified personnel corresponding to each Japanese expert to be dispatched by the Government of Japan as specified in II of the Annex for the effective and successful transfer of technology under the Project.

## VI. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE DEMOCRATIC REPUBLIC OF THE SUDAN

- 1. In accordance with the laws and regulations in force in the Democratic Republic of the Sudan, the Government of the Democratic Republic of the Sudan will take necessary measures to provide at its own expense:
  - (1) Land, buildings and facilities as listed in V of the Annex;

长 \$

12-1

- (2) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;
- (3) Transportation facilities and travel allowance for the official travel of the Japanese experts within the Democratic Republic of the Sudan:
- (4) Suitably furnished accommodations for the Japanese experts and their families.
- 2. In accordance with the laws and regulations in force in the Democratic Republic of the Sudan, the Government of the Democratic Republic of the Sudan will take necessary measures to meet:
  - (1) Expenses necessary for the transportation of the Equipment within the Democratic Republic of the Sudan as well as for the installation, operation and maintenance thereof;
  - (2) Customs duties, internal taxes and any other charges, imposed on the Equipment in the Democratic Republic of the Sudan;
  - (3) All running expenses necessary for the implementation of the Project.

## VII. ADMINISTRATION OF THE PROJECT

- 1. The Ministry of Health of the Democratic Republic of the Sudan will bear overall responsibility for the implementation of the Project.
- 2. The Director of the Khartoum Training Hospital, as the Head of the Project, will be responsible for the administrative and managerial matters of the Project.
- 3. The Japanese experts will give necessary technical guidance and advice to the Sudanese counterpart personnel on matters pertaining to the implementation of the Project.
- 4. For the effective and successful implementation of the Project, a Coordinating Committee will be established with the function and composition as referred to in VI of the Annex.



82:1

## VIII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Democratic Republic of the Sudan undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occuring in the course of, or otherwise connected with the discharge of their official functions in the Democratic Republic of the Sudan except for those arising from the willful misconduct or gross negligence of the Japanese experts.

## IX. MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with this Record of Discussions.

## X. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be five (5) years from April 1st,1985. However, there will be a general review by the Coordinating Committee on the progress of the implementation of the Project during the third year of the cooperation period in order to assess whether the term of cooperation should be modified for the successful implementation of the Project.

長 鹤

7721

## ANNEX I. MASTER PLAN

## 1. Objective of the Project

The Project aims at contributing to the improvement of healh of Sudanese people through the upgrading of the level of techniques for diagnosis, treatment and clinical research in the fields of gastroenterology, urology, and otorhinolaryngology at the Khartoum Training Hospital which will be constructed by the grant aid program of the Government of Japan.

## 2. Activities under the Projec

The activities will include the following:

- (1) To upgrade the technical levels of diagnosis and treatment of the gastro-intestinal, urological and otorhinolaryngological diseases.
- (2) To improve the capabilities in clinical research in the fields of gastroenterology, urology, and otorhinolaryngology.
- (3) To reinforce the clinical laboratories of the above-mentioned fields as national referral centres.
- (4) To upgrade training of doctors & medical personnel in the fields of gastroenterology, urology and otorhinolaryngology.
- 3. Implementation of the Technical Cooperation

The Government of Japan will cooperate with the Government of the Democratic Republic of the Sudan in carrying out the Project through the dispatch of Japanese experts, acceptance of Sudanese personnel for training in Japan and provision of equipment.

772J

## ANNEX II. JAPANESE EXPERTS

The Government of Japan will dispatch the following personnel;

- 1) Experts in the fields of;
- (1) Gastroenterology (internal medicine)
- (2) Gastroenterology (surgery)
- (3) Urology
- (4) Otorhinolaryngology
- (5) Radiology
- (6) Microbiology
- (7) Clinical laboratory medicine
- 2) Coordinator
- 3) Others mutually agreed upon as necessary

长的

R2-1

## ANNEX III. LIST OF EQUIPMENT

- 1. Equipment for diagnosis and treatment in gastroenterology, urology, otorhinolaryngology, radiology, microbiology, and others mutually agreed upon as necessary.
- 2. Equipment for clinical laboratory research in gastroenterology, urology, otorhinolaryngology, and others mutually agreed upon as necessary.
- 3. Mobile clinical examination vehicle, and other vehicles mutually agreed upon as necessary.
- 4. Other materials mutually agreed upon as necessary.

