

7. HEALTH RESOURCES

7.1. Health Budget and Expenditures

Cabinet approved estimates for 1981 totalled Rs. 820,809,810 for recurrent costs (5.2% of total Government recurrent expenditures) and Rs. 147,537,010 for capital costs (1.2% of total Government capital expenditures 1981) from a total approved Ministry of Health spending estimate for 1981 of Rs. 968,346,820. Actual 1981 expenditure were Rs. 831,685,898 for recurrent costs, Rs. 99,528,983 for capital costs from a total actual 1981 expenditures of Rs. 931,214,881.

Table 7.1 provides a comparison of 1981 actual expenditure to 1980 actual expenditure. Table 7.2 shows the breakdown of 1981 actual recurrent expenditures by major expense classification.

TABLE 7.1. MINISTRY OF HEALTH, SRI LANKA
SUMMARY OF EXPENDITURE/REVENUE 1980 & 1981

Programme	Actual 1980 (Rs.000)	Actual 1981 (Rs.000)	% Increase (Decrease) From 1980
Recurrent Expenditure :			
1. General Administration & Staff Services	55,607	59,368	6.8
2. Patient Care Services	533,076	594,151	11.5
3. Community Health Services	151,824	178,167	17.4
Total Recurrent	740,507	831,686	12.3
Capital Expenditure :			
1. General Administration & Staff Services	6,354	13,407	
2. Patient Care Services	98,160	67,777	
3. Community Health Services	16,279	18,345	
Total Capital	120,793	99,529	(17.6)
Source of Funds :			
Consolidated Fund	830,253	886,543	
Foreign Aid	31,047	44,672	
GRAND TOTAL	861,300	931,215	8.1

TABLE 7.2.

MINISTRY OF HEALTH, SRI LANKA
1981 RECURRENT EXPENDITURE BY OBJECT ITEM

Object	Amount (Rs.000's)	% of Total
Personal Emoluments	406 732	48.9
Travelling Expenses	22,181	2.7
Fuel & Lubricants	13,858	1.6
Drugs	145,692	17.5
Medical & Surgical Supplies	47,447	5.8
Malathion	49,500	6.0
Diet	79,769	9.6
Other Supplies and Requisites	15,346	1.8
Repairs	4,930	0.6
Transport, Communication and Miscellaneous	22,033	2.6
Grants & Contributions	24,197	2.9
Total 1981 Recurrent Expenditure	831,686	100.0

7.2. Medium Term Investment Programme

The Ministry of Health, Sri Lanka, prepares a rolling 5-year medium term capital investment programme. The 1982-1986 medium term investment programme provides for the following capital expenditures on health projects:

	(Rs. Million)
1982	239
1983	537
1984	643
1985	726
1986	860
Total 1982 - 1986	<u>3005</u>

7.3. Capital Expenditure on Health by Other Sectors

Capital funds for health projects are also provided for in the Decentralised Budgets, Integrated Rural Development Projects, the Accelerated Mahaweli Development Programme and the Ministry of Local Government, Housing and Construction. 1981 Cabinet estimates for the Ministry of Local Government, Housing and Construction made a provision of Rs. 22.4 million for capital expenditures on health projects.

7.4. Manpower:

A study was carried out in 1980 to determine actual and required staff by job category of the various administrative units of the Ministry of Health. For purposes of the study more than 350 job categories were reduced to 139 and grouped into three, viz. Medical (27), para medical and nursing (19) and non-medical (93). Special emphasis was placed on staffing needs of health institutions all of which were surveyed and a 95% response received. Information was obtained on actual staff as at January 1980. Required staffing was calculated on the basis of norms and standards recommended at a November 1980 workshop, and further refined by a small working group in March 1981. Findings of deficiencies and excesses for selected categories of institutional staff are presented in *Table 7.3*. The rate per 100,000 population of key health personnel by SHS Division is given in *Table 7.4*.

Since the shortage of medical doctors is most acute, as a short term measure 127 doctors from neighbouring countries were working in Sri Lanka in 1980 under the UNDP Volunteer Programme. These doctors provide service in the rural areas.

7.5. Training

To alleviate the shortage of trained manpower, extended training programmes have been undertaken to increase the output of Medical Officers from 275 to 400; Assistant Medical Practitioners from 90 to 150; Nurses from 400 to 1,200. A crash programme has been undertaken to train 2,600 Family Health Workers, with the first batch of about 1500 to complete this course in January 1982. Information on basic training of health personnel in Sri Lanka is contained in *Table 7.5*.

TABLE: 7.3 HEALTH INSTITUTIONS IN SRI LANKA
ACTUAL AND REQUIRED HEALTH MANPOWER (SELECTED CATEGORIES)
AS AT JANUARY - 1980

Medical Personnel	Actual	Required	Surplus (Deficit)
Medical Superintendent	15	18	(3)
D. M. O/M. O. O.	195	240	(45)
Physicians	65	66	(1)
Surgeons	70	75	(5)
Obst. & Gynaecologists	44	51	(7)
Paediatricians	31	42	(11)
Anaesthetists	29	42	(13)
Eye Surgeons	22	26	(4)
ENT Surgeons	17	19	(2)
Psychiatrists	25	28	(3)
Physical Medicine	7	12	(5)
Pathologists	17	66	(49)
J. M. O.	6	0	(4)
Res. Physicians	5	5*	
Res. Surgeons	7	7*	
Res. Obst. & Gynaecologists	14	14*	
House Officers	520	986	(466)
M. O. (OPD)	264	405	(141)
Dental Surgeons	55	55*	
M. O. H.	77	211	(134)
Totals	1485	2378	(893)
Nursing & Para-Med. Personnel			
A. M. PP/R. M. PP	882	973	(91)
P. H. II	513	1186	(673)
M. L. TT	350	832	(482)
Midwives	2673	5369	(2696)
Nurses	5762	10808	(5046)
Nurses, Public Health	153	354	(201)
Occupational Therapists	14	14	---
Pharmacists	386	521	(135)
Physiotherapists	137	223	(86)
Radiographers	161	168	(7)
Recordists—E. E. G.	5	5	---
Recordists—E. C. G.	32	79	(47)
Totals	11068	20532	(9464)
Non-Medical Personnel			
Attendants (Hosp.)	3384	8400	(5016)
Dispensers	653	623	30
Labourers Ord.)	7833	9055	(1222)
Labourers San.)	39	325	(286)
Orderlies Laboratory			
Totals	11909	18403	(6494)

* Required Staffing has not been determined and actual figures have therefore been included.

Note 1: Actual manpower is based on a 95% response to a survey conducted in January 1980.

Note 2: Required manpower based on norms/ standards recommended at a November 1980 workshop by a representative group of Ministry of Health Staff.

