

Ⅲ-9 海外からの協力(1970年から1978年9月まで)

この期間に総計602のFellowshipが適用されたが、それらはWHO及びその他の外国機関によるものである。また、さまざまなプロジェクトについて器材、自動車、物資等の形による援助が国連ほかいくつかの国々によって行われた。それらの主なものは以下に示すとおりである。

FOREIGN AID 70-1975

Source of Aid

Colombo Plan Financial Aid from the Government of Australia for Chest Clinics

Colombo Plan Financial Aid from the Government of Australia for the Institute of Hygiene

Colombo Plan Financial Aid from the Government of Australia for the purchase of Anti-T.B. Drugs

Colombo Plan Financial Aid from the Government of New Zealand for Dental Nurses Training School and Hostel, Maharegan

U.S.A. Cash Grant for construction of a Prosthetic and Orthetic Workshop at General Hospital, Kandy

W.H.O. Cash Grant for National Health Manpower Survey

UNICEF Aid for Orientation Training of Public Health Personnel

Amenities to patients at Angoda and Malleriyawa Hospitals- Aid from CARE

UNRPA Cash Grant for Health Education on Family Health.

UNRPA Cash Grant for Family Health

UNRPA Cash Grant Nursing and Midwifery

UNICEF Aid for Teacher Training Workshop for Obstetricians and Paediatricians, Surgeons and Anaestheticians

W.H.O. Aid for Nursing Advisory Services

UNICEF Aid For National Pre Profile on pre-school children.

Ⅳ キャンディ総合病院

キャンディ (Kandy, 人口1,030千人) はスリ・ランカ中部山岳地帯のヤ、北方に位置するキャンディ州 (914平方マイル, 人口1,273千人) の中心であり、古都である。

キャンディ総合病院は州病院であると同時にスリ・ランカ大学ペラデニア医学部の教育病院として位置づけられ、病床数1,248、一日の外米患者数は1,500~1,600に及ぶ。事前連絡の不備及び病院側の資料不足もあり、見取図や組織図を入手することができなかつたのは極めて残念であつたが、病院管理者である Medical Superintendant との面談により知り得た若干のデータを記す。

Ⅳ-1 会計規模

(1) 人件費は月間約70万Rs. であり年間に換算すると840万Rs. となろう。

(2) その他の費用は年間概略次の通りである。

輸送費	4,000	Rs.
通信費(電話等)	170,000	Rs.
事務用備品、器材	14,000	Rs.
燃料費	68,000	Rs.
食料費(患者給食を含む)	1,500,000	Rs.
被服費	82,000	Rs.
リネン	90,000	Rs.
消耗品費	30,000	Rs.
水道料	57,500	Rs.
電気代	250,000	Rs.
洗濯代	100,000	Rs.
死体処理	15,000	Rs.
機器類	100,000	Rs.
薬剤、外科器材	1,500,000	Rs.

これらを統計すると、年間約1,850万Rs. と推計される。

Ⅳ-2 職員数及び各職種の年俸

各職種別の職員数は表1に示すとおりであり、総計1,255名に達する。うち医師はインターンを含めて109名、歯科医9名、看護婦及び看護人407名、検査技師26名、PT13名等となっている。

これらの職種の年俸を次の表2に示す。

Organisation of the hospital.

<u>Category of staff.</u>	<u>Present strength.</u>
Specialist M.C.O.'s	30
Grade M.C.O.'s	64 M.R.B.S.
Intern M.C.O.'s	25
Dental Surgeons	9
M.R.O.	1
Registered Medical Practitioner	1
Nurses - Grade II	5
Grade III	21
Grade IV (male)	42
Grade IV (female)	339
Clerks - H.C.S.	26
Ward clerks	14
Telephone operators	6
Diet Stewardesses	3
Shroffs	2
Midwives	25
Pharmacists	16
Hospital Overseers	6
Ambulance drivers	7
House Warden	9
Public Health Inspectors	3
Workshop mechanics	2
Medical Laboratory Technicians	26
Physiotherapists	13
Radiographers	15
E.E.G. Recordist	2
E.C.G. Recordist	2
Labourers - ordinary (male)	163
female	106
Sanitary (male)	77
Female	16
Attendants (male)	47
(female)	72
Watchers	15
Liftmen	8
Cooks	18
Lab. orderlies	7
Office orderly	1
Seamstress	2
Carpenters	2
Shoe makers	2
Binder	1
Peons	3
Dispenser	1

ここで例えば Specialist staff (専門医)について

14,400 — 3×480 — 5×600 — 18,840

とあるのは、初任給は14,400 Rs. であり、以後480 Rs. づゝ3回昇給し、次には600 Rs. づゝ5回昇給して18,840 Rs. に達するということを意味する。1978年10~11月の時点では1R. は12.5円ほどであったから、専門医の初任給は日本円に換算して年俸18万円、最高で24万弱ということになるうか。

Ⅳ-3 サービスエリア

スリ・ランカ中部地方では随一の機能を有していることから、その診療圏は極めて広く、半径60~65マイル、面積にして約1,500平方マイル、人口170万余といわれる。病院の利用者は公営バス、鉄道、自家用車等の交通手段を用いて受診するとのことである。

Ⅳ-4 患者負担経費

保健省の資料によると医療費は原則として無料とのことであったが、病院の資料では次のようになっている。

入院料	: Class I (個室)	1日	45 Rs.
	Class II		20 Rs.
手術料	: 大手術		250 Rs.
	中等度の手術		150 Rs.
	小手術		50 Rs.
ワクチン接種	: 種痘及びコレラ		10 Rs.
	黄熱		25 Rs.
	TAB (腸チフス)		10 Rs.
私用の診断書料			15 Rs.
医学的検査報告書の発行			100 Rs.

Ⅳ-5 教育病院としての機能

Paradenia Campus の学生教育は主として General Hospital Kandy で行われている。

① 産科部門

産科部門は三つの Ward に分かれており、本教育病院新設後の産科部門の責任者が予定されている。de Silva 教授の案内で院内の産婦科諸設備と臨床の実態を見学した。

(1) 年間の分娩数は1970年代から今年まで7,000~8,000例/年で、一日20例以上の分娩件数がある。日本の大学病院の産科の年間分娩数は平均1,000例以下であり、

Salary Scales of various categories of staff.

Rs. / Y

Medical Officers -

- (1) Specialist Staff - 14,400-3x480-5x600 - 13840
- (11) Deputy Administrative grade - 14,400 - 3x480 - 3x600 - 17640
- (111) M.O. Grade 1A - 14,400-3x480-5x600-17640
- (112) M.O. Grade 1B - 9600-4x360-7x480-14400
- (V) M.O. Preliminary Grade - 8520-1x360-8880.

Dental Surgeons.

- (1) Grade 1 - 17040-600-19440
- Grade 11 - 7800-2x360-12x480-16800

Nursing Staff.

- Grade 11 - 8280-5x300-9780
- Grade 111 - 6840-8x240-8760
- Grade 1v - 4260-9x180-5880/6240-7x180-7500

M.R.O. - 6720-12x360-11040

Clerks -

- Grade 1 - 6840-6x240-6x300-9480
- Segment A - 3900-15x180-6600
- " B - 3000-3x90-3270/3432-14x144-5448

Ward Clerks - 3000-3x90-3270/3432-14x144-5440

Telephone Operators- 2820-14x90-4080

Diet Stewardesses - 2720-15x144-5880 - 4260-13x180 - 6600

Shroffs

Midwives - 3000-15x90-4350

Pharmacist - 3900-17x180-6960

Hospital Overseer - 2820-14x90-4080

Ambulance drivers - 3000-15x90-4350

House Warden - 3720-15x144-5880

A.M.P.

Public Health Inspector - 3432-17x144-8x180-5880

M.L.T.T.s - 3900-17x180-6960 - 6600-9x240-8760

Physiotherapists - 3900-17x180-6960

Radiographers - 3900-17x180-6960

E.F.G. Recordist - 3432-7x144-8x180-5330
 E.C.G. " - 3432-7x144-8x180-5330
 Ordinary Labourers - 2160-9x60-3700
 Female Labourers - -do-
 Attendants - 3760-12x60-3420
 Sanitary Labourers - 2380-9x60-2820
 Watchers, Liftmen,
 Seamstress? Lab. orderlies, Peons - 2400-12x60-3120
 (P.E. 7.)
 Cooks - 2640-12x60-3360
 Shoemaker - 2800-15x90-4350
 Binder - 2640-15x60 - 3540

General Hospital Kandy のそれは驚異的、これは医療費が無料に近い国立病院で外来は 24 時間 Service, 当地区に分娩施設が少なく、出生率が高い等に原因しているが、教育病院として症例実習にはめぐまれている。

- (2) しかし毎日の外来病棟での臨床活動、医療サービスでスタッフは時間に追われ、患者をさばくの一手一ぱい。きめこまかい医学教育には指導陣否足である。特に中間指導者層否足である。
- (3) 外来、病棟とも吹きぬけであること、自室がないこと等より重症患者の管理施設を欠く。妊婦の重症合併症管理の指導、教育は困難である。
- (4) 分娩後 3 日以内に退院するが (室の混雑緩和の目的と考えるが) そのため産褥生理学、産褥管理の教育は不充分である。
- (5) 近年産科学における Endocrinology と Medical Engineering の発達はめざましいものがあるが、それらの設備、臨床応用はいまだない。例えば児心音聴取ドブラー装置、分娩鑑視装置、超音断層法による診断装置は皆無。また内分泌学 (Estrogen の定性、定量) を応用した胎盤機能検査法は臨床に利用されてない。
- (6) 産科カリキュラムは本邦医学部のそれと大差は認め得ない。(別表参照) 手術症例、指導者の手技についても問題は全くない。それを習得する症例は充分であっても諸検査施設、手術台、分娩台の不備がある。

② 小児科・新生児部門

H. A. Aponso 教授の案内で見学した。

- (1) 一般に正常分娩では妊婦の足元に新生児のコットをおき母児同室である。新生児室、新生児 Unit の確立はされていない。
- (2) 生下児体重が 2,000 g 以上は一応正常児とみなしていること、保育器 (クベース) はなく、一室を未熟児および病児室としているため、病児間の感染の問題、症例個別の温度湿度、酸素濃度等の環境調節は不可能で病児の Intensive Care Unit は全く不備で教育病院としては早急な改善を必要とする。
- (3) 異常新生児の Intensive Care の必要性とその手技は教授陣のみが理解し修得しているもののそれを実行または指導する看護スタッフ、施設、器械がないため新生児学に対する学生教育は教科書の上だけの学問となっている。

新生児管理学の実際をまず看護婦サイドに指導すること、およびその設備の充実が教育病院として急務であろう。

V ペラデニア教育病院

V-1 設置の背景

SRI LANKA 中央高原地区最大の都市 KANDY (周辺50Kmが診療圏とする人口約10万)にある。General Hospital, Kandyは設立後約100年を経過し、病床数1221床に対し年間1日平均入院患者は1600名を超過するデータを示している。

また一方隣接する Peradenia Campus (Medical Faculty) の医学部学生(402名1978年11月現在)の臨床実習は General Hospital, Kandyでは全科を修得出来ず、同病院に欠除する心臓外科、泌尿器科、胸部、生殖外科、精神科についてはコロombo市の Colombo University Hospitalに行かねばならない。

現状では General Hospital, Kandyにそれらを増設する余地はない。

このように患者をさばくのに勢一ぱいの状況下では、教育病院としての機能は十分にはたし得ない。一方当地区およびスリ・ランカ全体としても周産期死亡率、妊産婦死亡率、乳児死亡率は依然高く(日本の昭和30年代)母子保健分野の充実がその技術、設備の上からも強く必要性を認めるところである。

そこで病床450(産婦人科、新生児関係)の教育病院を設立し General Hospital, Kandyよりそれらの Divisionを移行することを企図している。

V-2 保健省と高等教育省大学の基本構想

医学教育は高等教育省の所管であるが大学医学部の教育病院の運営は保健省の所管であり、わが国のような大学付属病院となっていない。大学医学部教授は教育病院内に自分の責任病棟をもち、同病棟の医長をかねて臨床教育に当たっている。

一方外国よりの援助の受け入窓口は Dept. of External Resources であるが、今回のプロジェクトの実際の計画は保健省の中で外国援助受け入れ事務を担当している計画部門を通じて実際の病院運営にあたる医療部門(責任者 Deputy Director Health Services)が担当している。

従って **保健省** としては、

- ① 基本的にはまず病院の建築物ができ日常臨床上一般的に必要な器材とそれを運営するのに足る諸設備が第一条件
- ② 医学研究上、または教育上高度な機器設備よりは病院の毎日の診療活動に支障のないものが優先。
- ③ 本教育病院も既存のキャンディ病院と同様、保健省の管轄下におかれるものであるとし、保健省当局者にとっては医学教育の充実、向上という使命よりも医療サービスの拡大、充実に主眼を置いている。

- ④ 保健省が1～3の構想をもとにして建物設計、機械選定の主導権をにぎっている。
これに対し **高等教育省** および直接本教育病院にて臨床教育を担当する **大学教官** は、
- (1) 新しい医療器機、検査施設による新知識の導入という大学としての教育病院の機能充実を望んでいる。
 - (2) 我が国からの技術指導については上記(1)の器機、設備、指導であり手術手抜などは要求してはいない。
 - (3) 本教育病院においては教育、研究を担当する教授及びスタッフは、その運営において保健省にすべてを干渉されないオートノミーを有した組織による運営構想を希求している。

V-3 名称、組織および運営責任者

① 名称

仮称として Peradenia Teaching Hospital と呼ばれているが、保健省、大学との合同会議においてスリ・ランカ側からスリ・ランカ日本教育病院 (Sri Lanka Japan Teaching Hospital) としたい旨の発言があった。

② 組織と運営責任者

組織も運営責任者もまだ決まっていないが、ペラデニア医学部から、医学部、計画省、保健省、その他関係機関から構成される Board of Management により運営管理される案 (資料) が提出されている。

V-4 設置場所

病院はペラデニアキャンパス内にあり、医学部基礎部門に隣接している。らん等で有名な、Royal Botanic Garden の真前である。病院の図面は資料編参照
ペラデニアはコロンボから109km北東に位置しているが、スリ・ランカの古都キャンディの郊外を形成している。キャンディ中心部から約6kmである。海拔約500mである。

V-5 技術協力：その要請内容と問題点

技術協力 (以下技協と略) については高等教育省にてコロンボ大学、ペラデニア大学関係者と会合をもち今回の技協はペラデニアに設立する本教育病院に限る由を確認した。ついで本教育病院設立後、その中で直接教育活動運営にタッチされる予定であるペラデニア大学医学部関係スタッフと会合をもち本教育病院の技術協力の Proposed Projects について検討した。

この要請内容は保健省関係者とも Joint Meeting をもって確認を得ている。

それらについて産婦人科関係 (特に産科を中心として)、小児科関係 (新生児、小児外科) 臨床検査部門関係に分けて当日意見を述べられた各科の責任者名、Proposed Projects、具体的にどのような技協が適当か、およびその問題点について一覧表にしてみた。

特に具体的技協事項に関しては本報告5の「教育病院としての機能」に関する視察結果から

Office of the Dean,
Faculty of Medical, Dental &
Veterinary Sciences,
University of Sri Lanka,
Peradeniya.

10th August 1978

The Secretary Higher Education

Thro' Vice Chancellor, University of Sri Lanka
President, Peradeniya Campus.

Dear Sir,

At a special general Meeting of the Faculty Academic Committee held on 9.8.78 the Faculty of Medical, Dental and Veterinary Sciences made the following recommendations in respect of the running of the teaching hospital being built in Peradeniya Campus. The Faculty wished that these views be placed before the Hon. Minister of Higher Education and the Hon. Minister of Health and that an early decision be taken as to the manner in which the Peradeniya Teaching Hospital be managed and run.

1. Funds

- 1.1. The funding for running the teaching hospital, Peradeniya should be provided by the Ministry of Health.
- 1.2. The Ministry of Health should provide a special grant for running the Peradeniya Teaching Hospital as is done for the teaching hospital in Colombo.
- 1.3. The Ministry of Education should provide a financial contribution to the special grant for funding the running of the teaching hospital at Peradeniya to be spent for the needs of the educational activities carried out in this hospital.
- 1.4. It was felt that the Teaching Hospital at Peradeniya should come under the Ministry of the Colombo Hospitals Group like the Teaching Hospital at Colombo and in the same manner as the Faculty asked that the General Hospital, Kandy should be brought under the Minister of the Colombo Hospitals Group.