发的

TO TO

## ANNEX IV. LIST OF SUDANESE COUNTERPART AND ADMINISTRATIVE PERSONNEL

- 1. Head of the Project:
  - Director, Khartoum Training Hospital
- 2. Counterpart Personnel to the Japanese Experts in the fields of:
  - (1) Gastroenterology(internal medicine)
  - (2) Gastroenterology(surgery)
  - (3) Urology
  - (4) Otorhinolaryngology
  - (5) Radiology
  - (6) Microbiology
  - (7) Clinical laboratory medicine
  - (8) Others mutually agreed upon as necessary
- 3. Engineers & technicians for:
  - (1) Medical equipment
  - (2) Clinical laboratory equipment
  - (3) Radiological equipment
  - (4) Other equipment mutually agreed upon as necessary
- 4. Nurses in the departments of:
  - (1) Outpatients
  - (2) Operating theatre
  - (3) Ward
  - (4) Other mutually agreed upon as necessary
- 5. Administrative personnel:
  - (1) Administrative staff
  - (2) Accountant
  - (3) Others mutually agreed upon as necessary

长岛

W21

## ANNEX V. LIST OF LAND, BUILDING AND FACILITIES

Land and buildings of the Khartoum Training Hospital and its facilities (including electricity, gas, water, sewerage system, telephone, and furniture) necessary for the implementation of the Project.

各島

P8 2-1

## ANNEX VI THE COORDINATING CONNITTEE

## 1. Functions:

The Coordinating Committee will meet at least once a year and whenever necessity arises, and work:

- (1) To formulate an Annual Work Plan of the Project in line with the Tentative Schedule of Implementation formulated under the framework of this Record of Discussions:
- (2) To review the overall progress of the technical cooperation program as well as the achievements of the above-mentioned Annual Work Plan;
- (3) To review and exchange views on major issues arising from or in connection with the technical cooperation program.

## 2. Composition:

- (1) Sudanese side:
  - a. Chairman: Director General, Department of Health, Ministry of Health
  - b. Members:
    - b-1 Director, Khartoum Training Hospital, Ministry of Health
    - b-2 Deputy Director, Khartoum Training Hospital, Ministry of Health
    - b-3 Senior Consultant on gastroenterology, Khartoum Training Hospital. Ministry of Health
    - b-4 Senior Consultant on urology, Khartoum Training Hospital, Ministry of Health
    - b-5 Senior Consultant onotorhinolaryngology, Khartoum Training Hospital Ministry of Health
- (2) Japanese side:
  - a. Experts
  - h. Members of a team to be dispatched by JICA, if necessary

Note: Officials of the Embassy of Japan in the Democratic Republic of the Sudan may attend the Coordinating Committee as observers.

智的

A21.