TABLE 7.4 KEY HEALTH PERSONNEL BY SHS DIVISION 1 AUGUST 1981

	Medical Officers ¹ No. Rates ⁴	AMP/RMP No. Rates ⁴	Nurses ² No. Rates ⁴	PH Staff ³ No. Rates ⁴	Supporting Staff No. Rates ⁴	Attendants No. Rates ⁴	TOTAL No. Rates ⁴
All Island	2233 15.0	925 6.2	6437 43.3	4785 32.2	2094 14.1	4883 32.9	21357 143.8
Colombo	596 35.1	52 3.1	1728 101.7	498 29.3	416 24.5	706 41.6	3996 235.3
Gampaha	155 11.2	70 5.0	480 34.5	480 34.5	157 11.3	407 29.3	1749 125.9
Kalutara	86 10.4	32 3.9	335 40.5	369 44.6	77 9.3	244 29.5	1143 138.2
Kandy	248 12.4	80 4.0	718 35.8	404 20.1	189 9.4	398 19.8	2037 101.5
Matale	29 4.7	45 7.3	158 25.5	153 24.7	69 11.1	176 28.4	630 101.6
Nuwara Eliya	32 6.1	29 5.6	99 19.0	66 12.6	36 6.9	86 16.5	348 66.6
Galle	133 16.3	48 5.9	299 36.7	290 35.6	101 12.4	224 27.5	1095 134.4
Matara	63 5.9	36 3.4	222 20.8	529 30.8	82 7.7	288 27.0	1020 95.5
Jaffna	139 16.7	66 7.9	242 29.1	233 28.0	140 16.8	278 33.4	1098 132.1
Vavuniya	34 12.1	40 14.3	43 15.3	70 25.0	38 13.6	90 32.1	315 112.4
Batticaloa	41 12.4	28 8.5	84 25.4	53 16.0	46 13.9	70 21.2	322 97.3
Amparai	20 5.1	27 6.9	35 9.0	78 20.1	24 6.2	48 12.3	232 59.7
Kurunegala	144 11.9	107 8.8	431 35.5	483 39.8	138 11.4	415 34.2	1718 141.7
Puttalam	35 7.1	40 8.1	134 27.2	142 28.8	54 10.9	103 20.9	508 103.0
Anuradhapura	73 8.6	69 8.2	212 25.1	199 23.6	93 11.0	201 23.8	847 100.3
Badulla	78 12.1	41 6.4	234 36.4	158 24.6	57 8.9	178 27.7	746 116.0
Monaragala	11 3.9	24 8.6	36 12.9	80 28.6	13 4.6	62 22.2	226 80.8
Reinapura	93 11.7	44 5.5	284 35.7	229 28.8	83 10.4	267 33.5	1000 125.6
Kegalle	51 7.5	41 6.0	244 35.8	286 41.9	63 9.2	202 29.6	887 130.0
Special Campaigns	76 0.5	5 0.0	220 1.5	169 1.1	99 0.7	161 1.1	730 4.9
Others	96 0.6	1 0.0	199 1.3	16 0.1	119 0.8	279 1.9	710 4.8

1) Includes 125 U. N. Volunteers 2) Excludes 368 student nurses (65 in Batticaloa and 303 in Kurunegala)

3) Excludes all MOH

4) Rate per 100,000 population.

Source : Office of the Medical Statistician

TABLE 7.5 HEALTH MANPOWER TRAINING FACILITIES

Categories	Training Institutions	Training Capacity	
Doctors	Colombo Campus	150	
	Peradeniya Campus	90	
	Jaffna Campus	70	
	Galle Campus	70	
		380	
AMP	Colombo Campus	60	
	Peradeniya Campus	60	
	Jaffna Campus	30	
	N. I. H. S. Kalutara	60	
MLT	MRI Colombo	50	
Nurses	NTS Colombo	100	
	" Kandy	50	
	" Anuradhapura	50	
	" Galle	50	
	" Ratnapura	50	
	" Kurunegala	50	
	" Batticaloa	50	
	" Jaffna	50	
		1200	
PHI Pharmacists Physiotherapists & Occupational Therapists Radiographers P. H. N. F. H. W. Dental Nurses	N. I. H. S. Kalutara	72	
	Colombo Campus	72	
	School of Physiotherapy & Occupational Therapy	45	
	G. H. Colombo	16	
	N. I. H. S. Kalutara	30	
	N. I. H. S. Kalutara	40	
	School of Dental Nurses (Maharagama)	40	
		25	

7.6 Health Institutions

On 4th November 1981, His Excellency the President laid the foundation for the construction of a new 1001 bed hospital in the new Capital City of Sri Jayawardenapura. This is expected to be completed before the end of 1983. Arrangements were made with the Ministry of Higher Education and the Buildings Department to proceed with those sections of the new hospital at Galle which are required for the faculty of medicine of the Ruhunu University. Work on the Central Stores at Angoda for the Anti Malaria Campaign was completed.

Twenty one new hospital wards with a total of 382 beds and other auxiliary buildings such as 3 M. O. H. Offices, 8 Dental Clinics, 2 ambulance garages, 5 administrative blocks, one operating theatre and several staff quarters were also constructed during the year 1981.

TABLE 7.6 NUMBER AND BED STRENGTH OF HEALTH INSTITUTIONS BY TYPE, SRI LANKA - 1981

Institutions	No.	Beds
Provincial Hospitals ¹⁾	12	10716
Base Hospitals	17	5396
District Hospitals	114	12180
Peripheral Units	109	4326
Rural Hospitals	109	2442
Maternity Hospitals	02	690
Mental Hospitals	02	2920
Chest Hospitals	03	1278
Leprosy Hospitals	02	393
Cancer Hospitals	01	462
Children's Hospitals	01	614
Eye Hospitals	01	471
Dental Hospitals	01	42
Maternity Homes ²⁾	102	1127
Other Hospitals	12	972
Central Dispensaries	340	—
Total ³⁾	828	44029

1) Includes Teaching Hospitals

2) Includes Central Dispensaries/Maternity Homes

3) In addition there are about 650 visiting stations where an AMP is usually available once a week or fortnight.

Source: Office of the Medical Statistician

TABLE - 7.7

DISTRIBUTION OF GENERAL HOSPITAL
BEDS* BY SHS DIVISION, SRI LANKA

SHS Division	Total No. of Beds	Beds Per 1000 Population
Colombo	4743	2.9
Gampaha	2848	2.0
Kalutara	1965	2.4
Kandy	4130	3.7
Matale	1622	2.6
Nuwara-Eliya	1105	2.1
Galle	1837	2.3
Matara	2159	2.0
Jaffna	2643	3.1
Vavuniya	732	2.6
Batticaloa	784	2.4
Amparai	619	1.6
Kurunegala	2906	2.4
Puttalam	1113	2.3
Anuradhapura	2123	2.5
Badulla	1653	2.6
Moneragala	641	2.3
Ratnapura	2365	3.0
Kegalle	1633	2.4
(All Island) Total	<u>37621</u>	<u>2.5</u>

* Excluding beds in specialised hospitals
Source: Office of the Medical Statistician

7.7. Transport

Existing serviceable motor vehicles are shown by type in Table 7.8.