2. Board of Management

- 2.1. The teaching hospital at Peradeniya should be run by a Board of Management.
- 2.2. The Board of Management should consist of 20 members with eleven members coming from the University giving University 556 representation and consist of the following:
 - (i) One member - Representative from Ministry of Planning.
 - (ii) DHS or his representative
 - (iii) Chief MCH (Kandy)
 - (iv) One nominee of District Minister.
 - (v) Matron of Hospital.

- (vi) One representative of workers to serve 1 year
 - (vii) Principal of Nurses Training School, Kandy
 - (viii) Hospital Administrator (i.e. Medical Superintendent)
 - (ix) One other members from Health Department
 - (x) Eleven members from University who should include
 - (a) Dean, Faculty of Medicine, Peradeniya
 - (b) Registrar, University, Peradeniya
 - (c) 5 Clinical Heads - Medicine, Surgery, Obstetrics & Gynaecology, Paediatrics, Psychiatry.
 - (d) 4 Representatives of Faculty of Medicine, Peradeniya of whom 2 should represent laboratory services academic staff and one from Community Health
- The Chairman of the Board should be elected from among its members.

2.3. The Board of Management should have an executive Committee of 5 which includes Dean/Medicine, Peradeniya and Hospital Administrator (Medical Superintendent) to see to the funds.

2.4. The Board of Management should be able to decide on subcommittees from among its membership for specific functions.

3. Functions of Board of Management

The functions of the Board of Management should include:

- 3.1. Laying down of general policy
- 3.2. Making appointments to all categories of workers wherever possible
- 3.3. Taking major disciplinary matters (This could be undertaken by sub-committees referred to in 2.4.) and these decisions to be ratified by Board of Management.

4. Appointment of Hospital Administrator (Medical Superintendent)

- 4.1. There should be adequate University representation on the selection committee.
- 4.2. The Hospital Administrator should be on contract and for a minimum of 3 years. It should be possible in terms of contract to discontinue the hospital Administrator earlier than 3 years on the grounds of inefficiency or other disciplinary matter warranting such action.

5. Consultant Staff to Hospital

As has been suggested earlier the Consultant staff to this hospital in Paediatrics and Obstetrics & Gynaecology should as far as possible be University staff. However, if consultants are appointed from the Department of Health they should be terminal appointments or appointments for a minimum period of 5 years.

Yours faithfully,

Dean
Faculty of Medical, Dental and Veterinary Sciences
Peradeniya Campus.

cc: Prof. Kulpage, Sec. Ministry of Higher Education (Direct copy)
Secretary /Health, Ministry of Health, Colombo
Director of Health Services, DHS's Office, Colombo)
Dr. D.B. Neangoda, S.H.S., Kandy.
Dr. R. Ranarajah, Medical Superintendent, GH., Kandy

私達調査員の考え方も入っている。

V-6 スリ・ランカ政府からの便宜供与

スリ・ランカ政府からコロンボ計画専門家に対する便宜供与内容は決まっており概要は（資料 ）のとおりである。留意すべき点は次のとおりである。

- ① 住居の提供がない。
- ② 無料医療サービスがあるのは専門家に対してのみで、その家族にはない。
- ③ 車を無税で持ち込めるが、その無税輸入車の売却について制限がある。（政府に売却しなければならない。

技術協力；その要請内容と問題点一覽

(科)	(責任者)	(要請内容)	(具体的技協)	(今後の問題点)
O B & G Y (産婦人科)	Prof. K de Silva	<ul style="list-style-type: none"> • Medical Electronics in the Obstetv Field. • Feto-Placental functions in Prenatal Care. 	分娩監視装置、超音波断層法診断装置、ドブラ胎児心音診断装置、胎児胎盤内分泌検査、その指導医	指導医の交代期間、相手方指導者の招請、
Pediatrics (小児科)	Prof. H. A. Aponso	<ul style="list-style-type: none"> • Establishment of neonatal Care 	7 ベース、一般異常新生児治療器具、新生児管理学指導看護婦の派遣	指導看護婦の派遣、交代期間、住居等、相手方指導者の招請、
Pediatric Surgery (小児外科)	Prof. C. B. Kumarakulasinghe Assist. Prof. Aluwihare	<ul style="list-style-type: none"> • Gastro-intestine Surgery • Urologycal Surgery in Congenital anomaly 	検 討 中	
Laboratory center (中央検査室)	Dr. S. B. Ellepola	<ul style="list-style-type: none"> • Improve the efficiency of Haematologycal examination • Fill up the immunologycal examination cornor (Endocrinology) 	自動血球血色素M C V 計算記録機 臨床検査指導員の派遣 Estrogen測定法および装置の充実	臨床検査指導員の派遣期間

PRIVILEGES AND FACILITIES ACCORDED TO COLOMBO PLAN
EXPERTS IN SRI LANKA EFFECTIVE FROM 1 JANUARY 1976

1. Board and lodging allowance: Rs.25/- per diem for board and lodging. If accommodation alone is provided, the economic rent for such accommodation provided will be recovered from the expert.
2. Medical facilities: Free medical facilities at Government Medical Institutions for experts only.
3. Subsistence allowance for travel on duty away from Headquarters: C-Plan experts when they are away from Headquarters on duty for periods exceeding 6 hours, are entitled to combined allowance and travelling in terms of Establishment Code, Chapter XIV, at the rate applicable to public servants drawing annual consolidated salaries of Rs.18,000/- and over.
4. Cost of internal travel of official business: A commuted travelling allowance of Rs.100/- per month is payable to experts who own motor transport. When they use their transport for official travelling outside their home station, they will be eligible to claim road mileage for short journeys to points accessible by rail. Payments will be made on lines similar to that which is available to Government servants who possess cars and who are entitled to claim mileage. First class rail travel facilities will be provided.
When the expert does not possess his own transport, necessary transport to either provided by Government or the expert is reimbursed taxi fare for the journey performed. The ceiling has been fixed at Rs.200/- per month. Experts will be entitled to the same privileges as are now accorded to diplomatic personnel with regard to purchase of motor transport.
5. Leave: Two weeks casual leave per annum. Six weeks vacation leave per annum. Leave to be taken within the agreement period. In the case of an Expert whose assignment exceeds two years, he shall be entitled to take any accumulated vacation leave of two consecutive years. Experts who proceed on home leave for periods less than 3 months and who would be returning to Sri Lanka for a further period of duty, half of their per diem allowance of Rs.25/- will be paid.
6. Income Tax: Experts will be exempted from payment of income tax.
7. Customs Duty: On first arrival Experts, their families and other members of their households will be permitted to import for the duration of their stay and within six months of their arrival, free of duty and taxes and without providing security, articles for their personal use. Such articles should include (a) for each household one motor vehicle, one refrigerator, one deep freezer, one radio, one record player, one tape recorder, one television set and minor electrical appliances and (b) for each person one air conditioner and one set of photographic equipment and cine equipment.
They are also entitled to import free of duty for their use, foodstuffs, liquor and cigarettes to the value of Rs.700/- per month (FOB) if married and accompanied by family, and Rs.500/- per month (FOB) if unmarried or married but not accompanied by family.
8. Office accommodation: Provision of a suitable office space, including office requisites, clerical assistance, etc., required by Experts.

Ⅵ スリ・ランカ一般事情

Ⅵ-1 スリ・ランカ民主社会主義共和国概要

- ① 面積：6.6万K^m (北海道よりやや小さい)
- ② 人口：約1,300万人
- ③ 首都：コロombo (コロombo (Colombo) 約60万人)
- ④ 通貨単位：ルピー (100セント)
1ルピー=約13円 (流動制)
- ⑤ 宗教：小乗仏教が主で仏教徒 (66%)、ヒンズー教 (17%)、キリスト教 (7%)
回教 (7%)
- ⑥ 言語：公用語はシンハリ語であるが、一部地方で公用としてタミール語も使われている。實際上英語が併用されており、官庁においては英語が主流である。
- ⑦ 教育：6才入学。小学校5年、中学校4年、高校2年、大学4年制。中学校までが義務教育である。
- ⑧ 住民：シンハリ族 (71%)、スリ・ランカ タミール族 (11%)、インド タミール族 (9%)、ムア族 (7%) 他
- ⑨ 政治体制：英連邦内自治国であったが、1972年5月新憲法の公布により共和制に移行するとともに、国名を「スリ・ランカ共和国」に改めた。1977年8月にはナショナリスト的な社会主義を標榜するパンダラナイケのSLFPから、新西欧派の資本主義を志向するジャヤワルデナのUNP (統一国民党) へ政権が移行し、慢性的に停滞していた経済活動を刺激する積極的な諸政策が実施されている。また、大統領制の新憲法を制定し、国名も更に「スリ・ランカ民主社会主義共和国 (The Democratic Socialist Republic of Sri Lanka)」と変更された。
- ⑩ 気候：スリ・ランカはインド洋中の小島であり、中央に山岳地帯があるが、海洋性気候に恵まれ赤道に近い熱帯にあるが、極端な酷暑および早魃等は少なく、台風 (サイクロン Cyclone) の如き暴風雨もまれである。
気温は平地のコロンボでは年平均27°C、変動中も2°C 前後で季節的にも昼夜についても差が少い。キャンディでは年平均25°C となっておりコロンボよりしのぎやすい。降雨日はコロンボで年間188日、キャンディで151日である。

Ⅵ-2 キャンディの生活事情

キャンディの住宅事情は、物件数からも一般的には悪いとは伝えない。

写真は日本人がキャンディにて借りている住宅である。3ベッドルームで150㎡以上であるが、家賃は月額2,750ルピーである。現地人が借りたら800~1,000ルピーぐらいであろうとの話である。数百平米の庭付が普通であるようだ。ゲストハウス 50㎡~20㎡ぐらいの部屋、食事付は月額1,500ルピーぐらい。

使用人については、日本人が使用している例は次のとおりである。メイド150ルピー/月、運転手200~450ルピー/月、庭師100ルピー/月、コック(食事なし)250ルピー/月、(食事付)150ルピー/月。

使用人は通常3人位雇うのが普通であり、特に外国人は十分な使用人を雇うのが義務の感さえる。

Ⅶ 資 料

QUESTIONNAIRE

1. National health situation in Sri Lanka

- 1) health administration
(chart and function of organization)
- 2) budget
- 3) national health policy and national health plan
- 4) dynamic statistics of population
- 5) disease statement
- 6) health manpower
- 7) medical facilities

2. Teaching hospital at Peradenia

- 1) outline of the teaching hospital
 - (1) objectives and activities
 - (2) organization and administration
 - (3) budget
- 2) teaching hospital and national health policy
 - (1) relation between objectives and activities of the teaching hospital and national health policy
 - (2) the difficulties, if any, for achieving the objectives and their measures
 - (3) relation between above mentioned difficulties and required technical cooperation

3. Technical Cooperation Project

- 1) name of the project
- 2) who will be responsible for implementation of a project
- 3) plan of implementation
 - (1) project objectives
 - (2) organization and administration of a project
 - (3) details of implementation activities
 - (4) staff required for the project
 - a) Japanese experts (duties of Japanese experts)
 - b) teaching staff
 - c) other personnel

- (5) equipment required for the project
- (6) project budget
- (7) duration of technical cooperation
- (8) required technical cooperation

Teaching Hospital at Peradeniya

01. Objectives and activities -

- (i) To provide medical care to the people in the area;
- (ii) To undertake the teaching of medical students in clinical and laboratory practices in Paediatrics, Obstetrics and Gynaecology;
- (iii) To undertake post-graduate training in Paediatrics, Obstetrics and Gynaecology to medical graduates;
- (iv) To undertake research in collaboration with the University of Sri Lanka, Peradeniya.

02. Organisation and Administration -

- (i) The hospital will have the status of a Teaching Hospital of the Department of Health Services;
- (ii) It will be under the administrative control and direction of the Director of Health Services;
- (iii) It will be under the management of a Medical Superintendent appointed by the Director of Health Services;
- (iv) All staff will be appointed by the Ministry of Health;
- (v) Arrangements will be made from consultation with the Faculty of Medicine, University of Sri Lanka, Peradeniya on relevant matters.

Budget -

The budget will be included in the capital and recurrent Votes of the Ministry of Health. Funds for recurrent expenditure will be decentralised to the Superintendent of Health Services, Kandy. The details of expenditure are under preparation.

03. Teaching hospital and national health policy -

- (i) The need for the Teaching Hospital was due to over-crowding of wards and over-loading of the present Teaching Hospital at Kandy with the increased in-take of medical students to the University of Sri Lanka, Peradeniya and the present logistical problems of having the Teaching Hospital four miles from the Campus;
- (ii) The decision to limit the scope of the hospital to Maternity and Child Health is related to the emphasis on the development of Family Health Services in Sri Lanka;
- (iii) Expansion and modernisation of the health services in Sri Lanka are limited by constraint of Foreign Exchange and trained personnel when considered against the background of National development priorities.
- (iv) Technical co-operation is sought for the procurement, installation, maintenance of equipment and training of personnel to operate such equipment required for a modern teaching hospital.

(more)

Technical Co-operation Project

01. Name of Project -

Technical co-operation for Teaching Hospital, Peradeniya, Sri Lanka.

02. The authority responsible for implementation of the project is the Ministry of Health.

03. Equipment required -

A complete list of equipment sought under this Project will be submitted in due course after consultations with the Japanese Experts engaged in the construction and supply of equipment to the Teaching Hospital.

04. Details of medical and teaching equipment, staff required, Japanese Experts required, budget, etc. will be forwarded after discussion with the Preliminary Survey Team for Technical Co-operation.

2.2 Health Administration

The responsibility for the delivery of health care for the people lies with the Ministry of Health headed by the Minister of Health who is assisted by the Deputy Minister of Health and the Minister of Colombo Group of Hospitals. The Government policy decisions are implemented through the Health Secretariat headed by the Secretary/Health. The Health Administration of the country is divided into the Directorate of Health Services and the Department of Ayurveda.

Directorate of Health Services:

Central Level: The Directorate of Health Services is headed by the Director of Health Services who is the technical head of the health services in the island. He is assisted by four Deputy Directors in the fields of Medical services, Public Health Services, Laboratory Services and Administration. Another Deputy Director who heads the unit of health planning and health statistics works in consultation with DHS although administratively he comes under the Secretary, Ministry of Health. All the Deputy Directors are assisted, in turn, by a number of senior officials in their work. (Please see attached Chart). Directorate health services being the Central Planning and Administrative Authority is situated in Colombo.

Division Level: For smooth implementation of Health Service activities the island has been divided into 16 health divisions - each in charge of a superintendent of Health Services (SHS). At the peripheral level for administrative purposes, the health services may be considered as preventive curative and laboratory.

However in practice these two services operate in close co-operation. The S.H.S. implements the regional Health Services activities with the assistance of the Medical Superintendents in-charge of Provincial Hospitals, the District Medical Officers and the Medical Officers of Health.

Colombo Group of Hospitals: The Minister of Colombo Group of hospitals assisted by an Addl. Secretary exercises control over this Group of hospitals. Minister is directly responsible to the Minister of Health while his Addl. Secretary (Administration) comes under the Secretary of health.

The Curative Service is implemented through a chain of Medical Institutions - Colombo Group of Hospitals (ii), Special Hospitals (13), Provincial Hospitals (09), Base Hospitals (15), District Hospitals (109), Peripheral Units (106), Rural Hospitals (85), Central Dispensaries and Maternity Homes (92), Maternity Homes (26) and Central Dispensaries (358), Branch dispensaries (345) and visiting Station (1019) in descending order of sophistication of Institutional Medical Care. The General Hospital, Colombo and most of the Provincial Hospitals have the major & finer specialities whilst the Base Hospitals have the major specialities. It is estimated that the Government provides 60% of Health Care Services and 40% by others in the Private Sector.

For the purpose of delivery of Community Health Care, each S.H.S. Division is divided into a number of Health areas each in-charge of a Medical Officer of Health. The Island is divided into 102 such areas. The Field staff of an M.O.H. consist of Public Health Inspectors, Public Health Nurses and Public Health Midwives and in the large areas supervising Public Health Inspectors and supervising public Health midwives. Besides the Preventive and Curative Services there are the Specialized Campaigns namely Malaria, Tuberculosis, V.D., Filariasis and Leprosy.

The activities of these Campaigns are confined to their specialities and each is administered by a Superintendent. These Campaigns function in close co-ordination with the overall system of Medical Care.

The Department of Ayurveda (Traditional System of Medicine) also is administered by the Ministry of Health. This Department is in-charge of the Commissioner of Ayurveda. There are 50 Ayurvedic Hospitals and 30 Ayurvedic Dispensaries manned by Ayurvedic Doctors.