TENTATIVE PLAN OF IMPLEMENTATION FOR KHARTOUM

# TRAINING HOSPITAL

	1989	1ヵ月		① 小児消化器外科	小児内臓外科	③ 消化器内料		<b>曹外科</b>	<b>乙光</b> 鏡	一般泌尿器科						Doctor (3名)	3 2 月	<b>器</b> 科	耳鼻咽喉科	器科	浴化器料(Dr·)	<b>耳母咽喉科(技術員)</b>
			消化器科	Î√ ⊕	<ul><li>(a)</li><li>(b)</li><li>(c)</li></ul>	)	泌尿器科	日 自 自 自 自 自 自 自 自 自 自 自 自 自 自 自 自 自 自 自	(a)	∯						3名) Junier	4月から3カ月	① 消化器科	が世 の 一	<ul><li>③ 必尿器科</li></ul>	<ul><li>● (B(L)</li></ul>	(g)
PERIOD	1988	1ヵ月	潛化器科	① 肝臓外科	② 一般消化器(内科	<ul><li>③ 関外科</li></ul>	<b>必尿器科</b>	① 配製料	② 小児泌尿器科	耳鼻咽喉科	© audiology	② 内视频				Junier Doctor (	4月から3カ月	〇 消化器科	② 耳鼻咽喉科	<ul><li>③ 級尿器料</li></ul>	<ul><li>各股格(大学格)</li></ul>	⑤ 泌尿器科(Dr.)
TECNICAL COOPERATION PI	1987	1 九月	消化器科	① 一般消化器率(內型)	② 外科	1) 胆道外科	2)大腦外陸	泌尿器科	① 乙类器	② 路遊析	③ 一般泌尿器科	耳鼻咽喉科	① Head and Neck	② 小児		Senier Doctor (3名)	4 月から3カ月	① 消化器科	② 耳鼻咽喉科	③ 忽於器科	の発売し、対象と	(a) /# #XXIII (b) (c)
TECN	1986	1 7 月	<b>連</b> ん踏歩	① 年駿	② 国外科	③ 門脈圧亢進症	放射線医学	<ul><li>① 血管造影</li></ul>	② 超奇波診断	必尿器科	① 自箇外科	小聲喧 @	耳母咽喉科	① microsvrgery	· · · · · · · · · · · · · · · · · · ·	Senjer Doctor (2名) 技術員 (1名)	4月からDr. は1ヵ月 按術員は6ヵ月	① 汽化器科	② 耳鼻咽喉唇 〕	③ 泌尿器科(技術員)		
	1985	1ヵ月	简化器型	① 内視鏡	② 食道外科	<ul><li><b></b></li></ul>	必尿器科	① 泌尿器科学	② 內膜液外	耳鼻咽喉科	① 耳华(一般)	(2)				Doctor (3名)	3.4月	① 放射線医学	(3) 成型	◎ 医臀科	<ul><li>⑤ 耳鼻鼠喙科(技術員)</li></ul>	<ul><li>● 内部を(Dr.)</li></ul>

表中番号は希望順位を示す。

5. Furnish full particulars in respect of-(a) Consignee; (b) Official to receive documents and enquiries; and

(c) Clearing agent at port of entry.

## TECHNICAL COOPERATION BY THE GOVERNMENT OF JAPAN PROPOSAL

By the Government of The Democratic Republic of the Sudan , to the Government of Japan for the supply of equipment

- Notes.—(1) This form has been devised for the general guidance of co-operating countries in order to facilitate the supply of relevant information and data necessary to afford an adequate appreciation of the nature of the technical assistance required. The careful completion of this proposal form will avoid much reference back and lead to speedler action.

  (2) The requisite number of copies of the Form A4 duly endorsed by the appropriate Foreign Aid Department of the requesting government should be forwarded to the donor government concerned through the appropriate channels.

  (3) The equipment to be supplied by the Government of Japan will become the property of the requesting government upon receipt of the shipping documents through the Japaness Embassy. Since the equipment is supplied on CLF. basis, it is requested that the recipient government will meet:

(a) mistams duties intern	te recipient government will meet:  al taxes and other similar charges, if any, imposed in respect of the equipment, and the transportation, installation, operation and maintenance of the equipment.
Please describe as concisely as possible the general outlines of the project for which the equipment is required, indicating whether the latter is (a) for use by an expert in the performance of his duties (b) for a training scheme of institution or (c) for a research institution of either (b) or (c) please say whether the equipment is for the establishment of a new institution or the expansion or re-organization of an existing one (e.g., by the provision of a new department, etc.). The name and exact location of the institution, its approximate cost and the authority responsible for it should be given of the availability of any services required for the operation of the equipment. This would include operation by electricity (i.e. type of current, periodicity, voltage and any variations, phases, frequency etc. and if D.C. is the only current available please give full details), water reticulation or steam gas etc. Details of similar equipment already in use should be given.	b) existing Khartoum Training Hospital plot No. 1 Block (9R) East Khartoum, New Extensio 16 million U.S.Dollars Ministry of Health - The Democratic Republic of the Sudan. 60A, 50Hz 415Y-240V (3 phase, 4 wire, 50Hz) City water line system Hot water high Butane Gas supply system
2. Description of equipment required, Please give a full description of each item and general specifications where possible. The manufacturer and estimated cost of each item if, known together with details of the proposed end use of item should be given. Where applicable, give details of any special packing or tropic proofing required and indicate whether handbooks or instruction data supplied in English will suffice. If appropriate, please indicate any required priorities or plassing of deliveries and advise whether adequate (acilities exist for maintenance and servicing of the type of equipment requested. (If lengthy, detailed lists should be annexed; it would be convenient to have separate annexures for (a) films; (b) books and (c) other equipment.)	tropic proofing
3. Has this equipment request already been directed to any other Agency or country and if so to whom was it addressed and with what result?	Home
<ol> <li>Has the list of equipment already been discussed with representatives of the supplying country/ies? If so, please indicate what stage the discussions have reached.</li> </ol>	Not

of the Sudan.

Ministry of Health, The Democratic Republic

					•				
		. :							
6. Where eq	nipment is regal	ired for use			A THE STREET OF THE STREET, AND ASSESSED TO STREET, AN	<u> </u>	UZANALIARSAN PARTA P	;	
Please Inc (a) The $\alpha$	licate nuntry or agency								
obtaine (b) His du	ties and length	of second-							
Form. expert	a reference to t A. 1 will suffice is being provi	when the							
reques (c) What	y to whom the is addressed), use is propose	d for the			:	•		·	
iod of	ent when the e secondment terr at date is the	minates?							
7. Where e	raipment is re or Research	-	Traini	ng young de	octors				
Please inc				ple with d		medical sch	nool		
(b) Total no dated fi elsewher	imber of students to took within the con e in the Region, the	qualifications	80 out	put					
end the (c) Whether tute(s) i	ssion, the duration annual output of to there is already a n existence in the c	similar insti-	Ио						1
(d) Whethe If not b	ve details of buildings are alres as construction star octed to be complete	ted and when							
(a) Whethe equipme	e qualified staff to at has been recruit be recruited locally	o headle the	Yes						
a od (D)	t proposed: ceruit foreigners us mes?	2.1	Yes f	orms attac	hed and a	pplyed at	the same	time	٠.
the	train locally recruited in handling oquiterence numbers or A.2 relating to	of say Forms	,						:
(f) Taking and (e) the equ	id be quoted) into account the a above, what is the o ipment is required b training or resear	date by which and the date	Ma	rch, 1985		·			
commen (g) Whethe the Scho experts	ce. r any essistance in me has been obtained (Any apecialist	drawing up	Ио		:				
Committe the requ	eene surveys (e.g., ee Reports, etc.), est should be provid	bearing oa						. <u></u>	
ress of of	dence stal and Telegr ficial to whom rding this appli	correspond-		nki El Din ox 2146   k	Ahmed hartoum -	Sudan	. •		
be forwar		Cadon Is W			· · · · · · · · · · · · · · · · · · ·				
	. •				Signed	Zakti	1er		
n-v- 21	/Augu., 198	34	on beh	alf of the Gove				li <u>c</u> .	
Date	/ August				. : <b>o</b>	f the Suda	in :	·	
For use only	by Donor Gove	rament							
Applicat	ion accepted/rej	ected/withdra		half of the De	partment of	•			21
Date:		· · · · · · · · · · · · · · · · · · ·	<i>y</i>						
: .									
	er er			3 - 2					
	• :			than the property	jalan.				
		46 - 15 - 15 - 15 - 15 - 15 - 15 - 15 - 15							
		•		-43-					
				4.5-		r"			