TABLE 7.8

SERVICEABLE MOTOR VEHICLES AS AT
1ST MARCH 1982
MINISTRY OF HEALTH SRI LANKA

Type of Vehicles	No.
Ambulances	249
Cars	78
Vans, minibuses and buses	201
Jeeps	356
Lorries	60
Refrigerated vans	3
Total	947

7.8 Drugs

Drug costs represent 17.5% of the total Ministry of Health recurrent budget for 1981. The cost of drugs and dressings imported by the State Pharmaceutical Corporation for the Ministry over the years is as below.

Year	Cost (Rupees thousands)
1978	74,886
1979	123,069
1980	106,981
1981	164,039

An indications of the consumption of drugs at different levels of the curative services is provided by comparing the data presented in Table 7.9.

Table 7.9 EXPENDITURE ON DRUGS BY PROJECT VOTES (ACTUALS 1980)

Head 154 Programme Two Project	Amount Spent on Drugs for 1980 (1) Rs. Thousands	Inpatients in 1980 in thousands (2)	No. of Beds as at 31.12.80 (2)	General OPD attendance in thousands 1980 (2)
1. General Hospital, Colombo	5,202	72	2,266	787
2. Colombo Group of Hospitals	3,758	151	2,423	1,339
3. Provincial and Base Hospitals	21,597	816	12,675	5,244
4. District Hospitals	15,574	784	11,903	8,178
5. Peripheral Units and Rural Hospitals	6,990	461	6,603	8,110
6. Central Dispensaries and Maternity Home	5,137	26	1,114	6,086

Source: 1. Finance Branch, Ministry of Health
2. Office of the Medical Statistician

8. LEGISLATION

In 1980, the Food Act and the Cosmetic Devices and Drugs Act were enacted to replace the old Food and Drugs Act. In December 1980, legislation was passed in Parliament to set up the Health Development Fund.

Work is underway in drafting new legislation in the areas of rabies control, health services dealing with organisation and service delivery, and medical ordinance dealing with registration of medical practitioners and para-medical staff, professional conduct and other matters.

The Acts and Ordinances for which the Ministry of Health is responsible for implementation either directly or in an advisory capacity are listed in *Table 8.1*

TABLE 8.1

MINISTRY OF HEALTH, SRI LANKA ACTS AND ORDINANCES - 1980

Bread Ordinance	Chapter	217
Poisons, Opiums & Dangerous Drugs Ord.	—	218
Health Services Act	—	219
Nursing Home (Regulation) Act	—	220
Cornel Grafting Act	—	221
Quarantine and Prevention of Diseases Ordinance	—	222
Contagious Diseases Ordinance	—	223
Veneral Diseases Ordinance	—	224
Diseases among Labourers Ordinance	—	225
Medical Ordinance	—	105
Medical Wants Ordinance	—	226
Mental Diseases Ordinance	—	227
Lepers Ordinance	—	228
Vaccination Ordinance	—	229
Nuisances Ordinance	—	230
Cemeteries Ordinance	—	231
Wells & Pits Ordinance	—	232
Suburban Dairies & Laundries Ordinance	—	233
Municipal Dairies & Laundries Ordinance	—	234
Food Act. No. 26 of 1980		
Cosmetic Devices and Drugs Act		
Health Development Fund Act No. 13 of 1981		
Ayurveda Act No. 31 of 1961		

9. INSTITUTIONAL HEALTH SERVICE ACTIVITIES

In recent years there has been a marked increase in workloads in health institutions. In 1981 there were 59% more discharges from hospitals and 6% more attendance to the outpatient departments and clinics than in 1960. The trend in hospital discharges and outpatient attendance can be seen from *Table 9.1*.

TABLE 9.1 HOSPITAL DISCHARGES AND OUTPATIENT ATTENDANCES
SRI LANKA - 1960 - 1981

Year	Discharges		Outpatient Attendances (Total Visits)	
	No. in 1000's	Rate per 1,000 Population	No. in 1000's	Rate per 1,000 Population
1960	1392	141.9	28,852	2915.6
1965	1643	150.6	31,258	2866.7
1970	2054	164.1	34,895	2783.2
1975	2146	159.0	27,654	2049.0
1980	2295	156.7	31,892	2176.9
1981	2220	149.5	30,439	2049.8

9.1 Indoor Patients

Table 9.2 gives a summary of hospital statistics by type of hospital for 1981. The average duration of stay is reasonably short for the non-specialised hospitals but reaches a fairly high level for some of the specialised hospitals. The bed occupancy rate varies considerably with the largest hospitals being rather over-crowded compared to the smaller ones. The death rate per 1000 patients and the rate of still births per 1000 births are higher in larger hospitals than in smaller ones, presumably because the more severe or complicated cases tend to be admitted to the larger rather than to the smaller hospitals.

9.2 Outpatients

The total attendance to General Outpatient Departments amounted in 1981 to 30,247,563 or 2.0 attendances for each individual in the population. Matara Division had the lowest attendance rate, viz 1.3, and Vavuniya Division the highest, viz: 3.1. The population appears to attend out-patient departments in District Hospitals instead of going to the usually much nearer Central Dispensary.

In 1981 a total of 4,956,079 patients visited a special clinic (see *Table 9.3*). The most frequented types of special clinics were Medical Clinics with 977,260 attendances, Dental Clinics with 869,828 and Antenatal Clinics with 581,614.