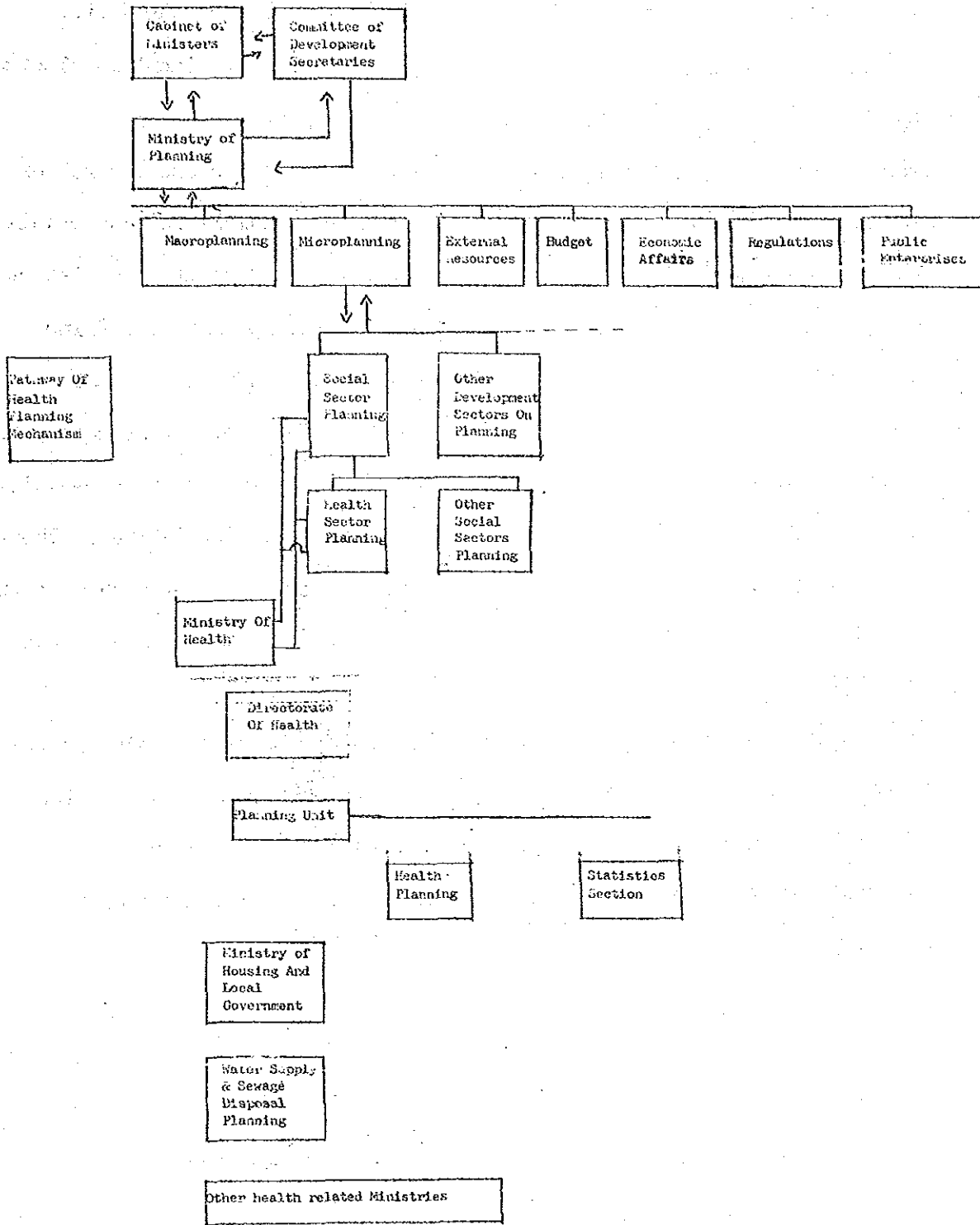
The Ayurvedic Drug Corporation Imports, Exports and manufactures Ayurvedic Drugs for the Government and private sector. There are approximately 10,000 Ayurvedic Registered Practitioners in the Private Sector. The Ayurvedic Practitioners also take over a fair work-load from the Government Medical Institutions run by the Health Department.

The State Pharmaceutical Corporation which is responsible for the import and distribution of the major portion of drugs has been now transferred from Ministry of Industries to the Ministry of Health.

3.1 National Health Policy

Policy of the Government had been to raise the health status of the population and to provide a satisfactory health care delivery system to meet the needs and demands of the people. In order to achieve this, it has been necessary :

- (a) To promote the co-ordination and/or integration at all levels whether preventive, curative, rehabilitative, diagnostic, therapeutic or research, including the Ayurvedic or Indigeneous System of Medicine. Special emphasis will be paid to control of Malaria, provision of safe drinking water, disposal of waste, Family Health Services and Planning and primary health care including Nutrition and Health Education.
- (b) To provide closer co-operation between teaching institutions and national health administration.
- (c) To re-orient the training pattern of health personnel on the basis of the country's health problems.
- (d) To re-organize and utilise the existing resources and strengthen the areas where necessary with additional resources.
- (e) To provide incentives for Health personnel taking into consideration the problem of brain drain and determine alternative strategies to provide better health care.



2/ Health and Health Related Administration

2.1 General Administration

The President of the Republic of Sri Lanka, is the Head of the State, the Head of the Executive and of the Government. The President is elected by the people and holds office for a term of six years.

The Cabinet of Ministers is responsible for the direction and control of the Govt. of the Republic, and is collectively responsible and answerable to the Parliament. The President is a Member of the Cabinet of Ministers and is also the Head of the Cabinet. The President appoints the Prime Minister the Member of Parliament who commands the confidence of the Parliament. In consultation with the Prime Minister wherever necessary he determines the number of cabinet ministers, and the Ministries, non-cabinet Ministers, Deputy Ministers to assist the Ministers of the Cabinet. There is a Secretary for each Ministry; the Secretary exercises supervision over the departments of the Government or other institutions in the charge of the Minister.

The President assisted by the Council of Ministers is responsible for the formulation of policy. Day to day administration is carried out by the State Services comprising officers of various services and grades. The different Ministries and the Departments/Institutions under each Ministry are mentioned below:

1. MINISTRY OF DEFENCE
 - Army, Navy, Air Force, Police, Immigration and Emigration, Registration of Persons of Indian Origin, Registration of Persons, Civil Aviation Department, Air Ceylon.
2. MINISTRY OF PLAN IMPLEMENTATION
 - Department of Plan Implementation, National Operations Room, Department of Census and Statistics, Regional Development.
3. MINISTRY OF LOCAL GOVERNMENT, HOUSING AND CONSTRUCTION
 - Department of Local Government Service, Department of Town and Country Planning, Local Loans and Development Fund. Department of Janatha Committees, National Water Supply and Drainage Board, Department of Local Government, Department of National Housing, Department of Buildings, State Engineering Corporation of Ceylon, Building Materials Corporation, Common Amenities Board.
4. MINISTRY OF PUBLIC ADMINISTRATION AND HOME AFFAIRS
 - Department of Public Administration, Government Agencies (Kachcheries) Department of Registrar-General, Department of Official Language Affairs, Department of Mosques and Muslim Charitable Trusts.
5. MINISTRY OF PLANTATION INDUSTRIES
 - Sri Lanka Tea Board, Sri Lanka State Trade (Tea) Corporation, Tea Smallholdings Development Authority, Rubber Control Department, State Rubber Manufacturing Corporation, Rubber Research Institute, Sri Lanka State Plantations Corporation, Janawasama, Usawasama, Sri Lanka Cashew Corporation, Silk and Allied Products Development Authority, Palmyrah Board.
6. MINISTRY OF SOCIAL SERVICE
 - Social Services, Probation and Child Care Services.
7. MINISTRY OF CULTURAL AFFAIRS
 - Department of Cultural Affairs, Archaeological Department, Department of National Archives, Department of National Museums.
8. MINISTRY OF TRANSPORT
 - Railway Department, Department of Motor Traffic, Ceylon Transport Board
9. MINISTRY OF AGRICULTURE DEVELOPMENT AND RESEARCH
 - Department of Agriculture (except Animal Production and Health Division), Department of Minor Export Crops, Sri Lanka Sugar Corporation, Ceylon Fertilizer Corporation, Agrarian Research and Training Institute, National Freedom From Hunger Campaign Board, Land Reforms Commission, Paddy Marketing Board, Fruit Board, Agriculture Development Authority, Janawasa Commission, Agrarian Services Division

Agricultural Insurance Board, National Agricultural Diversification and Settlement Authority.

10. MINISTRY OF LABOUR
 - Department of Labour
11. MINISTRY OF HEALTH
 - Department of Health, Department of Ayurveda, Ayurvedic Drugs Corporation, State Pharmaceutical Corporation of Ceylon.
12. MINISTRY OF POSTS AND TELECOMMUNICATIONS
 - Department of Posts and Telecommunications.
13. MINISTRY OF TEXTILE INDUSTRIES
 - National Textile Corporation, Weaving Supplies Corporation, Government-owned Business Undertaking formerly of Wellawatte Spinning and Weaving Mills Ltd., Government-owned Business Undertaking formerly of Ceylon Silks Ltd, Government-owned Business Undertaking formerly of J.B. Textile Industries Ltd., Government-owned Business Undertaking formerly of J.B. Fishing Industries Ltd, Government-owned Business Undertaking formerly of Libra Industries Ltd, Department of Textile Industries.
14. MINISTRY OF FOREIGN AFFAIRS
 - Department of Foreign Affairs
15. MINISTRY OF JUSTICE
 - Department of the Attorney-General, Legal Draftsman, Public Trustee, Government Analyst, Prisons, Bribery Commissioner, Debts, Conciliation, Law Commission, Institute of Corporation Lawyers.
16. MINISTRY OF FOOD AND CO-OPERATIVES
 - Department of Food Commissioner, Department of Co-operative and Registrar of Co-operative Societies, Co-operative Employees Commission.
17. MINISTRY OF INDUSTRIES AND SCIENTIFIC AFFAIRS
 - Geological Survey Department, Department of Salt, Industrial Development Board of Ceylon, Paranthan Chemicals Corporation, Ceylon Ceramics Corporation, National Salt Corporation, Ceylon Mineral Sands Corporation, Ceylon Cement Corporation, Eastern Paper Mills Corporation, Ceylon Plywood Corporation, Ceylon Steel Corporation, Ceylon Leather Products Corporation, Ceylon Tyre Corporation, Ceylon State Hardware Corporation, Ceylon State Flour Milling Corporation, Ceylon Institute of Scientific and Industrial Research, State Fertilizer Manufacturing Corporation Ceylon Petroleum Corporation, Department of Meteorology, National Science Council, Atomic Energy Authority, State Graphite Corporation of Ceylon, Lanka Layland Ltd, Ceylon Hardboard Corporation, Ceylon Tobacco Industries Corporation, Ceylon Jute Industries Corporation.
18. MINISTRY OF POWER AND HIGHWAYS
 - Department of Highways, Director of Works (Regional) Ceylon Electricity Board, Department of Kandyan Peasantry Rehabilitation.

27. MINISTRY OF RURAL INDUSTRIAL DEVELOPMENT

- National Milk Board, Department of Small Industries, National Small Industries Corporation, Ceylon Oils and Fats Corporation. Department of Animal Production and Health, National Livestock Development Board.

28. MINISTRY OF YOUTH AFFAIRS AND EMPLOYMENT

- National Youth Service Council, National Apprenticeship Board.

29. MINISTRY OF STATE

- Department of Information, Broadcasting Corporation, Department of Government Printer, State Printing Corporation, Department of Wild Life Conservation, Zoological Gardens, Ceylon Tourist Board, Ceylon Hotels Corporation, Asian Hotels Corporation Ltd.

(Contd. Table 2)

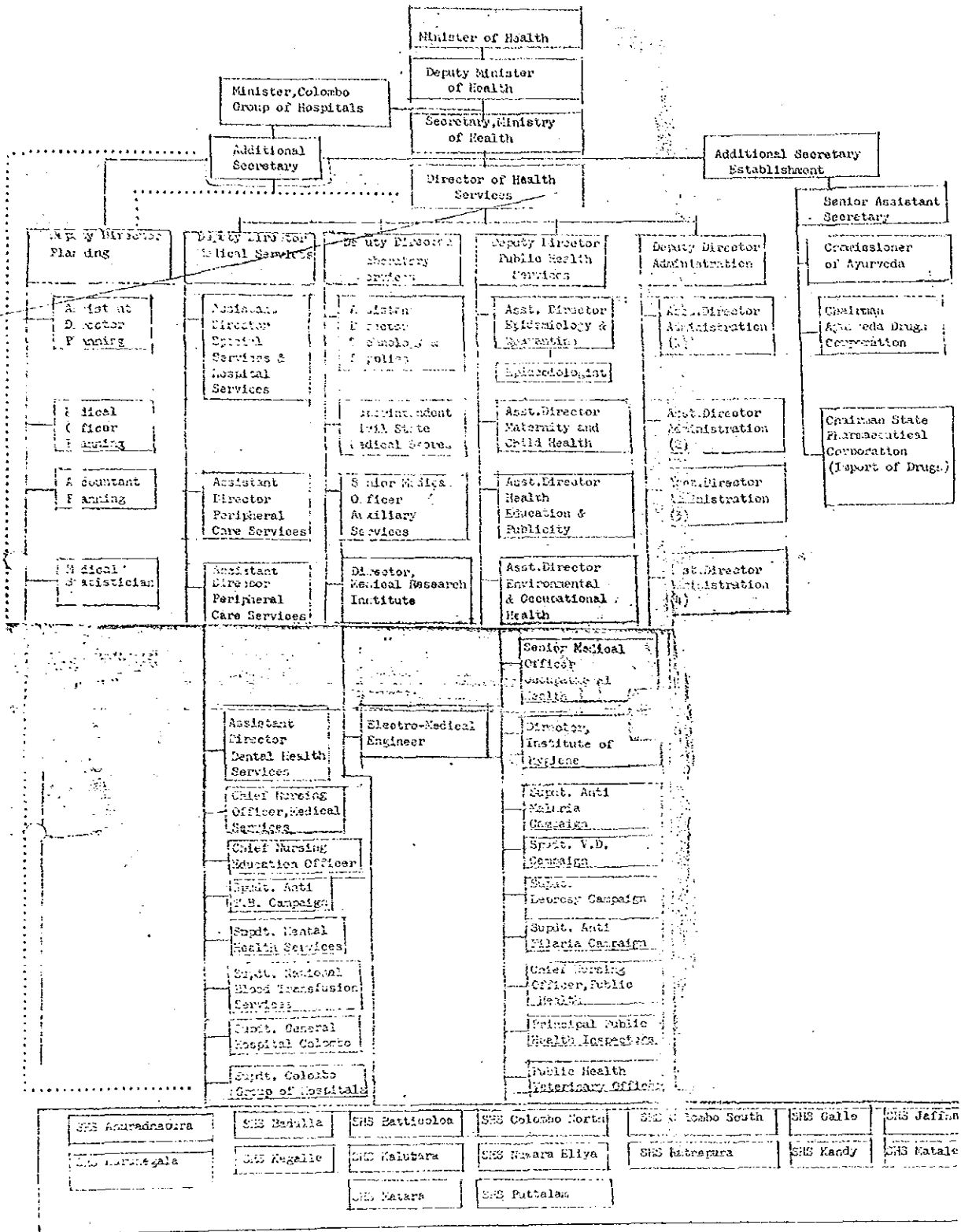
<u>Province</u>	<u>District</u>	<u>Area (sq.mi)</u> <u>(excluding large inland waters)</u>	
North Western	Kurunegala	1,843	2,992
	Puttalam	1,149	
Sabaragamuwa	Kegalla	642	1,892
	Ratnapura	1,250	
Uva	Badulla	1,088	3,843
	Monaragala	2,755	

2.3 Health - Related Administration

In addition to Ministry of Health, 13 other ministries deal with one or other aspect of Health, Co-ordination between these ministries and the Ministry of Health is rather nebulous. Co-ordination at lower levels is achieved on a person to person basis. However, major problems involving more than one Ministry is taken up at the Cabinet level for decision.