## MEDICAL EQUIPMENT AND OTHERS

OUANTITY NAME High intensity cold light supply with flash 1 set 1 Upper gastrointestinal fiberscope 1 set 2 1.000 pcs 3 Disposable blood transfusion sets Stomach catheters 36" long 1.000 pcs4 3 different sizes 1 set Slide projector 5 2 nos Ambulance car 6 2 nos 7 Station wagon car 3 sets E.N.T. Treatment unit 1 - for the audiology section 2 - for the E.N.T. ward 3 - For the Phoniatric section 6 sets Stools for the above units 9 E.N.T. Treatment chair (for the E.N.T. ward) 10 Nasopharyngofiberscope 11 Rhinolaryngofiberscope 12 13 Bronchofiberscope Set for microsurgery of larynx 14 15 Operative microscope for E.N.T. - O.P. out patient Binocular loope with accessories 16 Camera for the operative - microscope in the theater 1 1.7 200 sets Ventilation tubes for the middle ear 18 Toyes for the audiology and phoniatric sections 19 50 sets 20 Binaural body type Hearing aids for auditory training and speech therapy of deaf children Set Nephroscope 21 1 set Ultrasonic lithotrite 22 23 Uretro-reonoscope Renal hypothermia unit for intra-renal surgery 24 with extended ischemia time Microsurgical equipment for renovascural surgery 25 and surgery of the vas Posterior urthroplasty set for urethral 1 set 26 reconstruction 1 set Bipolar diathermy. 9 Hypthermia apparatus for 27 kidney surgery

**資料7の1 LIST OF EQUIPMENT FOR FIVE YEARS PLAN** 

1989	Portable X-Ray (Image intensifier), Gastroscopes	Infant cystoscope, Infant resectoscope Adult resectoscope, Adult cyetoscope Endoscopic lithotrite, etc.	Instrument cabinet, Medicine cabinet, Movie illuminator, Group hearing aid Coagulator, etc.	Evaluation team
1988	CT scanner Photocopying machine etc.	Urodynamic unit with image intensfier for teaching and reading Video-camera system with closed civic T.V. for endoscopic procedures	Minor operating set, Audiometer test room Diagnostic instrument, Dry temporal bone surgery set, etc.	Equipment repair team
1987	Front viewers, Gastroscopes, Front and merican Gun Sideviewers, Ambalance cars, el resection, Minibus, Deskcomputers, and Image etc.	Artificial kidney machine, Peritoneal dialysis machine, Portable X-Ray (Image intensifier) for Stone surgery	Tracheostomy tubes, Drill motor engine burs for mastoid surgery suction unit, Larynoscope, Bronchoscope, etc.	Advisory team
1986	Gastroscopes, Front viewers, Sideviewers, American Gun (SPIV) for bowel resection, Portable X-Ray and Image Intensifier, Slide making machine	Paediatric cystoscope, Adult cystoscope, padiatric Peritoneal dialysis resectoscope, Adult machine, Portable X Resectoscope, Cystoscopic (Image intensifier) Lithotrit, etc.	Suction unit, dry temporal bone surgery unit, Coagulator, Neometal audiometer for hearing test on newbone, Industrial fitting auditory trainer, etc.	Planning and Coordination team
1985	(GASTEROENTEROLOGY) High intensity color light supply, Gastrointenstinal fiberscope, Blood transfusion sets, etc. 1986社類科	(UROLOGY) Nephroscope, Cryosurgical equipment, Ultrasonic reonoscope, Renalhypother- mia unit, Microsurgical unit, etc.	Ent treatment unit Nasopharyngofiberscope, Rhinolaryngofiberscope Ent operative microscope, Camera for the operative microscope, etc.	
		ipment	nbg	Surveillance Team Implementation team