TABLE 9.2 HOSPITAL STATISTICS BY TYPE OF HOSPITAL — SRI LANKA, 1981

Type of Institution	No. Treated	DEATHS		No. of Institution	No. of beds as on 31.12.81	Av. daily occupancy rate	Bed occupancy rate	Av. duration of stay	Gen O.P.D. attendance	BIRTHS		Maternity beds as on 31.12.81	
		No. Rate	No. Rate							No. of live born	Stillborn No. Rate		
General Hospital Colombo	123489	4232	34.3	1	2331	2527	108	7.4	952341	—	—	—	
Provincial Hospital*	430208	9840	22.9	10	7922	8608	109	7.3	2251944	2401	41.6	1262	
Base Hospital	350379	4960	14.2	17	5396	5354	99	5.6	266665	1481	28.1	775	
District Hospital	766445	4623	6.0	114	12180	8926	73	4.3	7930657	1843	18.0	2583	
Peripheral Unit	286266	566	2.0	109	4326	3057	71	3.9	5063347	846	15.3	1358	
Rural Hospital	147005	153	1.0	109	2442	1832	75	4.5	2868982	333	15.7	651	
Maternity Homes	25203**	1	0.0	102	1127	320	28	4.6	1813425	245	14.5	1127	
Maternity Hospital	43040	26	0.6	2	690	570	83	4.8	—	413	18.2	505	
Mental Hospital	17007	252	14.8	2	2920	3195	109	68.6	—	—	—	—	
Chest Hospital	6577	194	29.4	3	1278	1002	78	55.6	—	—	—	—	
Leprosy Hospital	381	26	68.2	2	393	322	82	308.5	—	—	—	—	
Cancer Hospital	7602	434	57.1	1	462	542	117	26.0	—	—	—	—	
Children Hospital	52563	1794	34.1	1	614	586	95	4.0	487301	—	—	—	
Eye Hospital	9748	4	0.4	1	471	400	85	15.0	—	—	—	—	
Dental Hospital	1568	—	—	1	42	21	50	4.9	143627	—	—	—	
Other Hospital	15881	133	7.3	12	972	429	44	10.0	2630323	—	—	—	
C. D.	—	—	—	340	—	—	—	—	5838951	—	—	—	
TOTAL	2283362	27238	11.9	827	43566	37691	86	6.0	30247563	321141	7562	23.0	8261

** Admissions.

* Excludes Teaching Hospital Peradeniya
Source: Office of the Medical Statistician

TABLE 9.3

CLINIC ATTENDANCE—1981

Type of Clinic	Colombo Group & GH Colombo	Provincial Hospitals.	Base Hospitals.	District Hospitals.	Peripheral Units	Rural Hospitals.	Special Campaigns	TOTAL
1. Medical	54683	23318	145286	45717	5356	—	—	977260
2. Surgical	78493	111503	54866	9005	1251	—	—	255118
3. Orthopaedic	31386	32098	—	800	—	—	—	64284
4. Thoracic	4171	4016	—	—	—	—	—	8187
5. Neuro Surgical	13770	4163	—	—	—	—	—	17933
6. ENT	42640	44255	20007	3695	—	—	—	110597
7. Genito Urinary	13056	3158	—	—	—	—	—	16214
8. Rectal	722	858	—	—	—	—	—	1580
9. Varicose Veins	—	336	—	—	—	—	—	336
10. Skin	31628	70820	—	3409	—	—	—	105857
11. Neurology	10447	4551	—	—	—	—	—	14998
12. Paediatric	9257	68065	41624	7291	650	—	—	126887
13. Psychiatric	55178	77524	22201	20705	—	—	—	175608
14. Epileptic	—	10097	1550	—	—	—	—	11647
15. Neuro Psychiatric	7304	872	—	—	—	—	—	8176
16. Child Guidance	1479	653	653	786	964	136	—	4018
17. Ante Natal	122934	76868	44367	149406	119545	68094	—	581614
18. Post Natal	—	2632	—	8160	5857	7020	—	23669
19. Well Baby	28094	10149	8521	48649	63408	52835	—	211656
20. Pre-school, care milk,	294	1211	7627	113813	228719	149019	—	500683
21. Gynaecology	29443	33903	18435	3502	432	1764	—	87479
22. Family Planning	3141	11284	8079	10134	9552	1174	—	43369
23. Malnutrition	1911	—	14719	8051	—	3010	—	27691
24. Eye	142959	86944	8175	42275	355	—	—	280708
25. T.B	—	—	—	—	—	—	—	—
26. Dental	69835	216514	175232	324820	71292	2459	9676	869828
27. Cancer	2379	4398	—	—	—	—	26326	33103
28. V.D.	—	—	—	—	—	—	—	—
29. Rabies	11693	2087	991	10842	78	—	—	25691
30. Leprosy	—	—	—	—	—	—	—	—
31. Cardiology	45375	16809	—	—	—	—	—	62184
32. Plastic Surgery	901	—	—	—	—	—	—	901
33. Diabetic	93429	40044	4392	20699	219	4985	—	163768
34. Others	5043	49585	7648	1930	—	—	—	64206
35. Acupuncture	80829	—	—	—	—	—	—	80829
Total	1484774	1218662	584373	833689	508078	290501	36002	4956079

Source: Office of the Medical Statistician

10. COMMUNITY HEALTH SERVICES ACTIVITIES

10.1. Family Health

10.1.1. Training

10.1.1.1. Family Health Training for Local Government Health Personnel

Six, five day courses were held and a total of 212 Matrons, Assistant Matrons, Public Health Inspectors and Public Health Midwives were trained from the Municipalities of Colombo, Kandy, Galle and Negombo.

10.1.1.2. Family Health Manual Based Training

Six, five day courses were held at the Family Health Bureau for peripheral level instructors (trainers) on the use of the Family Health Manual.

These trainers in turn conducted 30 one day and 44 three day workshops at the periphery for public health staff in their respective Medical Officer of Health areas.

10.1.1.3. Training of Registered/Assistant Medical Practitioners in Maternal and Child Health/Family Planning including insertion of Intra Uterine Devices

109 RMPP/AMPP completed this 3 month training course.

10.1.1.4. Training in Sterilization

48 Medical Officers were trained in vasectomy and 74 Medical Officers were trained in female sterilizations.

10.1.1.5. Training of Public Health Inspectors in School Health

74 PHII in SHSS divisions of Anuradhapura and Matara were trained.

10.1.1.6. Other training activities

a) A five day workshop was held for health managers on Project Implementation and Evaluation.

b) A three day review workshop was held for all MOO (MCH) together with staff at the Family Health Bureau.

c) Orientation courses in health for Mahila Samithi Workers

d) Training in Family Health for staff and trainees at the Police Training School at Kalutara.

10.1.2. Services

10.1.2.1. Family Planning Services at the Family Health Bureau

During the year under review 1284 vasectomies were performed at the FHB, 12 IUCDs were inserted and 23 new acceptors were recruited for administration of injectable hormonal contraceptives.

10.1.2.2. Strengthening of Hospital Based Family Planning Services

Under this project 12 District Hospitals commenced sterilization services this year. A total of 43 District Hospitals provide sterilization services at present.

10.1.2.3. Services for Intra Uterine Device Insertions

Upto the end of 1981, 682 clinics have been supplied with equipment for insertion of intra uterine devices.

10. 1. 3. Supplies

Routine distribution of contraceptives, soft goods, consumables and equipment for family planning together with distribution of equipment and drugs for Maternal and Child health activities and the estate programme was undertaken by the Family Health Bureau.

10. 1. 4 Project "Development of Rural MCH Services" Funded by UNICEF

Ten central dispensaries and maternity homes were taken up for strengthening during the year under review. Repairs to these institutions were carried out and 2 institutions were supplied with electricity.

Hospital Development Committees were established in all 10 institutions resulting in integration of field staff, hospital staff and the community.