- (a) The Ministry of Planning. This Ministry deals with overall socio-economic development planning including planning for health.
- (b) The Ministry of Finance which has a tight grip on the health expenditure.
- (c) Plan Implementation. The Ministry comes directly under the President to ensure proper implementation of development plans. At present the Unit has initiated action to monitor budgetary utilization in financial terms. Actual evaluation has yet to be started.
- (d) The Ministry of Public Administration, Local Government and Home Affairs, is concerned with the service status of certain categories of health workers employed by the Health Department, as well as with the health care services run by the local authorities. The Municipality of Colombo alone runs 32 health Care clinics, independent of the Health Ministry.
- (e) The Ministry of Housing and Construction which is responsible for the construction of some health institutions.
- (f) The Ministry of Education is responsible for education and training of medical doctors and dentists, *Assistant Medical Practitioners*
- (g) The Ministry of Irrigation, Power and Highways has authority over water supply and drainage.
- (h) The Ministry of Foreign and Internal Trade deals with the importation of drugs, equipment, and supplies for the health care services.
- (i) *now import of drugs by ministry of health.* The Ministry of Labour is concerned with occupational health.
- (j) The Ministry of Shipping and Tourism is responsible for port health.
- (k) The Ministry of Defence and Foreign Affairs is concerned with the Army Navy and Air Force health services, as well as with the relationship with international agencies in the field of health.
- (l) The Ministry of Justice is concerned with prison hospitals.
- (m) The Ministry of Plantation Industry is partly responsible for health care services in estates, which are organized by the Ceylon Planters' Association and subsidized by the Ministry of Health.
- (n) Ministry of Social Services
- (o) Ministry of Agriculture.

Ministry of Health



4.2 Health Service Organization

4.2.1 Services operated by Health Ministry

Medical Care Services

Types of services

The most expensive component of a health programme is medical care. In Sri Lanka medical care is provided mainly by two systems of medicine : (a) Western medicine or that type of medicine taught in the medical faculties within and outside the country and practised by persons registered as medical practitioners with the Ceylon (Sri Lanka) Medical Council; and (b) Ayurveda or the indigenous system of medicine practised by persons registered as Ayurveda practitioners with the Ceylon (Sri Lanka) Ayurvedic Medical Council.

According to the 1969-70 Socio-Economic Survey, nearly 73 per cent of the demand for medical services is met by the Western system and about 22 per cent by the Ayurvedic or indigenous system (table i). The survey also showed that the government sector satisfied 53.7 per cent of the demand for medical care (48.6 per cent Western and 5.1 per cent Ayurveda) and the private sector catered to 41.3 per cent of the demand (24.8 per cent Western and 16.5 per cent Ayurveda).

Sri Lanka has a large number of institutions ranging from the small clinics of private practitioners to large provincial hospitals of the Government to provide medical care services for the people. These include also the specialized institutions like maternity Hospitals, dental institute, mental, tuberculosis, cancer, leprosy, eye, children's and infectious disease hospitals.

4.2.1 Services operated by Health Ministry (contd.)

Type of services (contd.)

Accessibility of health care services, which is one of the basic health service problems in many developing countries, virtually does not exist in Sri Lanka. "A health care delivery unit can be found, on the average, not further than ^{approximately} 0.8 miles from any home in the country and free-of-charge western-type health care services are available within ^{average} 3 miles of a patient's home.

In Sri Lanka, the hospital services lying within certain defined regions are organized in such a way that they would form for each region a single organized system consisting of a provincial hospital at the centre, or base Hospital or both and number of district hospitals, each of which in turn is the centre for a number of peripheral units & ^{rural} ~~rural~~ Hospitals. Since the objective is regional self-sufficiency, the constituents of each system function not independently but as parts of a co-ordinated whole. The provincial hospital is linked to the base hospital and the base hospital to the district hospital by a team of visiting specialists and ambulance services.

A similar functional relationship exists between the base and district hospitals and the peripheral units surrounding them.

Though the country is studded with a net work of Western medical institution, the smaller units are neglected in favour of the larger institutions. This is because, as noted earlier, specialist facilities are concentrated in provincial and base hospitals which are situated in urban areas while these facilities are not provided in the district hospitals, central-peripheral ^{units, rural dispensaries} and dispensaries units which are more accessible to the vast majority of the rural population.

4.2.1 Services operated by the Health Ministry

Outdoor Medical Care

As noted earlier, the demand for outpatient medical care in Sri Lanka is met largely by the government Western-type and Ayurveda medical institutions and by a private sector consisting of Western and Ayurveda practitioners. A recent study has estimated that on the average an inhabitant of Sri Lanka makes about three visits to government Western-type medical institutions annually: this includes visits to outpatients departments (OPD) and to clinics. The same study also reported that of those patronising the outpatient departments, 39 per cent were aged 20-59 years, 20 per cent were school children, 18 per cent were pre-school children and 8 per cent were the aged. Infants constituted only about 5 per cent of all OPD attendance, probably because they are taken care of mainly at the child welfare clinics. It was also noted that the number of all outpatient visits to hospitals and dispensaries showed a steady increase in the period 1961-1971, an increase that corresponded to population growth.

The estimated number of visits to government Ayurveda institutions roughly 0.3 per person while that to provide ayurvedic practitioners averages 2.5 per person. On the whole, nearly 50 per cent of patients visiting ayurvedic practitioners were aged 20-59 years, 11 per cent were over 60 years old and 14.5 per cent were 5-14 years old. About 56 per cent of the patients were males and 44 per cent females. Thus the Ayurveda services attract more male than female patients and more grown-up than children and young people.

Contd/.....

4.2.1 Services operated by Health Ministry

Types of services (contd.)

The actual and potential attendance in various medical institutions is shown in table 2. It will be seen that the most often by-passed institutions are the central dispensaries (by 47.2 per cent of the patients), followed by the branch dispensaries and visiting stations (44.0 per cent), rural hospitals (23. per cent) and peripheral units (11.5 per cent). It is interesting to note that the big hospitals like provincial and base hospitals are also by passed.

The phenomenon of "by passing" together with the increase in population, the demand for more and better care, the tendency of the people to seek treatment even for trivial complaints and the lax enforcement of the referral practice has resulted in over-utilization of some medical institutions and in under utilization of the others. It has been estimated by the Ministry of Health that about 60 medical care institutions are over 50 per cent overcrowded while about 100 hospitals have under 50 per cent bed occupancy.

It has been observed that if by-passing is controlled, "the work-load in the Colombo Group, provincial hospitals, the base hospitals, district hospitals, peripheral units and the central dispensaries and maternity homes will decrease by 25, 23, 28, 18, 11 and 2% respectively; whereas the workload in the rural hospitals, central dispensaries, and the branch dispensaries and visiting stations will increase by 12, 34 and 61% respectively.

Contd.....

4.2.1 Services operated by the Health Ministry

Outdoor medical care (Contd)

It was noted that in previous section that the tendency of the patients to by-pass certain medical care institutions has resulted in over utilization of some of those institutions and in an under-utilization of others. Nearly 61 per cent of outpatients for Western medical treatment visit large hospitals while 32.5 per cent go to central dispensaries with or without attached maternity homes. Thus OPD attendance at the large hospitals is very high, some provincial hospitals recording as many as 3,000 outpatients daily.

Indoor medical care

In Sri Lanka, indoor or inpatient medical care is available to all patients free of charge in the non-paying wards of the government hospitals. The demand for inpatient medical care is largely met by the Western sector of the government medical service and the contribution of the government Ayurveda sector and the private hospitals is very little.

The bed strength in government Western-type medical institutions in 1970 is shown in Table 3. The bed strength has increased from 34,454 in 1964 to 39,780 in 1970 - an increase of 15.46 per cent. This corresponds roughly to the annual growth of the total population of the country. It will also be noted from Table 3 that there are about 3.16 beds per 1,000 population in Sri Lanka compared with about 10 or more per 1,000 of the population in developed countries.

Contd/.....

4.2.1 Services operated by the Health Ministry

Indoor medical care (Contd)

The number of inpatients treated in government Western type medical institutions during the period 1961 - 1971 is shown in Table 3. It will be observed that the number of inpatients registered an increase of 6.3 per cent between 1961 and 1971. The annual demand for inpatient treatment also showed an increase from an average of 15.5 per 100 persons in 1961-1964 to 16.3 in 1965-1968 or an increase of 5 per cent between the two four year periods. A recent study has noted that the increase in the demand for inpatient treatment was not the same in all categories of hospitals. It was the highest in provincial hospitals, base hospitals and peripheral units. A decrease was also noted in the demand for inpatient treatment in tuberculosis hospitals and leprosy hospitals.

Over the past several years inpatient services have been subject to heavy pressure and the occupancy rates in the provincial and base hospitals were increasingly tremendously. In 1968, the occupancy rate of the provincial and base hospitals were 121 per cent. An analysis of the patients discharged from government hospitals indicated that 36 per cent received treatment for influenza, malaria, bronchitis, enteritis, skin infection, asthma, helminthiasis and diseases of the digestive system, while over 95 per cent of the mothers who were discharged have had normal deliveries. It will thus be seen that a substantial proportion of the hospital beds are occupied by patients suffering from diseases that can well be treated at outpatients departments.

Contd/.....

4.2.1 Services operated by Health Ministry (contd)

Indoor Medical care (contd)

Further, although about 90 per cent of all ailments could be adequately cared for by a general practitioner's service, patients demand to be treated by specialities thus resulting in an overcrowding of wards in the larger hospitals.

This increases the average length of hospital stay and reduces the turnover of patients.

It has also been observed that although the fatality rate of inpatients dropped from 2.5 per cent in 1951 to 1.6 per cent in 1964, this appears to be due to a more liberal policy as regards who needs inpatient care rather than an improvement in the care given. Since 1959, "the fatality rate achieved a level consistently less than 1.7% (1.9% if deliveries without complications are omitted from the calculation). At that time one nurse had to look after more than 600 inpatients p.a. (in patient days are not available); in 1962-63 when the rate was 1.5% the nurse inpatient ratio was no less than 1 : 759. If outpatient attendances are included in the calculation, doctors and apothecaries had each to look after 11,876 patients in 1964 -65 (in 1950 the rate was 1:9111)".

However, it has been observed that there was an increase in the number of patient days utilized in some categories of medical institutions between 1960/61 and 1970/71, though this increase was not uniform in regard to all categories of institutions. The largest increase was recorded in the provincial hospital (42.2 per cent) and in the base hospitals (33.4 per cent).

Contd,.....

42.1. Services operated by Health Ministry

Indoor Medical Care (contd)

The increase in the number of patient days was moderate (7.7 per cent) in the Colombo group of hospitals and very slight (1.2 per cent) in the district hospitals. On the other hand, the number of patient days decreased by 36.2 per cent in tuberculous hospitals and by 13.2 per cent in leprosy hospitals and by 15.4 per cent in mental hospitals.

The over-all effect of the varying changes in the number of inpatients and in the number of patient days was that "the average duration of treatment in hospitals decreased in all the hospitals under consideration from 8.1 days to 6.2 days (a reduction of 23.5%). This reduction was most pronounced in the mental hospitals (by 50%) and the tuberculosis hospitals (by 25.1%). In other types of hospitals, the decrease in the duration of inpatient treatment varied from 17.5 % in the district hospitals to 1.1% in the Colombo group. It is not clear whether the reduction in the duration of hospital treatment is due to higher pressure on hospital admissions and consequently a quicker turn-over of patients, or to changes in the diseases and their severity in these institutions; or to the adoption of more efficacious methods of treatment in hospitals; or to all these factors".

Contd/.....

4.2.1 Services operated by Health Ministry

General preventive services and environmental sanitation

At present there are 102 health units forming the network of public health services in the country. At the head of each of these units is the medical officer of the health who is assisted by a group field staff consisting of public health inspectors, public health midwives and public health nurses. The 102 health units are divided into 700 ranges (or areas) for public health inspectors and 2,277 ranges for public health midwives. On the average, therefore, each health unit has eight public health inspectors and 23 public health midwives. Thus the basic working unit in public health is the range of public health midwives for family health work and the range of the public health inspector for environmental sanitation and the control of communicable diseases.

The public health inspector administers vaccinations against smallpox, follows up contact in respect of communicable disease control, inspects premises with regard to sanitation and food control and promotes health education, latrine construction and provision of safe water supply. The midwife provides a domicillary service to pregnant mothers and infants and is directly engaged in maintaining a link between the clinics and the families in the village. The public health nurse supervises the work of the midwife and attends to the care of children over 10 years old. Because of high birth rates and infant mortality rates the greatest emphasis in terms of expenditure and personnel has been placed on maternal and child health work. However, the services provided by the health unit include anti-natal care at home and at clinics, home delivery of normal cases and after care of mother and child, child health clinics, nutrition programme, immunization programmes, investigation of notifiable disease and attempts to improve sanitation through advise education and financial assistance.

Contd./.....

4.2.1 Services operated by Health Ministry

General preventive services and environmental sanitation(contd)

With a view to improving the nutritional levels among expectant mothers and children, the Ministry of Health has been issuing milk and dietary supplements at ante-natal and well baby clinics. For a long time the milk feeding centres have been distributing free fresh milk to pre-school children expectant and nursing mothers. In addition, under the CARE Milk scheme, skim milk is distributed free as a dry ration to pre-school children, expectant and nursing mothers, tuberculosis and leprosy patients through health centres, MCH Clinics and medical institutions. Recently, a nutritional supplement programme has been introduced with CARE aid through the distribution of "Thripasha" - a wheat-soya blend protein food. This programme has been integrated with the Family Health programme.

Health programmes can be effective only with the understanding support and active participation of the people. Since a large number of morbidity cases in Sri Lanka result from ignorance of the Simple health rules, there is hardly any line of effort in the field of health which is capable of yielding as high a return, in proportion to investment, as the spread of health education. In the past, the health education programmes have been organized and carried out only by health educators with a view to teaching the people the elementary rules relating to hygiene and public health.

Contd/.....

4.2.1 Services operated by Health Ministry

General preventive services and environmental sanitation (contd)

These programmes, however, were not designed to meet the specific health problems of different areas. However, the programme has now been reorganized and expanded to meet the particular health needs of the people in the various regions and also enable all categories of personnel in the health services and all concerned public and private agencies to participate in the programme.

Though originally designed to cover a population of about 50,000, each of the health units currently serves a population of approximately 80,000 to 120,000 and at times even more than this.

Specialized campaigns

There are five specialised campaigns each concerned with the control of a specific disease. These are : (a) anti-malaria campaign; (b) anti-filariasis campaign; (c) anti-tuberculosis campaign; (d) anti-leprosy campaign and (e) anti-venereal diseases campaign. All these campaigns are organised and carried out independently, although some have partly merged their activities with the general medical care and public health services.

(i) The anti-malaria campaign performs two main activities :
(a) spraying of houses with insecticides in the endemic areas;
and (b) diagnostic and therapeutic services to individual patients.
The spraying of houses is carried out by spraying teams and the diagnosis and treatment of malaria in the field is done by mobile and walking teams and by malaria assistants attached to the general medical institutions.

Contd/.....

4.2.1 Services operated by Health Ministry

Specialised Campaigns (contd)

- (ii) The antifilaria campaign deals with three aspects of filariasis control : (a) the diagnosis and treatment of cases; (b) mosquito control, by spraying and oiling stagnant waters (c) the conversion of bucket latrines to water seal ones.

The work is organised and conducted through one centre, one sub centre, 16 special clinics for treatment, and field team for diagnosis and for vector control work.

- (iii) The anti-tuberculosis campaign is concerned with (a) the diagnosis and treatment of cases of tuberculosis; and (b) BCG vaccination. There is a National Tuberculosis Institute in Colombo, which administers the campaign, as well as 51 chest clinics and branch clinics, 4 special hospitals and 28 wards for tuberculosis in general hospitals for the treatment of tuberculosis cases. A large number of general medical and public health institutions participate in the work by carrying out BCG vaccinations and treating the diagnosed cases. Some of them also take part in diagnostic work by collecting sputum specimens.

- (iv) The anti-leprosy campaign diagnoses and treats patients at home and in the two leprosy hospitals. The incidence of leprosy clearly increased during the period 1964-1972 from three to seven new cases per 10,000 population. This increase cannot be ascribed solely to improved case-finding and registration, since about 25 per cent of new cases registered in 1970-1971 were children under 15 years old.

Contd.,.....

4.2.1 Services operated by Health Ministry

Specialised campaigns (contd).

(v) The anti-venereal diseases campaign deals with the diagnosis, treatment, and follow-up of cases of venereal diseases in the Colombo central venereal diseases clinic, and in nine full-time clinics and 16 part-time clinics in various parts of the country.

Dental Services

In Sri Lanka, dental care forms an integral part of the general health services of the country. Dental services are organised and administered in two streams - curative and preventive. The dental curative services consist of both out-door and in-door treatment of patients at the dental clinics attached to 3 provincial, 15 base and in a large number of district hospitals throughout the island. Nevertheless, due to a shortage of qualified dental surgeons and limited financial resources to meet the capital as well as the current expenses of an expansion programme, it has not been possible to provide an adequate dental service.