## List of Equipment for the first year of the project type Technical corporation

## GASTROENTEROLOGY

- 1) 1 set of high intensity cold light supply with flash "type 2B-8"
- 2) 1 set of upper Gastrointestinal fiberscope "Olympus with wide biopsy channel"
- 3) 1000 pieces of disposable blood transfusion sets
- 4) 1000 pieces of stomach catheters 36" long, 3 different sizes
- 5) 1 set of slide projector
- 6) 1 set of OHP
- 7) 2 Ambulance cars to move the sizable number of patients who will be referred from the other teaching hospitals to the Khartoum training hospital (Ibn Sina)

Remembering there is no adequate ambulance cars available in any of the teaching hospitals.

## FIVE YEARS PLAN EQUIPMENTS FOR

## G. UROLOGY DEPARTMENT IBN-SINA HOSPITAL

## 1st year

- 1. Nephroscope
- 2. Cryosurgical equipments for Urological surgery
- 3. Ultrasonic lithotrite
- 4. Uretro reonoscope
- 5. Renal hypothermia unit for intra-renal surgery with extended ischemia time.
- 6. Microsurgical equipment for renovascural surgery and surgery of the vas.
- 7. Posterior urthroplasty set for urethral reconstruction
- 8. Bipolar diathermy.
- 9. Hypthermia apparatus for kidney surgery

## 2nd year

- 1. Paediatric cystoscope
- 2. Adult cystoscope
- 3. Paediatric resectoscope
- 4. Adult resectoscope
- 5. Cystoscopic lithotrite
- 6. Vision uretrotone
- 7. Synchronus video-pressure-flow-cystourethrogram unit

## 3rd year

- 1. Artificial Kidney Machine
- 2. Peritoneal dialysis machine
- 3. Portable X-ray with image intensfier for stone surgery

## 4th year

- 1. Urodynemic unit with imate, intensfier for teaching and reading
- 2. Video-camera system with closed civic T.V. for endoscopic procedures

## 5th year

- 1. Infant cystoscope
- 2. Infant resectoscope
- 3. Adult cystoscope
- 4. Adult resectoscope
- 5. Endoscopic lithotrite
- 6. Ultrasonic lithotrite
- 7. Vision urethrotome
- 8. Nephroscope

## FIRST YEAR

Item	Description	Quantity
1	E.N.T. Treatment Unit	3
· ·	1. for the E.N.T. Ward	
	2. for the Audiology Section	
	3. for the Phoniatric Section	:
2.	Stools for the above units	6
3.	E.N.T. Treatment chair	1
	for the E.N.T. Ward	
4.	Nasopharyngofiberscope	1
5.	Rhinolaryngofiberscope	1
6.	Bronchofiberscope	1
7.	Set for Microsurgery of Larynx	1
· 8.	Operative Microscope for E.N.T O.P. Out	1
	Patient	
9.	Binocolar Loope with Accessaries	2
10.	Camera for the Operative Microscope	1
	in the Theatre	
11.	Ventilation Tubes for the Middle Ear	200
12.	Toyes for the Audiology and Phoniatric	
	Sections	
13.	Binaural Body Type Hearing Aids for	50
	Auditory Training and Speech Therapy of	
	Deaf Children	

## SECOND YEAR

Item	Description	Quantity
1.	Suction unit	3
2.	Dry Temporal Bone Surgery set	1
3.	Binocular Loope with Accessories	2
4.	Coagulator with Accessories	1
5.	Equipment and Material for Ear Mould Laboratory	1
6.	Neometal Audiometer for Hearing Test on Newborn	1
7.	Individual Fitting Auditory Trainer	1
8.	Infant Screening Audiometer	1
9.	Pitch Extractor	1
10.	Speech and Auditory Trainer	1
11.	Ventilation Tubes for the Middle Ear	200
12.	Tape Recorder with Reals for Speech Therapy	: "
13.	Amplifier with 4 Loud-Speakers for Speech	1
	Therapy	