Volunteers were trained in all ten areas and "Children's Day" celebrations and a health exhibition was held at Anuradhapura in early October. Family health activities including immunization and family planning were started in all 10 institutions. Equipment and supplies were distributed to the 10 CDD & MHH in Phase I and 10 CDD & MHH in Phase II of the project.

10. 1. 5. Project "Integrated Parasite Control, Nutrition and Family Planning Programme" - funded by JOICFP

Activities under this project are confined to 3 areas namely Ambalanduwa (in MOH area Panadura), Nakulugamuwa (in MOH area Tangalle) and Galnewa (in MOH area Kekirawa). Major activities include mass treatment for intestinal helminths (monitored by stool survey), construction of latrines, nutrition intervention programme, income generating projects, training of health volunteers, provision of family planning services and health education activities with special emphasis on schools.

10. 1. 6. Family Health Programme in the Plantation Sector

200 Estate Polyclinics have continued to be maintained while 40 additional polyclinics have been established. 100 midwives and 20 AMPP were trained for employment in the estate sector and an expanded programme of immunization has been initiated. All aspects of programme implementation have been completed in phase I areas (Kalutara, Ratnapura, Balangoda, Haputale and Badulla). Training of staff in phase II areas was also undertaken (Hatton, Nawalapitiya, Kegalle and Avissawella).

Equipment and drugs were distributed to Estate Polyclinics.

A two day workshop was held for MOO (Family Health Estates) together with representatives from UNICEF, JEDB, and SLSPC, to review ongoing programmes and discuss proposed activities for 1982.

10. 1. 7. Evaluation

TABLE - 10.1 FAMILY PLANNING PERFORMANCE - 1977 TO 1981

Method	1977	1978	1979	1980*	1981*
Vasectomy	1302	2325	5640	45967	27978
Tubectomy	17752	19624	30003	55215	37512
IUCDs	21321	23085	20187	17005	13582
Orals	27514	31146	30394	26868	21478
Injectable	—	3046	5932	8448	7798
Total	67890	79226	92156	153553	108348

* Provisional

During 1981, a total of 108348 new acceptors have been recruited by the programme. 65490 sterilizations have been performed amounting for 60.4% of the total new acceptors. A reduction of 35.7% was observed in the sterilization in comparison to the previous year. This decrease is attributed to the reduction in the incentive payment (out of pocket expenses) to the acceptors from Rs. 500/- to Rs. 200/- per acceptor.

Acceptance of temporary methods too have shown a reduction during 1981 as compared to 1980. The IUCDs have declined by 20.1%, while orals and injectables have shown a reduction of 20.0% and 7.7% respectively.

Family Health

An island wide Family Health Impact Survey was undertaken by the Family Health Bureau in 1981. Data pertaining to Family Health including Family Planning practices was collected from 7500 households from the 24 administrative districts. This data is being processed at present at the Family Health Bureau.

In 1981, school children in Grade 1 were given DT as follows:

1st dose	46,884
2nd dose	26,667
Booster	43,536

BCC was given to 165,486 school children.

10.2 Water Supply and Sanitation

A National plan in respect of the International Drinking Water Supply and Sanitation Decade (1981 - 1990) was finalised by the National Water Supply and Drainage Board and made available to international and bi-lateral agencies for the purpose of obtaining support for its implementation.

The projections for community water supply and excreta disposal under this plan are given in Tables 10.2 and 10.3 respectively.

The type of water supply and toilets, expressed as percentages, as found at the 1971 and 1981 censuses are in Tables 10.4 and 10.5 respectively.

TABLE 10.2 PROJECTIONS FOR COMMUNITY WATER SUPPLY IN SRI LANKA 1981 AND 1990 (PERCENTAGES)

	Urban population to be served			Rural population who have reasonable access to safe water	Total
	By house connection	By Public Standpost	Total Urban		
1981	32%	40%	72%	16%	29%
1990	35%	45%	80%	50%	57%

Source : National Water Supply and Drainage Board

TABLE 10.3 PROJECTIONS FOR EXCRETA DISPOSAL IN SRI LANKA
1981 AND 1990 (PERCENTAGES)

	Urban population to be served				Rural population to have adequate disposal	Total
	by public sewerage	by pit privy or septic tank	By bucket latrine	Total Urban		
1981	30%	40%	12%	82%	63%	67%
1990	40%	43%	7%	90%	68%	73%

Source : National Water Supply and Drainage Board

TABLE 10.4 PERCENTAGE DISTRIBUTION OF OCCUPIED HOUSING UNITS BY SOURCE OF WATER SUPPLY BY SECTORS - 1971 AND 1981

Source	All Sectors		Urban Sector		Rural Sector		Estate Sector	
	1971	1981	1971	1981	1971	1981	1971	1981
Piped water on tap	20.1	17.3	45.3	46.5	4.8	5.1	74.7	65.6
Well	68.8	73.1	50.5	48.7	81.9	84.5	15.4	20.4
River, tank or other source	8.9	7.0	2.0	1.1	11.0	8.5	7.3	5.8
Not stated	2.3	2.7	2.1	3.7	2.3	1.9	2.1	8.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source : Census of Population and Housing 1981 : Housing Tables Based on a Ten Percent Sample

TABLE 10.5 - PERCENTAGE DISTRIBUTION OF OCCUPIED HOUSING UNITS
BY TYPE OF TOILET BY SECTORS - 1971 AND 1981

Type of Toilet	All Sectors		Urban Sector		Rural Sector		Estate Sector	
	1971	1981	1971	1981	1971	1981	1971	1981
Flush Toilet	6.7	4.8	22.8	15.6	2.2	2.1	8.2	4.9
Water Seal	14.3	21.9	19.2	38.9	9.9	17.5	33.9	24.2
Pit Type	38.8	37.9	18.3	17.0	44.4	43.5	38.2	32.3
Bucket Type	4.8	2.0	19.4	8.8	1.0	0.3	4.1	2.1
None	34.3	30.9	19.1	16.4	41.5	34.8	13.4	28.1
Unspecified	1.2	2.5	11.3	3.4	1.0	1.7	2.2	8.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census of Population and Housing 1981: Housing Tables Based on a Ten Percent Sample

10.3 School Health

Of a total number of 9177 government schools in the island only 1780 have been taken up for Medical Inspection; its coverage is only 19%. The percentage of children screened in the primary school has been only 17.6%. Of children examined 45% have been found to have one or more defects. The covered of schools by personnel engaged in school Medical activities in respect of the 1780 schools taken up is as follows:

Schools covered by AMPP/RMPP	886	(47%)
" " " Medical Officer of Health	665	(37%)
" " " School Medical Officers (6)	89	(5%)
" " " Other Medical Officers	212	(11%)

Of the children screened only 24% attended central clinics for treatment. Follow-up is very unsatisfactory.