The largest curative dental unit is the Dental Institute, Colombo, administered as part of the Colombo Group of Hospitals. There are 30 dental surgeons including 4 specialists with a ward of 45 beds. The average daily attendance is in the order of 800 patients and it is estimated that a large number of others are referred by this Institute to the clinics nearest to their homes as it is not possible to cater to their needs with existing staff and facilities. The lack of adequate facilities has also resulted in work in several departments like prosthetics, orthodontics and conservation falling into arrears.

4.2.1. Services operated by Health Ministry

Dental Services (contd.)

The other aspect of the preventive dental service is the adolescent dental services catering to school-going children between 13 and 18 years of age. This service is manned by dental surgeons who also attend to difficult cases referred by the school dental clinics. The adolescent dental service is at present available at only four clinics - three in Colombo and one in Kandy.

Laboratory Services

At the operational level, there is only one institution : the Medical Research Institute in Colombo, which performs routine laboratory tests for the medical and public health services and carries out basic laboratory research. The other parts of laboratory services are represented in the larger hospitals and in the specialised campaigns. Laboratory facilities are available in the Colombo group of hospitals, provincial hospitals, base hospitals, and district hospitals as well as for specialised campaigns. The smaller hospitals and units have no access to laboratory diagnosis, except by referring to one of the above institutions, or through the private sector.

4.3.1. Health Manpower in Sri Lanka

A. Existing Health Manpower (1978)

The efficient and smooth functioning of the health system depends largely on the timely availability of appropriately trained manpower in adequate numbers. A proper assessment of the health manpower of various categories and levels is rather difficult due to absence of reliable information. Although data on medical doctors, nurses, midwives and dental nurses are to a great extent reliable those on other categories are often reflection of the budgetary provision. Nevertheless, the situation in regard to health manpower at the beginning of 1978 is shown in Table I.

Table 1.

HEALTH MANPOWER IN SRI LANKA, 1978

Category of Health Manpower	In Government Service	Non-Government *	Total
<u>Western Type (Total)</u>	29250	9950	43540
Doctors	2229	1033	3262
Nurses	5938	797	6735
Midwives Hospital	1388	192	3721
Field	2141		
Dental Surgeons	249	100	349
Asst. Medical Practitioners	1051	143	1194
Public Health Inspectors	998	129	1127
Medical Laboratory Technologists	475	55	530
Radiographers	153	20	173
Physiotherpists	139	15	154
Dental Nurses	332	29	361
Pharmacists	442	49	491
Dispensers	735	96	831
Attendants Male	2167	632	5675
Attendants Female	2876		
Other workers	18007	1000	19007
<u>Ayurveda (Total)</u>	983	4290	10933
Doctors	293	9950	10243
Other workers	690	-	690

Source: Ministry of Health (Planning Units)

* Estimates.

Medical Doctors

Number of doctors qualified in Western System of medicine has been estimated to be 3262 in 1978 and the estimated number of population per each doctor works out to be 4291 persons.

Table 2

NO. OF POPULATION PER ONE DOCTOR IN SRI LANKA

Type of Doctors	No. of Doctors	Population per one Doctor
In Government Service	2229	6.28
All Doctors	3262*	4.29

Source: Ministry of Health (Planning Units)

* Figure for non government doctors is 1033.

The doctor: population ratio is on the higher side in comparison to that of many developing countries. However the ratio of doctor to population when based on the data of the entire island does not reflect the disparity of distribution of doctors in the different regions of the country.

Table 3 shows the wide disparity in the regional distribution of doctors in Sri Lanka. It is lowest in the Colombo (s) SHS division (one doctor per 51560 persons) and highest in Jaffna (one doctor per 7130 persons). This disparity of distribution will be further aggravated if these ratios are standardized for the size of the geographical area to reflect accessibility to doctors by the population. Although the doctor population ratio is a good indicator of the level of the medical facilities available to the people in ideal situation, in the context of Sri Lanka the adequacy of the number of the doctors in the country has to be determined in relation to number of other health service personnel, Availability of institutional facilities etc. As far back as in 1967 the Report

of Planning Committee on Education, Health, Housing and Manpower (Colombo, Ministry of Planning and Economic Affairs, May 1967) recommended a ratio of 1 doctor per 3000. This ratio is yet to be achieved.

Table 3
POPULATION PER DOCTOR IN S.H.S. DIVISIONS IN SRI LANKA*

Superintendent of Health Services Division	Population (in thousand)	Number of Doctors	Population per Doctor (in thousand)
Sri Lanka		2229	6.28
Anuradhapura	695	60	11.59
Badulla	920	77	11.94
Batticaloa	614	56	10.96
Colombo (s)	1184	23	51.56
Colombo (n)	1890	127	14.88
Galle	793	76	10.43
Jaffna	756	106	7.13
Kandy	1762	199	8.85
Kalutara	790	66	11.97
Kegalle	702	39	18.00
Kurunegala	1141	75	15.21
Matale	557	37	15.05
Matara	1018	50	20.36
Puttalam	428	32	13.37
Ratnapura	737	50	14.74
Vavuniya	205	17	12.05

Source: Ministry of Health (Planning Unit)

* Figures are calculated on the basis of doctors in government service in 1978.

Dental Surgeons

The number of dental surgeons in practice in the country is estimated to be 349 in 1978 of whom 249 are employed in government and semi-governmental institutes. The ratio of dental surgeon to population in 1978 works out to be 1 : 38,674.

Table 4.
DENTAL SURGEON -- POPULATION RATIO (1978)

Types of Dental Surgeons	Number	Population per one Dental Surgeon
In government service	249	40,114
All dental surgeons	349	38,674

Source: Ministry of Health (Planning Units)

This ratio, however, is not realistic in equity of distribution among regions since the tendency of the private dental surgeons is to concentrate in the urban areas. Even so, compared with the standards of many other developing countries the ratio is still too low. The Report of the Planning Committee on Education, Health, Housing and Manpower (appointed by the Ministry of Health in 1967) has recommended a decade ago that this ratio should be brought up to 1:20,000 as early as possible. Disparity between this target and the existing ratio is obvious.

Nurses

Number of qualified nurses in Sri Lanka in 1978 is 6735 which works out to be 1 nurse per 2018 persons.

Table 5.
NURSES IN SRI LANKA (1978)

Types of Nurses	Number	Population per Nurse
In government service	5,938	2,357
All nurses	6,735	2,018

Source: Ministry of Health (Planning Unit)

Table 6
NUMBER OF NURSES IN GOVERNMENT HEALTH SERVICES IN EACH YEAR
FOR THE PERIOD 1975 TO 1978

Year	Number	Cumulative increase
1975	5685	-
1976	5782	97
1977	5640	55
1978	5938	253

Source: Ministry of Health (Planning unit)

Thus between 1975 and 1978 only 231 nurses have been added to the health services. Survey conducted in 1972 revealed that nearly 88% of the nurses in the country were employed in the government services. The same percentage is being maintained in 1978. The percentage increase of nurses in government services from 3856 in 1965 to 5,661 in 1972 was 47 per cent where as percentage increase during period between 1975 and 1978 was 4.4 per cent only which appears to be rather low. In 1978 the Doctor to nurse ratio is 2.6 nurse per doctor. There is fairly good association between regional distribution of doctors and that of nurses. The distribution of nurses (in government service) in the SHS Divisions are given in Table 7.

Table 7

GEOGRAPHICAL DISTRIBUTION OF NURSES BY S.H.S. DIVISION

	Population (in thousand)	Number of Nurses	Population per one nurse (in thousand)
Anuradhapura	695	207	3.35
Badulla	920	232	3.96
Batticaloa	614	117	5.24
Colombo (s)	1186	514	2.34
Colombo (n)	1890		
Galle	793	252	3.14
Jaffna	756	259	2.91
Kandy	1762	661	2.66
Kalutara	790	282	2.80
Kegalle	702	212	3.31
Kurunegala	1141	387	2.95
Matale	557	152	3.66
Matara	1018	208	4.89
Puttalam	428	120	3.56
Ratnapura	737	249	2.95
Vavuniya	205	29	7.06

Source: Ministry of Health (Planning Unit)

Table 7 shows that there is disparity in distribution of nurses among the populations of the different SHS divisions ranging from 1 nurse per 7060 person (in Vavuniya) to 1 nurse per 2340 person (in Colombo South and North combined together). Batticaloa, Matara, Vavuniya and Badulla have comparatively low nurse-population ratios. Another disparity is quite obvious in respect of government nurses in that 1851 government nurses are appointed in Colombo group of

hospitals (1647) and special campaigns (204); thus these two together engages about one third of the total number of government nurses.

Assistant Medical Practitioners (AMP)

The AMP's are a group of health workers who have basic minimal knowledge in medicine and are generally employed in outpatients departments of the hospitals not belonging to the Colombo Group. In the provincial, base and district hospitals and the peripheral units the AMPs work under the supervision of the Medical doctors. In small institutions they provide both outpatient and in patient medical care often without any supervision by doctors. AMPs who were trained in the past usually do not deal with obstetrics or gynaecological patients. They can be compared with feldsher.

Most AMPs are government employees either in the hospitals, peripheral units or special campaigns. In 1978, out of a total of 1124, the number of AMPs serving in the health services was 1051. Table 8 gives the number of AMPs in government service for each year between 1975-1978.

Table 8.

AMPs IN GOVERNMENT SERVICE

Year	Number of AMPs in Govt. Service
1975	1068
1976	1059
1977	1059
1978	1051

Source: The Ministry of Health (Planning unit)

Distribution of AMPs in the SHS Division are given in Table 9.

Table 9

SHS DIVISION WISE DISTRIBUTION OF AMPs IN SRI LANKA (1978)

SHS DIVISION	No. of AMPs
Anuradhapura	77
Badulla	67
Batticaloa	59
Colombo (s)	54

Table 9 (cont'd.)

SHS DIVISION	No. of AMPs
Colombo (n)	68
Galle	45
Jaffna	63
Kandy	62
Kalutara	17
Kegalle	41
Kurunegala	87
Matale	46
Matara	56
Puttalam	32
Ratnapura	40
Vavuniya	38
Total:	862

Source: Ministry of Health (Planning Unit)

In addition to posting the AMPs in SHS divisions the government has employed 15 and 182 AMPs in Colombo Group of Hospitals and specialized Campaigns respectively.

Other Categories of Health Workers

Other categories of health workers which are employed by the Health Services are given below in Table 10.

Table 10.

AUXILIARY HEALTH WORKERS IN HEALTH SERVICES (1975-1978) IN SRI LANKA

Year	Number in Government Service			
	1975	1976	1977	1978
Midwives	-	-	-	-
Hospital M.W.	1411	1411	NA	1388
Field M.W.	1800	1794	2035	2141
Public Health Inspector	976	922	933	998
Pharmacist	465	459	459	442
Radiographer	190	144	141	153
Physiotherapist	125	135	131	139
Laboratory Technologist	394	470	956	475
Attendant: Male	4751	NA	1862	2167
Female	NA	NA	2691	2876
Dispensers	776	776	668	735

Source: Ministry of Health (Planning unit)

SHS Division wise distribution of auxiliary and para-medical health workers of health services in Sri Lanka during 1978 is given in Table 11.

Table 11.

AUXILIARY AND PARA-MEDICAL HEALTH WORKERS IN HEALTH SERVICES
S.H.S. DIVISION-WISE DISTRIBUTION (1978)

Category of Health workers	Midwives	Public Health Inspectors	Para-medical Personnel	Remarks
<u>SHS Divisions</u>				
Anuradhapura	76	34	39	Para-medical includes Physiotherapists Radio-graphers Pharmacists Medical Laboratory Technologist and EEG Recordist.
Badulla	61	34	34	
Batticaloa	45	32	32	
Colombc (s)	45	54	23	
Colombo (n)	138	56	85	
Galle	89	48	42	
Jaffna	65	46	84	
Kandy	124	72	91	
Kalutara	93	56	30	
Kegalle	83	45	32	
Kurunegala	129	68	51	
Matale	62	40	20	
Matara	88	62	26	
Puttalam	37	25	22	
Ratnapura	69	41	41	
Vavuniya	20	15	13	
Colombo Group of Hospital	213	5	342	
Special Campaigns	598	230	160	
Total	2055	963	1167	

Source: Planning unit, Ministry of Health.

Ayurveda Practitioners

Long before the first Board of Indigenous Medicine was constituted in 1928 Ayurveda Medicine was in vogue in Sri Lanka and the Government supported with final assistance to establish a College of Indigenous Medicine with a small hospital in 1929. In 1941, the government took over the responsibility of running the college as a government institution.

Total number of practitioners of Indigenous Medicine in Sri Lanka in 1977 (April).

Table 12

PRACTITIONERS IN INDIGENOUS MEDICINE (in 1977)

Type of Indigenous Medicine	Institutionally trained	Non-institutionally trained	Total
Ayurveda	1800	3700	5500
Siddha	1050	2080	5130
Unani	180	210	390
Others	-	8600	8600
Total	3030	14590	17620

Source: Country Information (Seminar on traditional Medicine, Sri Lanka 1977).

The total number of practitioners in indigenous medicine registered with Ayurvedic Medical Council is however 10243 at the beginning of 1977.

The SRS Division-wise distribution of Ayurvedic Medical Practitioners in terms of Ayurvedic doctor-population ratio is given in Table 13.

The indigenous practitioners who are eligible for registration with the Sri Lanka Ayurvedic Medical Council practises three systems of indigenous medicine viz. Ayurvedic, Unani and Siddha. However, all these three systems are labelled by the government and by the public as Ayurveda.

Table 13.

AYURVEDIC DOCTOR POPULATION RATIO

SHA Division	Ayurvedic doctor population ratio per 100,000
Anuradhapura	58.5
Badulla	14.8
Batticaloa	54.6
Colombo	100.3
Galle	98.5
Jaffna	113.1
Kalutara	115.5
Kandy	49.5
Kegalle	109.4

Table 13 (Cont'd.)

SHS Division	Ayurvedic doctor population ratio per 100,000
Kurunegala	97.2
Matale	75.2
Matara	86.8
Puttalam	66.8
Ratnapura	77.3
Vavuniya	32.9
SRI LANKA	80.6

Source: Ministry of Health

Number of Ayurveda medical practitioners registered in Sri Lanka during each year between 1970 and 1976 are given in Table 14.

Table 14

NO. OF REGISTRATION OF AYURVEDA DOCTORS

Year	Number Registered
1970	517
1971	456
1972	285
1973	236
1974	69
1975	80
1976	39

During the years 1974, 1975 and 1976 graduates of Ayurveda Colleges only was registered.

The number of Ayurveda doctors engaged in different Ayurveda hospitals are given in Table 15.

Table 15

AYURVEDA DOCTORS WORKING IN DIFFERENT AYURVEDA HOSPITALS IN SRI LANKA

Name of Ayurveda Hospital	No. of Beds	No. of Ayurveda Doctor
1. Colombo	361	31
2. Anuradhapura	111	4
3. Ratnapura	67	3
4. Kurunegala	154	9
5. Jaffna	150	6
6. Beliatta	60	5
Diyatalawa	OPD	2
Lunawa	OPD	2
1 Navinna (Research)	40	8
Total	943	70

While the Ayurveda practitioners employed in government institutions and in local authority Ayurvedic dispensaries are full time workers majority of private Ayurvedic practitioners also carry out other occupational activities and practise medicine on a part time basis.

Rate of Loss of Various Category of Health Workers including Medical Doctors.

(a) Medical Doctors:

The recently held manpower study in Sri Lanka revealed that during first ten after graduation after registration nearly 41.3 per cent of registered doctors are lost for various reasons, emigration being an important factor. The possible reasons for emigration are:

- (i) Unattractive career pattern for doctors
- (ii) Influence of training abroad; two thirds of the doctors who go for training abroad do not return to Sri Lanka.

The government has tried to stop the loss of doctors due to emigration by introducing compulsory government services during the first six years after graduating. The other step taken is awarding of scholarship/Fellowship and study leave for specialization after the compulsory service of 5 years following registration, but before the age of 45 years.

(b) Nurses and Midwives:

The nurses in Sri Lanka often do not stop working as a nurse after marriage which is one of the common causes of loss of nurses in many countries. The nurses of Sri Lanka are, fortunately, not as easily exportable as the doctors. The estimated annual rate of loss of nurses is around 3 per cent.

As for loss of midwives, it can be reasonably assumed that the rate of loss of midwives might not differ very much from that of nurses and would remain around 3 per cent.

Asst. Medical Practitioners:

The estimated rate of loss of AMPs is around 2.0 per cent annually.