## THIRD YEAR

Item	Description	Quantity
1.	Tracheostomy Tubes - Different Sizes	500
2.	Drill-Motor Engine for Mastuid Surgery	3
3.	Hand Piece for Above	· 6
4.	Burs for Mastoid Surgery Different Types	100
	and Sizes	
5.	Suction Unit	2
6.	Laryngoscope- Solid - Infant	1
	- Child	1
	- Adult + sets of Forceps	1
7.	Bronchoscope-Solid - Infant	1
<b>/ •</b>	- Child	1
	Adult + sets of Forceps	1 
8.	Oeso Phagoscope-Solid - Infant	1
	- Child - Adult + sets of Forceps	1
9.	Spare Bulbs for the Above	30
10.	Sound Level Meter	1
11.	Ventilation Tubes for the Middlear	200
12.	Prostheses for Stapes Surgery	20

## FOURTH YEAR

Item	Description	Quantity
1.	Minor Operating set for E.N.T.	1
2.	Audiometric Test Room	1
3.	Diagnostic Instrument for E.N.T.	1
4.	Dry Temporal Bone Surgery set for Training	1
5.	Binocular Loope	2
6.	Nebulizer for Three Persons	1
7.	Infant Audiometer	1
8.	Audiometer with Casette Recorder	1
9.	Hearing Aid Function Test System	1
10.	Calorometer for Caloric Test	1
11.	Ventilation Tubes for the Middle Ear	200
12.	Middle Ear Analyser	1
13.	Autospiror	1
14.	Binaural Body Type Hearing Aids for Auditory Training and Speech Therapy of Deaf Children	

### FIFTY YEAR

Item	Description	Quantity
1.	Instrument Cabinet	1
2.	Medicine Cabinet	1
3.	Instrument Table	1
4.	Film Illuminator	3
5.	Group Hearing Aid	1
6.	Coagulator	1
7.	Ventilation Tubes for the Middle Ear	200
8.	Tracheostomy Tubes Different Sizes	500
9.	Suction Unit	3
10.	Laryngostroboscope	1
11.	Prosthesis for Stapes Surgery	20
12.	Bulbs for Operating Microscopes	20
	Endoscopes	100
13.	Equipment and Material for Ear Mould Laborat	ory
14.	Toyes for the Audiology and Phoniatric	
	Sections	

Health facilities

the state of the s							·
	Unit	1976	1977	1978	1979	1980	1981
Hospitals	No.	138	145	150	156	158	160
Hospital beds	No	17,911	16,596	16,869	17,004	17,205	17,300
Health centres	No	157	201	213	212	220	206
Dispensaries	No.	109	736	766	870	887	790
Dressing stations	No.	1,713	1,901	1,851	1,828	1,619	1,417
Primary Health Care Units	No.	Started 79	Started 79	Started 79	989	1,095	1,580
Blood banks	No.	24	26	27	28	-29	29
Specialised hospitals	No.	61	- 63	64	70	40	. 47
School health services	No.	12	12	12	13	72	91
Nursing schools	No.	54	63	64	. 70	3	3
Midwifery schools	No.	16	18	18	17	.8	18
Health visitor schools	No.	3	3	3	3	3	. 3
Medical assistant schools	No.	5	5	. 5	5	5	6
Public Health laboratories	No.	2	3	3	3	3	3
Public Health offices	No.	Started 79	Started 79	Started 79	321	224	228
Endemic disease units	No.	3	3	3	3	8	8