The following defects were detected among the 41,457 children screened in all S. H. S. divisions in 1981:

Underweight	13.6%
Overweight	3%
Anaemia	11.6%
Angular Stomatitis	5.6%
Erosion of Tongue	1.1%
Phrynoderma	7.6%
Mosaic skin	10.5%
Defective Vision	2%
Dental Caries	83%

10.3.1 Immunization

The percentage of children taken up for B. C. G. has shown a gradual decline from 77.7% in 1976 to 45.7% in 1981.

10.4. Health Education

The report of work done for the year 1981 is given below. The health education activities carried out are described under each section.

10.4.1 Community Health Education

Community Health Education activities are mainly channelled through the Family Health Education Action Programme wherein the rural leadership and volunteers are involved for the purpose of educating rural communities and making them available the maximum utilisation of health programmes.

No. of FHEA Programmes for 1981	- 215
No. of volunteers trained	- 2936

10.4.2 Hospital Health Education

Hospital Health education activities were further expanded for the year 1981 with the following health education programmes in medical institutions.

	No. of Programmes
1. General Hospitals	1
2. District Hospitals	17
3. Rural Hospitals	3
4. Maternity Homes	5

In order to facilitate the efficient management of above programmes 26 health committees have been established.

10.4.3 Research in Health Education

To test the effectiveness of the village health volunteers a study was undertaken and completed. The study is now in the stage of data entry. The study involved 102 Public Health Midwife areas with 10200 families in all S.H.S. areas of the country.

10.4.4 School Health Education

In collaboration with the Curriculum Development Centre of the Ministry of Education the curriculum of health was developed taking into consideration the students' requirements and health problems of this country. Curriculum of grade 1 to 5 was integrated with environmental studies while it remains a separate subject for grade 6 to 10.

A group of trainers consisting of MOOH, Health Educators, In-service Training Instructors and trained Coordinators who were trained in School Health Education was established in all districts. Nearly 3500 teachers have been trained by these groups having selected two teachers per school. This programme is being continued.

10.4.5 Health Education in Specialised Campaigns

Malaria Control

Three training programmes of health education of six days duration have been conducted for public health personnel and officers of the malaria campaign. 151 officers of MOH areas of Anuradhapura, Badulla and Hingurakgoda were trained under this programme.

Sexually Transmitted Diseases

With the assistance of Medical Officers and Public Health Inspectors attached to V. D. clinics of Anuradhapura, Jaffna, Kandy, Kurunegala, Ratnapura and Galle health education programmes have been planned and carried out.

Non-communicable Diseases - Cancer

Towards the end of 1981 a health education programme for cancer control was planned and conducted for PHII and PHMM in MOH areas Unawatuna and Elpitiya.

Dental Health Education Activities

First half of the year four workshops of two days duration were held in the division of Kurunegala and Colombo where 120 School Dental Nurses participated. These workshops were follow up programmes of dental health education activities done in various school dental clinics in the Island.

The No. of children involved in each school in each programme was 420 (grade IV & V).

No. of schools participating in the programme 60.

The latter half of the year a National Workshop on Planning Oral Health Services and appropriate in-service training programmes in Oral Health for Family Health workers was held.

The participants were tutors from various training institutions in the Island and University Staff.

No. of participants -- 40

Teacher training workshop held in October 1980:

No. of teachers participated = 37

No. of schools in the programme = 37

No. of children involved in the programme = 4400 (all Grade I children in the schools)

This programme is at present being followed up in five electoral divisions: Homagama, Kaduwela, Kesbewa, Piliyandala and Kotte.

10.4.6 Communication

Publications

The following publications have been printed and distributed.

- Sepatha Quarterly Sinhala journal - 40,000
- Sepatha - Supplement - three publications on health hazards of smoking, Mental hygiene and smoking or health, 20,000 publications each - 60,000

Other publications

With UNICEF assistance a text book on School Health Education in Sri Lanka was printed and distributed.

Two publications on Mahaweli health programmes and Mahaweli health volunteers were also printed and distributed.

Press releases

An Article on World Health Day was released to all the dailies,
25 articles on current interest were released to daily and Weekly papers.

Radio Programmes

No. of programmes conducted -- 126
(Sinhala medium).

Health Education Materials

The following are the materials produced:

Slides (different topics)	312
Photographic materials to exhibitions, and coverage of seminars and workshops etc	250
Art materials - which include poster, diagrammes, exhibition items, maps, slides etc	242
Carpentry items - which include exhibition panels, boards etc.,	128

Educational Materials

The following H.E. materials have been produced and distributed.

Leaflets on bowel diseases	—	50,000
Leaflets on dental health	—	50,000

A leaflet has been developed, pretested and sent to the Government Press for printing. 10 programmes on the use of H.E. materials have been conducted to Public Health Personnel, Hospital staff and Volunteer associations.

Cinema Technical Section

Maintenance and repairs of the cinema equipment of S. H. S. divisions, supply of Public Address system, Coverage of National and international workshops by providing technical facilities, and electrical and illuminations of exhibitions have been attended to by this section. 130 jobs in all have been performed.

Exhibitions

While giving the necessary support to S. H. S. Divisions, 9 exhibitions at national level including Gam Udawa and Mahapola have been undertaken during this year

10.4.7 Health Education activities by Divisional Health Educators

Community Health Education

No. of training programmes	—	321
No. of volunteers trained	—	1485
No. of primary health care workers trained	—	390
No. of teachers trained	—	96
No. of leaders trained	—	1421
No. of R. D. S. members	—	45
Boy Scouts	—	75
Family Health Workers	—	450

School Health

No. of training programmes	—	60
No. of teachers trained	—	2165

Hospital Health Education

No. of training programmes	—	15
No. of hospital workers trained	—	324

Malaria

No. of training programmes	—	27
No. of volunteers trained	—	716
No. of field attendants trained	—	70

Rabies Control

No. of training programmes	—	1
No. of volunteers trained	—	30

11. SPECIAL PROGRAMMES

11.1 Anti-Malaria Campaign

The incidence of Malaria has been static for the last two years as shown in Table 11.1, in 1981 causing some concern. The reasons are both operational and administrative but not technical.

The receptivity and vulnerability of areas such as Moneragala, Kahatagasdigiya, Bibile, Trincomalee and Puttalam has always been high.

Favourable environmental conditions and rainfall pattern helped in increased transmission, this was further helped by operational defects such as low coverage and delay in spray cycles. Localised out breaks broke out in Puttalam, Trincomalee, Galgamuwa, Medavachchiya and Bibile areas in 1981.

Data on the residual spraying carried out in 1981 are given in Table 11.2.