4.3.2. Health Manpower Training Institutions:

The institutional facilities for training health manpower in Sri Lanka are given below:

<u>Name of the Institutions</u>	<u>Training Courses</u>
A. <u>University of Sri Lanka</u>	
I. Faculty of Medicine Colombo Campus, Kynsey Road, Colombo 8.	A. I. 1 Degree Course in Bachelor of Medicine and Surgery (MBBS) I. 2 Postgraduate Diploma Course in Tropical Medicine & Hygiene (DTM & H) I. 3 Postgraduate Diploma Course in Child Health (DCH) I. 4 MD in Medicine and Pathology and MS in Surgery and Gynaecology. I. 5 Certificate Course for Asst. Medical Practitioners. I. 6 Certificate Course in Pharmacy I. 7 Certificate Course in Dispensing.
2. Medical Faculty Peradeniya Campus, Peradeniya.	A. 2. 1 Degree Course in Bachelor of Medicine and Surgery (MBBS) 2. 2 Degree Course in Bachelor of Dental Surgery (BDS) 2. 3 Postgraduate Diploma Course in Higher Dental Surgery. 2. 4 Postgraduate Course in Community Medicine (M.Sc.) 2. 5 Certificate Course for Asst. Medical Practitioners.

Contd.....2

- | | |
|---|---|
| 6. Nurses Training Schools
(8 institutions) as Colombo,
Kandy, Galle, Kurunegala,
Ratnapura, Anuradhapura,
Jaffna and Badulla. | B. 6. I Certificate Course in basic
Nursing.
6. 2 Certificate Course in Midwifery |
| 7. Post Basic Nursing School
Kynsey Road, Colombo 8. | B. 7. I Diploma courses in Post Basic
Nursing (Ward Sisters, Nursing
Tutors) |
| 8. Provincial Hospitals and
Base Hospitals. | B. 8. I Attendants training. |

A. Medical Doctors

I. Undergraduate Training of Doctors

The census of doctors during 1973 confirmed that the main suppliers of doctors in Sri Lanka have been the medical faculties in Colombo and Peradeniya: 76.9% of all doctors enumerated during the census were graduates of the Colombo Medical Faculty, 2.1% were graduates from India, and 1.9% from the United Kingdom. Those who graduated in India do not differ by age from those who graduated in Sri Lanka, whereas the United Kingdom graduates belong mainly to the older generation of doctors.

The demand for admission into the Medical faculties is very high and only 5 - 8% of the total applicants can be accommodated.

Although the optimum intake capacity on the basis of student - teacher ratio, library, laboratory and other facilities in Colombo Medical Faculty is ICC due to pressure of demand the intake of students have been much larger than ICC during past few years as will be seen from the table.

Table intake in Colombo Medical Faculty

Year	Intake of students
1973	178
1974	174
1975	159
1976	152
1977	151
1978	194

Due to shortage of doctors, the government has decided to start two medical faculties - one in Jaffna in 1978 and the other in Galle in 1980. These two campuses will have capacity of training 75 doctors in each. However since the creation of physical facilities and recruitment of teaching are yet to be completed for the Jaffna faculty the student selected for being trained in Jaffna faculty have been admitted into Colombo and Peradeniya Campuses of 75 students selected 40 have been admitted in Colombo and 35 in Peradeniya faculty. It is expected that Jaffna Campus will be ready and functioning within a year and Galle campus by 1980.

The actual output of doctor from the Colombo and Peradeniya Medical Faculties are given below :

Year	Colombo	Peradeniya	Total
1973	162	95	257
1974	104	64	168
1975	162	89	251
1976	86	78	164

The attrition rate: According to the experience in Colombo Medical Faculty the attrition rate of Medical students is quite low and has remained within 1-2%.

Note: When information on Peradeniya Faculty is received, it will be included.

2. Postgraduate Training:

The Colombo Medical Faculty has facilities for Postgraduates training of doctors which are being conducted in collaboration with the Institute of Postgraduate Medicine (IPCM).

IPCM however is the responsible institution for administrative and academic management of the postgraduate courses while using the facilities of the Colombo Campus since 1974.

Contd.....5.

B: Nursing training Institutions:

I. Basic : There are eight Schools of nursing in the country which provide a 3 year basic courses in nursing. All schools are administered by the Ministry of Health.

There is great demand for nursing education and on average only around 5-6% of the applicants could be admitted into the Nursing Schools Total training capacity of providing basic Nursing training in 1978 is 150.

The faculty of the eight schools is composed of 59 tutors, parttime lecturers, and clinical staff in the hospitals where the students get their clinical training.

The total intake of nurses during the each year during the period 1974 - 1977 is given in table.

Table : Total admission Nurses by eight schools of Nursing in Sri Lanka.

<u>Year</u>	<u>Number of nurses admitted</u>
1974	400
1975	367
1976	385
1977	636

The drop-out rate of basic nursing training course is around 14% in 1978 is the same as was found in 1973 Manpower study.

2. Post Basic Training

There is a post-basic School of Nursing in Colombo which organized and conducts courses for training in a number special field of clinical nursing. Courses of 6 - 12 months duration are conducted for tutors and ward sisters. Short courses of 2 months duration are conducted in special disciplines like paediatric nursing, nursing management etc.

Midwife's Training Facilities

The training of midwives in Sri Lanka consists of two parts: clinical training conducted during 12 months in 10 hospitals (in 5 hospitals permanently and in another 5 occasionally) and field training organized in 9 training areas (6 permanent and 3 temporary). Actually, the great majority of midwives were trained in two hospitals in Colombo (about 62%).

The training curriculum of midwives includes lectures and practical work in general nursing, ethics, principles of cleaning and disinfection, personal hygiene, general hygiene, nutrition, water supply, bacteria and infection, elementary anatomy and physiology, drugs in common use, care of mothers and baby care, preparation of operation cases, giving intramuscular injections, conduct of labour, post-natal experience in wards, care of the premature baby, and the conduct of mother classes (health education).

The Staff of all the training centres, in hospitals as well as in the field consists of 7 public health tutors, 4 supervising public health midwives and a number of partime lectures.

The Total training capacity in 1978 is 400.

The drop out rate is similar to that of nursing being around 14%.

D. Training facilities for Assistant Medical Practitioners (AMP)

The training of AMPs was discontinued in 1967. Up-to that year they were trained for 2 years by the Sri Lanka Medical College. The demand for this kind of training was quite high because every year an average of 1466 competed for 40 places.

The AMP training courses was revised with a new syllabus in 1974 for theoretical, practical and hospital training.

Both the Colombo and Peradeniya Campuses are training AMPs since then with an average admission rate of 31 - 32 in each campuses. The ultimate aim is to admit 50 student each year in each campus.

Duration of course is 2 1/2 years.

Terminal objectives of the Course are:

Clerical Staff:

Chief Clerk	-	CI
Clerks	=	Ch
S. Typist	-	OI

Field Staff:

Public Health Inspectors	16
Public Health Nurses	15
Public Health Midwives	39
Supervising Public Health Inspectors	CI
Supervising Public Health Midwife	OI

Other Institutions

<u>Institutions</u>	<u>Type of Health worker trained</u>	<u>Duration of course</u>	<u>Yearly admission capacity in 1978.</u>
1. University of Sri Lanka Colombo and Peradeniya Campuses.	Medical Officer Dental Surgeon	5 yrs 4 years	25
2. Dental Nursing School, Maharagama.	Dental Nurses	2 years	25
3. Medical Research Instit.	Medical Laboratory Technologists	2 years	30
4. Sri Lanka School of Radiography, Colombo General Hospital.	radiographers	3 years	30
5. School of Physio-therapist, General Hospital, Colombo.	Physiotherapist	2 years	25
6. Sri Lanka Medical College Council	Pharmacist	1 year	60

The dispensers and attendants are trained on the job.

Direct government spending on health has shown a steady upward trend in money terms over the period since 1950 (Table 2), though much of this increase had been due to rising costs. There has been a little change in the distribution of expenditure between broad types of activity in the last 10 years (Table 3). Programme 2 (Patient Care Services) accounts for the greater part of recurrent expenditure (62.3% in 1978) and an even higher proportion of capital expenditure. Within this Programme, approximately 70% of the expenditure is accounted for by Project 1 - 3 (Colombo Hospitals, Provincial and Base Hospitals, and District and Cottage Hospitals).

Programme 3 (Community Health Services) accounts for 28.6% of recurrent expenditure in 1978. Over half of this is accounted for by Project 6 (Malaria Control) and a further 20% by Project 2 (Family Health) Table 4).

The Ministry has generally been successful in spending the recurrent funds allotted to them so that the actual expenditure for each programme corresponds closely with that estimated at the beginning of the budget year (Table 5). On the capital side it has not always been possible to spend fully the funds available, particularly those for Community Health Services.

Table 6 shows the expenditure on personal enrolments by programme, 1974-8, the number of posts, and on index of average salary levels. Expenditure on current supplies and services is shown in Table 7, together with the consumer price index 1973-7 and the import price index for intermediate goods. The number of posts in the Health Ministry showed little change between 1974 and 1978. Average enrolments rose by approximately 30%, or somewhat more than the official cost of living index (however, such indexes normally understage the increase in the cost of living for professional and clerical workers because they are weighted towards basic consumption goods which are often subsidised or under price control).

For most items the rise in average emoluments and other input prices led to an increase in unit costs between 1974 and 1976, inspite of growth in output, and this increase is estimated to continue into 1978. For outpatient services, output grew more rapidly between 1974 and 1976 than expenditure, leading to a fall in unit costs, but this fall is estimated to be reversed by 1978.

Table 11 shows the foreign aid component in Ministry of Health Expenditure, by projects as shown in the 1978 Budget document. It will be seen that foreign aid is concentrated on Programme 3 (Community Health Services) whereas locally financed capital projects have been concentrated on Programme 2 (Patient Care Services) Table 5).

Table 12 shows the distribution of externally financed development assistance, to Sri Lanka 1977, by field and type of agency Health and population account for 23% of all assistance and for approximately 40% of assistance from the UN System.

5.1 Planning and Development of Health Services

The Ministry of Health is the second largest Ministry in Sri Lanka coming next to the Ministry of Education in its administrative network with 42,717 employees in the cadre in Health and Ayurveda Departments. The successful Delivery of Health Care to 14 million people is the responsibility of the Minister of Health, this service is provided free. The Ministry of Health is headed by the Minister of Health and is assisted by the Deputy Minister of Health and the Minister for the Colombo Group of Hospitals. The Government policy decisions are implemented through the Health Secretariat which is headed by the Secretary/Health. The Department of Health Services, the Department of Ayurveda, the Ayurvedic Drugs Corporation and the State Pharmaceutical Corporation comes under the Ministry of Health. The Planning Unit of the Health Ministry which is supervised by Secretary/Health was started in 1971, is staffed by the Deputy Director (Planning), Assistant Director (Planning), Medical Officer (Planning), Accountant/Planning, 4 Planning Assistants and the Medical Statistician is also attached to the Health Planning Unit. In addition a Planning Officer has been temporary attached to this Unit from Ministry of Finance & Planning.

2. Problem Definition:

- 2.1 Delay in the feedback of information from the Health Divisions for formulation, monitoring and evaluation of Plans.
- 2.2 Failure of implementation of approved plans due to pruning of financial allocations, causing frustration to the planners.
- 2.3 Shortage of suitable Manpower, equipment and accommodation for Health personnel.
- 2.4 Magnitude of the incidence of Malaria, V.D. and Gastro enteritis and other diseases causing overcrowding of Medical Care Institutions.
- 2.5 Brain Drain
- 2.6 Inadequate capacity for training of Health Personnel to meet the growing needs and demands for an effective Health Care delivery service.

2.7. Increase in population growth and opening of new agricultural and industrial projects with population settlement programmes.

3. Objectives (National)

- 3.1 To formulate feasible National Health Plans for implementation in order to facilitate the delivery of a satisfactory Health Care Delivery System to meet the needs and demands of the population.
- 3.2 To reduce the rate of premature mortality and the rate and degree of morbidity and increase the proportion enjoying 'positive health'.
- 3.3 To reduce the increase in population.
- 3.4 To expand the Health Care Services and afford more facilities to the rural areas, taking into consideration the new national development project areas.

4. Targets:

Norms have been worked to increase the cadre of Health Personnel and to supply vehicles, equipment and materials in a 5 year planned period, and projects have been drawn up for different health programmes.

5. Approaches (National)

- 5.1 For a better information system more personnel will be posted to the larger Medical Care Institutions.
- 5.2 Finance and Planning Ministry will be requested to inform the Health Ministry to the approximate financial allocations in order to formulate plans within the limited resources.
- 5.3 Steps have been taken to increase the training capacity of Health Manpower and more personnel are being recruited.
- 5.4 A Community Health worker scheme has been worked out for the rural areas to lower the incidence of Malaria and other communicable diseases by way of Health Education elementary treatment and assistance to maternity and child health programmes and reduce the overcrowding in Hospitals.

5.5 Brain drain - more personnel are being recruited

specially Doctors and Assistant Medical Practitioners.

Assistant Medical Practitioners are being given a 2.1/2 year course of training with 6 months of internship as against 2 years as done in the past. These Officers will be posted to the rural Medical Care Institutions, to replace the more qualified Medical Officers. The Asst. Medical Practitioners new training course was started in 1973 and gradually the recruitment has been increased from 30 in 1974 to 90 in 1978. These Officers would not be seeking jobs abroad as their qualifications would not be recognised in other countries. Also allowances have been increased and consultation Practice allowed to Medical Officers as incentives to stay in the Island.

5.6 Plans have been formulated to meet the Health Care Delivery Service demands in the New National Development Project Areas, namely Mahaweli Projects area and District Development Project areas in Kurunegala, Matara and Hambantota. At the same time the Health Ministry Family Planning Programme has been intensified to bring down the increase in population.

6. W.H.O. Interface:

W.H.O. has provided consultants in an advisory capacity from time to time for different Health Programme. Aid in the form of cash grants, vehicles, equipment, fellowships and training programmes have been offered, in addition to a number of conferences, seminars, and workshops which have been conducted with the assistance of the W.H.O. It should also be mentioned that a National Health Manpower Study was conducted in 1971 and completed in 1973 and a report submitted, this Study consisted of 11 substudies. At the moment a Country Health Programming Exercise has been inaugurated with the co-operation of the W.H.O.

7. Progress/Review

In addition of other functions performed by the Planning Unit the following may be mentioned:-

1. Formulation of New Proposals for Capital Investment and the Annual Plans for effective implementation of the 5 year plan of 1971.
2. Worked in close liason with the Planning Ministry in formulating the Annual Implementation Programmes for all Projects and Programmes, setting out quarterly targets in Physical and Financial terms. Progress Reports were received for evaluation of progress against the set targets for rendition to the Ministry of Plannin.
3. This Unit was concerned with a Committee appointed to examine the requirements of professional and technical of Health Services and to project the requirements for a 5 year period and submit a report.
4. A Health Planning information system has been organised to collect statistical data from all Health Care Institutions in the island and from Specialised Campaigns.

Foreign Assistance: 1970 to September, 1978

During this period 602 Fellowship applications have been processed. These fellowships have been sponsored by W.H.O. and other Foreign Agencies. Also aid has been obtained for different projects in the form of equipment, vehicles and materials from UN Agencies and several other countries.

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FOREIGN ASSISTANCE AND PROJECTS

W.H.O.	(1) Malaria Eradication Programme with the supply of Material & Equipment and the training of Personnel.	C-Plan (New Zealand)	(a) Supply of Equipment and Material for Dental Nurses Training School, Maharagama.
	(2) In-service Training of Public Health Medical & Nursing Personnel	CARE	Supply of Flour & Milk powders for Supplementary Feeding Programmes
	(3) Comprehensive Health manpower	US-AID	Rehabilitation Demonstration of Leprosy patients of Ceylon. Malaria
	(4) Additions and Improvements to Nurses Training Schools	SIDA	Provision of Advisory Services, Training of Personnel, Research, Medical and Audi-Visual Equipment and the supply of Material & Vehicles
	(5) Strengthening of Community Health Services		
WHO/UNFPA	(1) Additions & Improvements to Family Planning Clinics and Supply of Vehicles	FRW/USA	Supply of Equipment and Material for Prosthetic & Orthotic Project at General Hospital, Kandy.
	(2) Additions & Improvements to Health Education and Family Health Buildings	Japan (Germany)	CEY-NOR Project (REDD-BARNA) Establishment of Health Centres Teaching Hospital Peradeniya.
UNICEF	(1) Orientation training of Public Health Nursing & Midwifery personnel.	New Zealand	Aid for Dental Clinic for the establishment of Dental Clinics & Scholarships Malaria.
	(2) T.B. Control Education of Personnel	Netherlands	Aid for Electro Medical Division
	(3) Strengthening of Health Services		Aid from the Dutch Economic Mission for Cardiology Unit General Hospital, Colombo. Vehicles for Malaria
WHO/UNICEF	(1) Provision of Health Education Equipment	UK	
C-Plan	Australia (a) Provision of buildings for Institute of Hygiene -Kalutara		
	(b) Establishment of Chest clinics & supply of Equipment for T.B. Institutions		
C-Plan	Japan (a) supply of Equipment for Drugs Quality Control Laboratory		

FOREIGN AID 70-1975

Source of Aid

Colombo Plan Financial Aid from the Government of Australia for Chest Clinics

Colombo Plan Financial Aid from the Government of Australia for the Institute of Hygiene

Colombo Plan Financial Aid from the Government of Australia for the purchase of Anti-T.B. Drugs

Colombo Plan Financial Aid from the Government of New Zealand for Dental Nurses Training School and Hostel, Maharagam

U.S.A. Cash Grant for construction of a Prosthetic and Orthetic Workshop at General Hospital, Kandy

W.H.O. Cash Grant for National Health Manpower Survey

UNICEF Aid for Orientation Training of Public Health Personnel

Amenities to patients at Angoda and Mulleriyawa Hospitals- Aid from CARE

UNFPA Cash Grant for Health Education on Family Health.