### Health services

Health Services						
	Unit	1975-76	1976-77	1977-78	1978-79	1979-80
Hospitals	No.	135	141	145	145	na
Hospital beds	No.	15,782	16,248	16,596	16,869	na
Health centres	No.	171	1,837	1,901	213	na
Dressing stations	No.	1,609	709	736	766	na
Dispensaries	No.	637	173	201	213	na
Child welfare centres	No.	171	1,562	1,944	2,165	na
Doctors	No.	1,081	105	141	173	na
Dentists	No.	64	57	67	<b>73</b> ,	na
Pharmacists	No.	53,	1,749	2,355	2,603	na
Medical assistants	No.	1,618	1,749	2,355	2,603	na
Laboratory technicians	No.	75	62	96	113	na
Senior nurses	No.	691	741	788	838	na
Midwives	No.	. na	na	4,500	4,500	na
Health visitors	No.	na	352	357	434	na

Reported cases of common disea							1000	1001
· · · · · · · · · · · · · · · · · · ·	Unit	1975	1976	1977	1978	1979	1980	1981
Malnutrition, Anaemia	No.	621,569	167,697	33,749	495,229	479,901	250,009	221,503
Eye diseases	No.	628,502	964,241	573,971	954,154	1,261,604	1,192,889	1,584,176
Tuberculosis	No.	205,755	12,124	25,820	24,452	20,846	28,420	30,72
Heart diseases	No.	182,538	16,959	10,797	12,145	280,251	19,153	20,60
Bilharzia	No.	399,762	102,982	146,273	98,354	98,143	120,917	159,84
Cerebrospinal meningitis	No.	4,900	463	522	29,170	378	4,447	1,72
Malaria	No.	927,399	1,030,243	1,844,084	2,660,753	2,830,931	2,925,404	2,981,05
Dysentery	No.	697,435	607,440	815,287	982,532	1,090,943	1,177,938	1,345,86
Respiratory tract infections	No.	242,103	2,484,105	2,744,227	3,694,311	4,957,994	5,514,578	5,311,69
Gastroenteritis	No.	579,589	791,112	1,094,626	2,570,636	4,254,116	2,871,513	2,857,15
Measles	No.	58,028	24,542	34,115	16,426	44,015	50,168	59,90
Tetanus	No.	460	531	2,471	1,902	3,959	4,451	4,67
Polio	No.	4,900	463	522	912	842	-	-
Typhoid	No.	1,071	2,010	4,825	5,741	12,380	1,648	1,63
Diptheria	No.	1,656	750	1,641	1,816	383	558	42
Hepatitis	No.	15,324	30,357	37,706	41,186	42,474	50,338	54,53
Influenza	No.	na	1,314	67,715	32,641	20,972	22,205	21,25
Sleeping sickness	No.	na	na	na	· na	na	-	-
Kala-azar	No.	1,319	335	3,817	2,230	1,056	2,632	2,68
Relapsing fever	No.	nil	574	236	143	43	-	22,40
Rabies	No.	nil	18	34	26	49	457	1,12

Health personnel	:	e Gregoria			100	<u> </u>	
	Unit	1976	1977	1978	1979	1980	1981
Doctors	No.	1,570	1,944	2,165	2,177	2,122	2,169
Medical assistants	No.	1,849	2,355	2,603	2,280	2,411	2,987
Technicians	No.	433	506	602	617	625	1,136
Dentists	No.	110	141	173	134	161	207
Pharmacists	No.	57	67	73	73	-	58
Health visitors	No.	na	357	344	434	366	385
Health statisticians	No.	12	. 17	18	18	-	531
Dental technicians	No.	. 5	7	7	6	6.	11
Social workers	No.	ni1	nil	nil	47	_	33
Nutritionists	No.	2	13	. 2	- 5	-	54
Senior public health inspectors	No.	12	12	12	12	12	12
Public health inspectors	No.	54	54	54	54	69	69
Public health officers	No.	150	150	150	150	143	147
Sanitary overseers	No.	328	328	328	328	293	296
Nurses	No.	12,152	12,496	12,300	12,047	12,871	13,443
Village midwives	No.	4,000	4,000	4,000	3,697	3,858	4,164
Community Health workers	No.	nil	nil	nil	989	1,821	1,764
Total	No.	27,466	24,758	23,068	22,831	22,447	20,734