TABLE 11.1

MALARIA CASES IN SRI LANKA 1980-81

Year	Total Slides Examined	Number positive	P. Vivax	P. Falc and Mixed	Cases per 1000 population	% P. Falciparum & Mixed of all positive
1980	803,692	47,949	46,474	1475	3.3	3.1
1981	892,143	47,383	46,143	1240	3.2	2.6

TABLE 11.2

RESIDUAL SPRAYING IN SRI LANKA - 1981

	Number	%
Average No. of Houses Sprayed Completely	599,142	58.9
" " " Partly	255,099	25.1
" " Closed	77,675	7.6
" " Refused	84,759	8.3
	1,016,605	100.0
Total Spray man days	496,157	
Malathion used (kg.)	4,501,677	

11.2. Anti-Tuberculosis Campaign

During the last five years the incidence of Tuberculosis has remained fairly static as shown in Table 11.3.

Incidence varies from division to division. The highest is 110.5 in the Colombo Municipal area and the lowest has been 11.1 per 100,000 population in Moneragala and 11.7 in Mannar.

Province wise the rates vary from 63.2 per 100,000 population in the Western Province to 14.5 in the Uva Province, while Eastern Province has recorded a rate of 59.1.

Age-wise Tuberculosis has remained the disease of the elderly with higher rates for higher age groups. Sex-wise 63.5% of the patients registered were males. (ref. Table 11.4)

TABLE 11.3 TUBERCULOSIS INCIDENCE AND MORTALITY 1970 - 1981

Year	Mid-Year Population in 1000s (Estimates)	Incidence			Incidence per 100,000 pop.			Mortality	
		P.T.B	Extra P.T.B	Total	P.T.B	Extra P.T.B	Total	Number	Rate per 100,000 pop.
1970	12616	4921	841	5762	39.3	6.7	46.0	1563	12.5
1971	12608	4780	870	5650	37.9	6.9	44.8	1597	12.6
1972	12861	5456	985	6441	42.4	7.6	50.0	1588	12.3
1973	13091	5231	739	5970	39.9	5.6	45.6	1458	11.1
1974	13284	5406	668	6074	40.6	5.0	45.7	1552	11.7
1975	13496	6402	922	7324	47.4	6.8	54.2	1805	13.4
1976	13717	5955	868	6823	43.4	6.3	49.7	1594	11.6
1977	13942	5244	750	5994	37.6	5.4	42.9	1503	10.8
1978	14190	5367	993	6350	37.8	6.9	44.8	1386	9.8
1979	14472	5280	872	6152	36.5	6.0	42.5	—	—
1980	14738	5379	833	6212	36.5	5.7	42.1	—	—
1981	14988	5492	796	6288	36.6	5.3	41.9	—	—

Source : Anti-TB Campaign

TABLE 114 TUBERCULOSIS - REGISTRATION BY AGE, SEX & DIVISION 1981

S.H.S. DIV. / AGE & SEX	COLOMBO M. C.		COLOMBO SOUTH		GAMPAHA		KALUTARA		KANDY		MATALE		NUWARA ELIYA		MATARA		GALLE		JAFFNA		VAVUNIYA		AMPARAI		BATTICALOA		PUTTALAM		KURUNEGALA		ANURADHAPURA		BADULLA		MONARAGALA		RATNAPURA		KEGALLE				
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F							
0-4	10	10	13	8	6	8	0	1	2	3	1	0	1	0	1	3	4	3	2	0	0	1	1	3	2	1	1	0	1	5	3	2	1	0	0	5	3	1	0				
5-9	8	4	4	6	5	5	1	3	2	2	1	0	1	1	1	2	4	1	1	1	1	0	0	3	0	0	2	0	2	0	2	1	1	0	0	1	3	0	2				
10-14	3	8	5	2	6	3	2	6	5	2	0	1	0	1	3	1	2	3	1	1	0	0	1	2	1	3	0	4	2	4	2	1	2	0	1	2	3	1	1				
15-24	50	62	41	54	36	29	29	19	34	49	12	14	5	10	19	16	26	26	17	17	3	1	20	14	15	5	2	15	12	10	13	10	6	3	1	29	39	14	20				
25-34	110	55	86	85	71	70	45	41	57	59	21	14	7	6	35	25	58	37	44	30	5	9	25	15	28	15	9	11	50	37	24	19	18	9	1	3	60	33	22	29			
35-44	89	30	92	56	69	43	54	32	46	20	18	8	8	7	40	15	35	15	44	23	11	4	32	20	25	18	9	3	37	18	25	17	13	7	3	2	42	33	27	14			
45-54	103	35	70	26	107	56	57	19	59	25	17	2	6	3	51	23	51	30	78	17	11	4	37	14	29	10	17	9	45	24	43	21	16	9	5	1	53	32	31	20			
55+	121	26	98	45	119	55	73	45	48	19	18	7	3	1	85	26	87	35	74	25	12	3	31	15	42	15	22	13	71	20	65	21	11	3	7	1	63	17	41	16			
TOTAL	734	691	668	427	668	427	432	134	432	134	11.5	32.4	51.2	45.1	23.2	60.2	63.5	20.5	28.4	31.7	16.6	10.0	52.5	35.0																			
RATE PER 100,000 POP	125.3	62.1	48.1	51.6	48.1	51.6	38.4	21.6	38.4	21.6	11.5	32.4	51.2	45.1	23.2	60.2	63.5	20.5	28.4	31.7	16.6	10.0	52.5	35.0																			

Source: Anti-T B Campaign

11.3. Anti Filariasis Campaign

The number of cases positive for microfilaria has not decreased significantly over the recent years (Table 11.5) There is a very slight increase of the cases with clinical manifestations this year (Table 11.6)

TABLE 11.5 POSITIVE CASES FOUND 1976 — 1981

	1976	1977	1978	1979	1980	1981
No of blood films examined	1,636,255	1,431,154	1,500,552	1,477,532	1,378,957	1,425,443
No positive	4,352	2,995	3,831	4,329	4,438	3,483
M. F. Rate %	0.26	0.21	0.21	0.29	0.32	0.24

TABLE 11.6 CLINICAL MANIFESTATIONS 1976 — 1981

	1976	1977	1978	1979	1980	1981
Cases with clinical manifestation	4,352	2,995	3,831	4,329	4,450	4,944
First visits	2,093	1,315	1,525	1,720	1,504	1,606

The entomological evaluation shows an upward trend both in the infection and infectivity rates (Table 11.7)

TABLE 11.7 ENTOMOLOGICAL EVALUATION

	1980	1981
Total <i>Culex quinquefasciatus</i> Examined	47,678	24,435
Infection rate %	0.70	0.83
Infective rate %	0.25	0.53

11.4. Sexually Transmitted Diseases

Twelve thousand two hundred and eleven new cases were investigated at the full-time V. D. Clinics in the whole island, during the year 1981.