UNFPA Cash Grant for Family Health

UNFPA Cash Grant Nursing and Midwifery

UNICEF Aid for Teacher Training Workshop for Obstettricians and Paediatricians, Surgeons and Anaestheticians

W.H.O. Aid for Nursing Advisory Services

UNICEF Aid For National Pre Profile on pre-school children

Summary of Policy and Strategy on Social Overheads,
1979 - 1983 (Planning Commission)

The Social Services in Sri Lanka are provided free to the population in order that every individual might be able to meet his basic needs in terms of education, health, welfare and security. Services, particularly in the areas of education and security are provided almost exclusively by government. Voluntary organizations play a significant role with regard to welfare services and in the health field, private practitioners of indigenous medicine are very important. Today, the distance a child has to travel to reach a free primary school does not exceed 2 miles in the remotest area and a free health service is within 3 miles of any patient. However, in qualitative terms, all these services have suffered over the period 1972 - 76 due to declines in the allocations of resources, in real terms to these sectors. These declines ranged from 14% p.a. per capita of the labour force for labour, through 7% per capita p.a. for social services to 1.6% per student p.a. for education and 1.55% per capita p.a. for health services.

(A) Education

The education strategy for the period 1979 - 83 will consolidate and improve the quality of general education and reduce the disparities prevailing in the facilities available. Expansion of the opportunities for the further development of an individual's ability and skills will take place at the post-secondary level in step with development needs. The strategy has 4 major components :

- (i) The strengthening of the general education programme through providing uniform pre-school facilities to all children over 5 years; restoting the 10th year of the basic education cycle together with the G.C.E. 'O' level and 'A' level examinations; improving facilities and equipment in all schools particularly small schools and estate schools and with special emphasis on the teaching of science; and improving the communication with and training of teachers.

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(iv) Improving the organizational efficiency of the school system identifying and remedying weaknesses in existing management and administrative systems. An Education Service Commission will take over all recruitment and promotional matters and Parent-Teacher Associations will be encouraged to take an active interest in on-going programmes.

The capital investment for the Education Sector for the period 1979-83 will come to Rs. 1,621 million of which about Rs. 664 million is for an on-going activity. The general education programme accounts for 48% of the total; post secondary education 43% and non-formal education 9%.

(B) Health

The disease pattern in Sri Lanka is characterised by the predominance of preventable diseases. The leading causes of hospitalisation, outdoor treatment and death can be traced to the lack of environmental sanitation, especially safe water supplies and sewerage disposal, food hygiene and vector control. Resurgent Malaria is a serious problem in the dry zone and the incidence of venereal diseases, anaemia and malnutrition has doubled over the last decade.

The health strategy for 1979 - 83 therefore places greatly increased emphasis on preventive health care organisational changes in the curative services, and the urgent restoration of the existing health care infrastructure to full operational effectiveness.

Firstly the health programme will aim at reducing infections and infestations by (a) immunisation, improvement in hygiene sanitation and water supply and the strengthening of the specialised campaigns for diseases requiring intensive attention ; (b) nutrition supplementation and education of those considered at risk, mainly pregnant and lactating mothers, infants and pre-school children and (c) family spacing and control. Health programmes in these areas will cost Rs. 64 million. Water supply schemes envisaged include the completion of 100 rural schemes with UNICEF assistance, minor water supply schemes

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costing Rs. 98 million and commencement of work on the Rs. 310 million South West Coastal Water Supply Project. Together with the major investments envisaged in the Greater Colombo, Galle and Negombo Sewerage systems (Rs. 338 million) and stages II and III of the South West Coastal Schemes, investment in this sub sector will total Rs. 1,131 million over the period 1979-83.

Improvements will be made in the delivery of the curative services through organisational changes aimed at .)

- (a) counteracting the urban concentration of personnel;
- (b) improving drug supply and other supporting services to lower level treatment centres; and (c) establishing a referral system which places emphasis on para-medical treatment; which discourages the bypassing of lower level units, and which frees highly qualified personnel for more specialised work. In addition Rs. 211 million will be spent on putting up a new hospital at Peradeniya (financed entirely by the Japanese Government) and a hospital to replace the existing one at Galle. Additions and improvements to the General Hospital and the Colombo Group of Hospitals will cost a further Rs. 22 million. All these hospitals provide substantial teaching facilities. The ongoing programme of setting up dental clinics in major hospitals and schools will be continued with assistance from New Zealand. The only dental hospital in the country will also be expanded on its present site at a cost of Rs. 6 million. Health facilities for the Mahaweli Area will be provided under the budget of the Mahaweli Development Board.

The transport capability of the health care sector will be rapidly expanded with the purchase of 512 vehicles and this will permit the replacement of the large number of aged and unreliable vehicles. For the efficient functioning of the supportive services and for improving treatment technology, Rs. 114 million of electro-medical equipment and Rs. 38 million of surgical and auxiliary equipment will be required.

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The construction of accommodation in rural areas costing Rs. 145 million and, in some cases, additional work buildings, is necessary for increasing the availability of medical staff in rural areas. A central drug store, central laundry facilities and garages for vehicles will also be provided at a cost of Rs. 29 million to reduce losses and replacement costs in these areas.

The availability of adequate medical manpower, whether to replace attrition or historic shortages or to increase output is a prerequisite for the changes in the organisation, the division of functions between different categories of personnel, and the improvement in the health care services envisaged for this period. Manpower shortages seem likely to arise at almost all levels of the health service, so that a major development and expansion of training facilities and intake, particularly of doctors, nurses, assistant medical practitioners, public health workers and community health workers, will be necessary. Expanded training facilities for Doctors and A.M.Ps will be provided through the new medical faculty at Jaffna and the Universities at Matara and Batticaloa. The Institute of Hygiene at Kalutara will be strengthened to provide the necessary public health training to doctors, midwives, public health nurses and health inspectors. The intake into nursing schools has been increased to 1200 p.a.

The importation of drugs has been liberalised and the private sector permitted to undertake the direct import of drugs as well as their distribution. The State Pharmaceuticals Corporation will concentrate on the importation of allopathic drugs for the state sector and continue to undertake imports for the private sector in competition with other importers. The SPC is also exploring the possibility of the local manufacture of drugs and other products on its own or in collaboration with suitable foreign manufacturers. The Ayurveda Drugs Corporation will concentrate on the import, local manufacture and distribution of the drugs needed in government ayurvedic hospitals as well as in the free ayurvedic dispensaries run by the Local Authorities.

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The Ayurveda services will be further developed through the extension of curative, training and research facilities throughout the island. Eight new hospitals will be provided, existing ones upgraded and assistance provided to dispensaries run by local authorities. The number of medical graduates will be increased and the knowledge of the traditional and non-institutionally trained Ayurvedic Practitioners upgraded, particularly with a view to integrating them into the national family health service. Research will also be done into effective methods of treatment, processes for the extraction of essential plant properties, and the systematic cultivation, harvesting and storage of medicinal herbs. Expenditure on ongoing activity in the Ayurveda sub-sector will come to Rs. 6 million and new projects to Rs. 79 million over this period.

(C) Social Welfare and Security

This sector aims at providing protection against risks of social or occupational character which, through no fault of his own cannot be met through an individual's own resources and therefore require the assistance of the community. Vulnerable groups who are not covered by social insurance or security fall back on social welfare schemes operated by the state and a large number of voluntary agencies while the capital expenditure programme for this sector is small, it is of enormous significance to the under-privileged, since these programmes are targetted directly to these groups :

- (1) The provision of more effective protection against long term risks such as invalidity and old age;
- (2) The rehabilitation of those who are indigent and handicapped so that they can become self supporting ;
- (3) The protection of vulnerable groups so that they do not become socially disadvantaged.
- (4) The provision of special services to children seriously affected by poverty so that they do not turn to crime;
- (5) The provision of training facilities for social workers in public and private sectors;

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- (6) The use of assistance from the private sector in all areas where possible.

Specific targets for the next 5 years include:

- (1) The rehabilitation of 10,000 public assistances recipients and 3,000 beggar children by 1983;
- (2) The provision of vocational training to an additional 560 mentally and physically handicapped persons each year;
- (3) The provision of hostel facilities for 400 vulnerable low income girls and stranded women and children in Colombo ;
- (4) The provision of uniforms and school requisites to 5 percent of the children of school going age who do not attend school because of poverty.

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7. SOCIAL OVERHEADS

(a) Education

	Allocation of funds 1979	Likely Expenditure 1980-83	Five Year Plan
(i) Ongoing Buildings and Equipment Projects of Ministries of Education and Higher Education	74,813	587,755	662,568
Projects of the Ministry of Labour	1,542	0.315	1.857
Sub Total	<u>76,355</u>	<u>588.07</u>	<u>664.425</u>
(ii) New Work			
New Polytechnic . Including Equipment.	T.V.	85.732	85.732
Slide - Hostels, Laboratories and Workshops	T.V.	4.5	4.5
Slide - Books, Periodicals and Equipment	11.665	30.23	41.895
Open University Building	-	9.0	9.0
Primary Education Development	T.V.	14.615	14.615
Population Education	1.208	2.854	4.062
Documentation Centre and Research Library	0.170	0.1	0.270
Media Centre	0.15	0.15	0.300
Training College, Warakapola	1.15	1.550	2.7
Hostel for 300 students - Puttalagedera	0.14	0.16	0.30
Hostel & Admin. Block, Maharagama	0.18	0.22	0.40
Dept. of Examinations - Buildings & Computer and Improvements to press	0.623	4.188	4.811
Estate Schools - Takeover and Development	4.0	26.441	30.441
University Buildings	22.045	313.451	335.496
University Equipment	20.0	146.83	166.83
Foreman Training Institute	T.V.	45.115	45.115
District Vocational Centres	-	62.0	62.0
National Apprenticeship Board	5.3	24.0	30.2
Sub-Total	66.631	772.036	838.667
Other Projects	0.425	117.072	117.497
Total - Education	<u>143.411</u>	<u>1477.178</u>	<u>1620.589</u>

	Allocation of Funds 1979	Likely Expenditure 1980-83	Five Year Total
(b) Health			
(i) Ongoing			
Administration - Building and Equipment	8.1	11.4	19.5
Curative Service - Building and Equipment	132.8	193.3	326.1
Preventive Service - Building and Equipment	40.0	13.1	53.1
Capital Grant for Latrine Construction	1.5	17.0	18.5
Ayurvedic Service	1.05	4.65	5.70
Buildings Dept. - Hospitals at Galle and Peradeniya	<u>121.1</u>	<u>227.0</u>	<u>348.1</u>
Sub Totals	304.55	466.45	771.0
(ii) New Work			
Staff Quarters	2.5	142.5	145.0
State Medical Stores	3.0	12.0	15.0
Anti Leprosy Campaign	0.4	0.66	1.06
Syphilis Control	0.6	4.28	4.88
Filaria Campaign	0.11	1.10	1.21
Rabies Control	1.08	0.5	1.58
Family Health Programme	10.02	10.52	20.54
Burns Unit Colombo	0.1	0.130	0.230
Medical Research Institute	0.4	2.75	3.15
Sterile Products Manufacture	<u>T.V.</u>	<u>23.0</u>	<u>23.0</u>
Sub-Total	18.21	197.44	215.65
Other Projects	3.12	278.96	262.08
Total - Health	<u>325.88</u>	<u>942.85</u>	<u>1268.73</u>
(c) Social Security & Welfare			
(i) Continuation Work			
Ministry of Social Services	0.312	16.904	17.216
(ii) New Work			
Ministry of Social Services	0.752	51.112	51.864
Ministry of Labour	<u>1.985</u>	<u>71.490</u>	<u>73.475</u>
Total - Social Security and Welfare	<u>3,049</u>	<u>139,506</u>	<u>142,555</u>

HEALTH PROBLEM STATEMENT

ICD NOS	DISEASE OR GROUP	MORBIDITY (Hosp. Disch. 1976)		MORTALITY (Reg. Gen'l - 1976)		REMARKS
		NO. CASES	RATE PER 100,000	NO. DEATHS	RATE PER 100,000	
(000)	CHOLERA	610	4.4	20	0.15	Downward
(001)	TYPHOID	9559	70.6	139	1.01	14.2 %
(004), (006.9) (006.0)	BACILLARY DYSENTERY & AMOEBIASIS	37655	274.2	331	2.41	35 %
(008) (009)	GASTRO ENTER- RITIS AND OTHER DIA- RYNOEL DISEASES	130209	948.4	6916	50.37	2.8%
010-015	TUBERCULOSIS (All forms)	14045 6823	102.3 49.7	1593	11.6	1.29% -3.0%
001	LEPROSY	278	2.0	16	0.12	-12.7%
002	DIPHTHERIA	152	1.1	42	0.31	-28.8%
003	WHOOPING COUGH	1040	7.5	24	0.17	-10.4%
007.8-9	TETANUS (OVERALL)	2000	14.5	751	5.47	4.7 -6.4%
007.1	TETANUS NEONATAL	642	4.6			8%
040-044	POLIO MYELITIS	475	3.4	136	0.99	

1) Average annual % of change in rate over period 1972 - 1976.

New Cases- Anti TB Campaign

HEALTH PROBLEM STATEMENT

ICD NOS	DISEASE OR GROUP	MORBIDITY (Hosp. Disch. 1976)		MORTALITY (Reg. Gen'l-1976)		REMARKS
		NO. CASES	RATE PER 100,000	NO. DEATHS	RATE PER 100,000	
071	RABIES	123	0.8	257	1.87	
070, 999.2	VIRAL HE-PATITIS	18122	131.9	92	0.70	-3.8%
084	MALARIA	113809 304487	828.9 2217.7	267	1.94	Anti Malaria Campaign confirmed case rate recent trend is down
030-095 017-098	VENEREAL DISEASES	794 19285	5.7 32	3	0.02	Anti V D Campaign
(125)	FILARIA	1964 4352	14.3 0.26	8	0.06	Anti Filaria Campaign
121, 123, 124, 126 to 129	HELMINTHI-ASIS	35470	258.3	844	6.15	-5.7%
133.0	SCABIES	27589	200.9			
140-239	NEOPLASMS	15915	115.9	4225	30.77	

1) Average annual % of change in rate over period 1972 - 1976.

(Activity 1.2 - 26.X.78)

HEALTH PROBLEM STATEMENT

ICD NOS	DISEASE OR GROUP	MORBIDITY (Hosp. Disch. 1976)		MORTALITY (Reg. Gen'l - 1976)		REMARKS
		NO. CASES	RATE PER 100,000	NO. DEATHS	RATE PER 100,000	
250	DIABETIS MELLITUS	13751	100.1	1306	9.51	
243 to 279	AVITAMINOSES & OTHER NUTRITION DEFICIENCIES (Includes PCM, PARASITIC, KWASHIORKOR ETC.)	30512	222.2	3123	22.74	19.52%
280-285	ANAEMIAS	64387	468.9	2995	21.8	8.2%
290-309	MENTAL DISORDERS (PSYCHOSES)	21190	154.3	126	0.92	21.36%
374, 375	EYE DISEASES CATARACTS GLAUCOMA	6455	47.0	497	3.62	
390-392	ACTIVE RHEUMATIC FEVER	6903	50.2	118	0.86	
393-458	DISEASE OF THE CIRCULATORY SYSTEM, HYPERTENSION, IHD, STROKES, ETC.	79172	576.6	11543	84.07	.2.5%

1) Average annual % of change in rate over period 1972 -1976

Contd./...

- 4 -

(Activity 1.2 - 26.X.78)

HEALTH PROBLEM STATEMENT

ICD NOS	DISEASE OR GROUP	MORBIDITY (Hosp. Disch. 1976)		MORTALITY (Reg. Gen'l. 1976)		REMARKS
		NO. CASES	RATE PER 100,000	NO. DEATHS	RATE PER 100,000	
460-519	DISEASE OF THE RESPIRATORY SYSTEM PNEUMONIAS, BRONCHITIS, ASTHMA ETC.	318 731	2321.4	9617	70.04	
520-525	DENTAL DISEASES	10819	78.8	0	0	
531-577	DISEASES OF DIGESTIVE SYSTEM (PEPTIC ULCER, GASTRITIS, DUODENITIS)	113699	828.1	147	1.07	
580-629	DISEASES OF THE GENITO URINARY SYSTEM (NEPHRITIS, CALCULUS, BREAST DISEASES ETC)	84 574	615.9	849	6.18	-1.4%
640-645	ABORTIONS	28326	206.3	28	0.20	
652-673	OTHER COMPLICATIONS OF PREGNANCY, TOXAEMIAS, HAEMORRHAGES, ANAEMIAS, ETC.	100 719	758.2	327	2.38	+10.07% 1974 discharges
118	DELIVERY WITHOUT COMPLICATIONS	246877	1798.0	-	-	-

1) Average annual % of change in rate over period 1972-1976

Contd./....

(Activity 1.2 - 26.X.76)

H E A L T H P R O B L E M S S T A T E M E N T

ICD NOS	DISEASE OR GROUP	MORBIDITY (Hosp. Disch. 1976)		MORTALITY (Reg. Gen'l. 1976)		REMARKS
		NO. CASES	RATE PER 100,000	NO. DEATHS	RATE PER 100,000	
680-709	DISEASES OF SKIN.	108404	789.5	874	6.37	-5.22%
710-738	DISEASE OF MUSCULO SKELETAL CONDITIONS ARTHRITIS, SPONDYLITIS RHEUMATISM ETC.	51176	372.7	1129	8.22	
741-779	DISEASES OF INFANCY CONGENITAL ANOMALIES, BIRTH INJURY PREMATUREITY ETC.	17175	125.1	6491	47.3	-6.1%
138-150	ACCIDENTS, POISONING AND VIOLENCE (SUICIDES, HOMICIDES ETC)	251067	1682.9	8667	63.12	-3.1%

1) Average annual % of change in rate over period 1972 - 1976.

	Population	Total Expenditure On Health *	Per Capita Expenditure On Health
	<hr/>	<hr/>	<hr/>
1960	9,894,000	152,132,962	15.27
1963	10,646,000	145,463,380	13.66
1965	11,164,000	156,202,961	13.99
1966	11,439,000	164,004,631	14.33
1967	11,703,000	180,112,174	15.39
1968	11,992,000	196,221,766	16.36
1969	12,252,000	227,181,201	18.54
1970	12,516,000	239,511,153	19.13
1971	12,608,000	252,428,368	20.02
1972	12,861,000	326,360,905	25.37
1973	13,091,000	273,517,376	36.89
1974	13,284,000	302,822,855	22.79
1975	13,514,000	351,574,173	26.01
1976	13,730,000	431,385,800	31.41
1977	13,908,400	458,798,450	32.98

Sources:

1. Mid year population - Department of Census & Statistics
 2. Health Expenditure- Govt. Printed Estimates
- * Includes capital budget

DISTRIBUTION OF HEALTH PERSONNEL BY DISTRICT AND HEALTH INSTITUTE PROJECTS ^{Year 1978}

SRS DIVISION	POPULATION	M. OFFICERS		NURSES		MIDWIVES		P.H.N.		A.M.P.		M.L. TT.		PHARMACIES
		Hosp.	Field	Hosp.	Field	Hosp.	Field	Field	Hosp.	Hosp.	Hosp.	Hosp.	Hospital	
Anuradhapura	660,000	57	4	198	6	73	93	30	74	14	12			
Badulla	881,000	59	6	215	-	70	127	28	72	11	19			
Batticaloa	598,000	49	6	109	1	36	45	32	51	10	18			
Colombo N)	2926,000	140	14	405	65	148	158	53	63	25	26			
Colombo S)		22	13	93	34	55	128	55	49	4	4			
Galle	802,000	68	6	247	5	83	120	48	49	14	16			
Jaffna	981,000	126	12	273	1	94	145	61	107	34	53			
Kalutara	795,000	62	12	197	38	86	149	56	30	8	14			
Kandy	1273,000	151	12	548	14	101	146	54	66	27	34			
Kegalle	708,000	37	8	209	13	85	126	43	41	9	19			
Kurunegala	1137,000	97	13	325	17	120	206	63	88	19	17			
Matale	532,000	33	6	148	4	54	75	35	49	9	13			
Matara	1028,000	43	10	200	7	99	127	60	60	12	13			
Nuwara Eliya	467,000	27	-	105	-	28	32	9	35	3	6			
Puttalam	426,000	32	5	117	6	42	58	23	49	7	12			
Ratnapura	726,000	55	5	260	6	64	102	39	49	14	16			
Colombo General Hospital		201	-	736	-	-	-	-	4	58	49			
Colombo Group		206	-	1185	-	204	-	-	-	65	63			
Filaria Campaign		-	5	1	-	-	-	33	-	6	-			

Contd./...

DISTRIBUTION OF HEALTH PERSONNEL BY DISTRICT AND HEALTH INSTITUTE PROJECTS

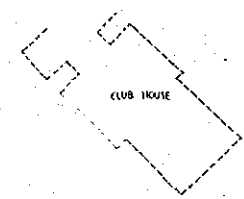
SHS DIVISION	POPULATION	M.OFFICERS		NURSES		MIDWIVES		P.H.H. Field	A.M.P. Hosp.	M.L.T.T. Hosp.	PHARMACIES Hospital
		Hosp.	Field	Hosp.	Field	Hosp.	Field				
Mental Health Services		26	-	162	-	-	-	-	-	2	7
T.B. Hospitals		40	-	175	-	-	31	5	18	25	
Leprosy Hospitals		6	-	25	-	-	15	-	2	1	
A.M.C.		24	-	-	-	-	89	-	10	-	
A.V.D.C.		15	-	-	-	-	21	-	11	2	
Quarantine		7	-	1	-	-	11	-	-	-	
Blood Bank		25	-	-	-	-	7	-	-	8	
Family Health		-	7	-	-	-	-	-	-	-	
Epidemiology Unit		-	6	-	-	-	3	-	-	-	
School Medical Officer		-	8	-	-	-	1	-	-	-	
M.R.I.		-	18	-	-	-	5	-	85	-	
D.H.S. Office & SHSS		47	-	-	-	-	-	-	-	-	
Health Institute (Kalutara)		-	5	-	16	-	-	16	-	-	
TOTAL	13,940,000	1655	181	5938	244	1378	1876	921	957	477	447

Year	Estimated Mid Year Population on	Registered Births	Birth rate per 1000	Deaths	Death per 1000 living rate	Infant Deaths	Per living 1000 Rate	Maternal Deaths	Per 1000 living rate
1925	4,846,850	193,261	39.6	117,543	24.3	33,221	172	-	18.5
1930	5,253,210	205,606	39.0	133,708	25.4	35,887	175	-	21.4
1933	5,419,000	209,032	38.6	144,690	21.2	32,866	157	3,882	18.6
1935	5,608,000	192,755	34.4	204,823	36.5	50,733	263	5,165	26.8
1940	5,972,000	212,980	35.7	122,738	20.6	31,719	149	3,423	16.1
1945	6,516,000	238,494	36.6	142,931	21.9	33,309	140	3,940	16.5
1950	7,544,000	304,635	40.4	95,142	12.6	24,849	82	1,692	5.6
1955	8,723,000	325,538	37.3	94,368	11.0	23,260	71	1,319	4.1
1960	9,896,000	261,702	36.6	84,918	8.6	20,549	56.8	1,094	3.0
1965	11,164,000	367,741	33.1	90,765	8.2	19,656	53.2	1,007	2.4
1970	12,516,000	367,901	29.4	94,129	7.5	18,634	50.6	571	1.2
1971	12,669,000	382,480	30.0	97,374	7.6	16,478	43.1	433	1.2
1972	12,861,000	385,462	30.0	103,918	8.1	17,592	45.6	514	1.3
1973	13,091,000	367,158	28.0	100,617	7.7	17,002	46.3	444	1.2
1974	13,284,000	365,902	27.5	119,518	9.0	18,724	51.2	375	1.0
1975	13,514,000	374,689	27.7	115,175	8.5	-	-	-	-
1976	13,730,000	378,833	27.6	109,293	8.0	-	-	-	-

VI - 4 収集資料リスト

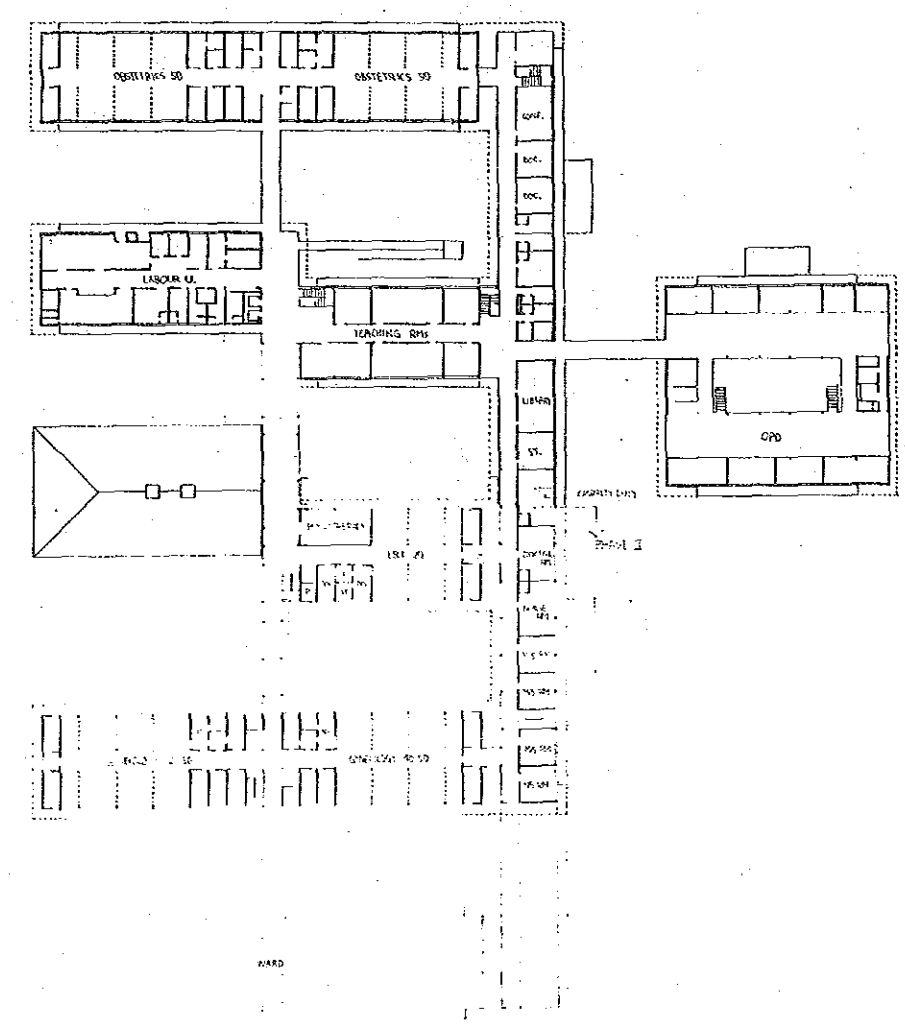
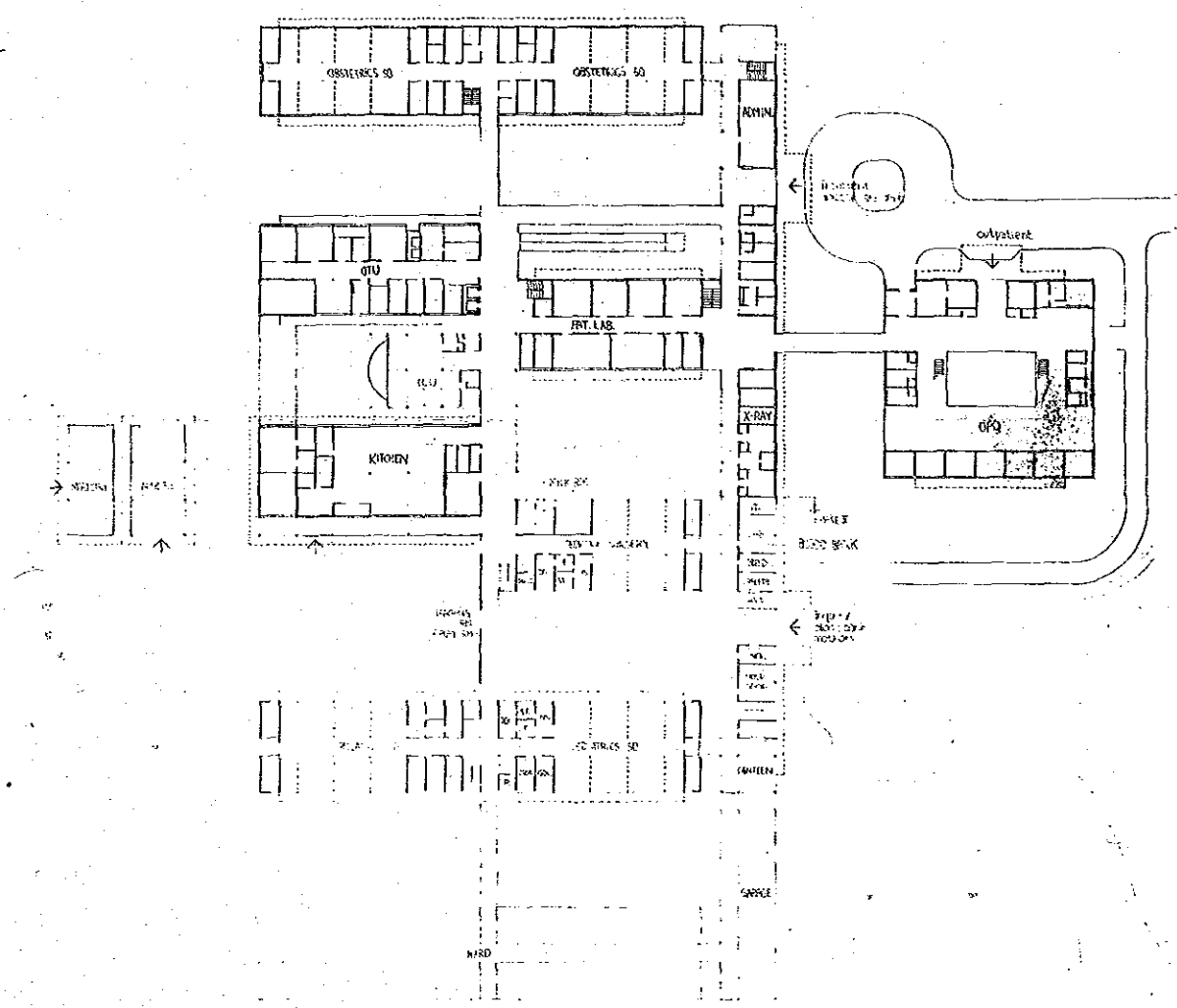
1. Statistical Pocket Book of the Democratic Socialist Republic of Sri Lanka 1978; Department of Census & Statistics
2. Sri Lanka Year Book 1977; Department of Census & Statistics
3. Sensus of Population 1971
Sri Lanka
General Report; Department of Census & Statistics
4. Bulletin on Vital Statistics 1976; Department of Census & Statistics
5. Review of the Activities of the Department of Health Sri Lanka (1970-1975) with particular reference to 1975;
Director of Health Services
6. Road Map of Sri Lanka; Survey Department

Ⅶ-5 ペラデニア教育病院平面図



建築士事務所 K.U.M.E. ARCHITECTS-ENGINEERS	建築主 久米建築事務所 K.U.M.E. ARCHITECTS-ENGINEERS	建築士 久米 英一 K. Ume	建築年 1981.11	建築面積 5,140	構造 S 1400	階 GF 1F PLAN
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1F PLAN



LEGEND
 ■ WARD
 □ OPD

FLOOR AREA TABULATION (sqm)			
	BDRM	WARD	TOTAL
GF	2255	220	2475
1F	2016	279	2295
TOTAL	4271	499	4770

JICA