One hundred and thirty thousand four hundred and thirty four laboratory tests were carried out during the period under review. 1,125 contacts of infectious V. D. patients were traced and brought to clinics for treatment.

(1) Cases detected

Infectious syphilis	..	964
Late syphilis	..	767
Congenital syphilis: Early	..	26
Congenital syphilis: Late	..	19
Gonorrhoea	..	3,532

(2) Incidence. There has been a significant decline of early infectious syphilis, and a slight increase in gonorrhoea during this year. In 1980, there were 1,187 cases of infectious syphilis and 3,425 cases of gonorrhoea, giving a rate 8.1 per 100,000 population for infectious syphilis and 23.4 per 100,000 population for gonorrhoea.

However, in 1981, there were 964 new cases of infectious syphilis and 3,532 new cases of gonorrhoea giving a rate of 6.5 per 100,000 population for infectious syphilis and 23.8 per 100,000 population for gonorrhoea.

(3) Age Group and Occupation (Colombo Clinics)

The most affected age group is between the ages of 20-29 yrs. and the most affected occupational group were labourers.

(4) Laboratory: Total number of special tests done in the year 1981 was 130,434.

(5) Control Programme: All known contacts of infectious syphilis and gonorrhoea were traced and brought for treatment. 1,125 contacts including family contacts were treated at all clinics in the year 1981.

(6) Research: Eight cases of Penicillin resistant Gonorrhoea (Penicillinase producing Neisseria Gonorrhoea) were registered in 1981. They were successfully treated with alternate therapy either Kanamycin or Spectinomycin.

(7) Mass Blood Survey

(a) Ante natal blood testing	..	34,417
Found Reactive	..	284
Treated	..	230
(b) Special Survey done	..	3,468
Reactive	..	48
Treated	..	36
(c) Vagrants tested	..	25
Reactive	..	3
Treated	..	3

11.5 Anti-Leprosy Campaign

617 new cases registered during 1981 of whom 21% were lepromatous, 77% tuberculoid, and 2% indeterminate. 14% were children below 15 years of age, and were detected among 12,106 children screened for leprosy. 404 were detected among referrals, 65 among contacts, and 25 during field surveys, 58 in school surveys and 65 by self reporting.

82 lecture demonstrations were given to medical and para-medical personnel during pre-service and in-service training programmes. Health education was also carried out in schools, teacher colleges and to special groups.

Treatment (chemotherapy) was carried out in 81 leprosy clinics. There were 320 patients in the two leprosy hospitals.

The number of known cases at the end of 1981 was 11,389 of whom 64.8% were males, and 29% were lepromatous.

The prevalence in the provinces is shown in Table 11.8.

Six cases were recommended for the award of the Leprosy (Disability) allowance.

On 29. 8. 1981 an Agreement was concluded between the Government and Leprosy Relief Work Emmaus, Switzerland by which the latter would assist in the intensification of leprosy control measures for the next five years.

TABLE 11.8 LEPROSY PREVALENCE BY PROVINCE 1981 (PER 1000 POPULATION)

PROVINCE	PREVALENCE
Western Province	1.50
Central Province	0.24
Southern Province	1.00
Northern Province	0.53
Eastern Province	0.80
North Western Province	0.40
North Central	0.19
Sabaragamuwa Province	0.58
Uva Province	0.21
Total Island	0.77

11.6 Expanded Programme on Immunization (EPI) (Table 11.9)

D.P.T. The coverage of infants (under 1 year) with DPT was as follows: 1st dose - 76.5%, 2nd. dose - 63.9%, 3rd. dose - 46.3%. The 3rd. dose coverage was similar to the 1980 figure (46.0%).

O.P.V. The coverage of infants with O.P.V. was: 1st. dose - 75.3%, 2nd. dose 63.1%, 3rd dose 47.2%. The 3rd dose coverage was similar to 1980 (47.6%).

Tetanus Toxoid (for pregnant women). The coverage with the 1st and 2nd doses (+ booster) was 57.7% and 47.5%. The 2nd dose coverage was less than in 1980 (52.2%).

A joint WHO/UNICEF EPI Review was held in November 1981. The review team in their report stated that they were impressed by the Sri Lanka Immunization Programme. Certain recommendations were made for improvement of the programme.

EPI Cluster Sample Surveys were carried out in the Batticaloa, Ratnapura and Kurunegala Health Divisions which revealed that the coverage with DPT, OPV and TT for pregnant women was much higher than the reported coverage.

A WHO EPI Mid - Level Managers Training Course was held in Colombo in August 1981. An EPI Cluster Survey was carried out in the Dehiwela/Mt. Lavinia M. C. area as part of the course.

The incidence of Diphtheria, Whooping Cough and Neonatal Tetanus continues to decline further but exact figures are not available as the data from some S.H.S Divisions have to be verified.

TABLE 11.9 IMMUNIZATIONS GIVEN IN SRI LANKA 1981

Vaccine	Dose	Children under 1 year	Children 1-4 yrs	School children	Pregnant women	Other groups or unspecified	Total
B.C.G	First Vaccination	233,775	79,227	165,486			478,488
	Re-Vaccination						
D.P.T.	1st. dose	319,919	70,699				390,618
	2nd. dose	267,688	68,239				335,927
	3rd. dose	193,723	86,862				280,585
Polio	1st. dose	314,228	85,839				400,067
	2nd. dose	264,156	78,600				342,756
	3rd. dose	197,093	95,286				292,379
	Booster		43,815				43,815
D.T.	1st. dose			46,884			46,884
	2nd. dose			26,667			26,667
	Booster			43,536			43,536
Tetanus Toxoid	1st. dose				242,445	166,424	408,869
	2nd. dose				177,944	34,019	211,963
	3rd. dose				—	7,035	7,035
	Booster				21,591	10,192	31,793
Typhoid Vaccine	1st. dose					38,988	38,988
	2nd. dose					23,077	23,077
	Booster					21,833	21,833
Cholera Vaccine	1st. dose					6,321	6,321
	2nd. dose					458	458
	Booster					6,523	6,523

Source : Expanded Programme on Immunization

11.7 Rabies Control

Sri Lanka is one of the few countries in South East Asia to recognise the importance of the control of zoonotic diseases. Thus a special unit for Veterinary Public Health Activities has been established from 1953 under the Ministry of Health. This Unit lays special emphasis on the Control of Rabies since this dreaded disease has turned out to be a major public health problem in recent times.

A two prong attack for the control of Rabies in the island has been launched by the VPH Unit viz - elimination of stray dogs and immunization of owned dogs. These activities have been considerably intensified since 1978 and an elaborate accelerated programme is being implemented with Cabinet approval from 1981. Steps have been taken to update the outdated Rabies Control Legislation to facilitate effective implementation of this programme. The draft has been approved by the Cabinet and sent to the legal Draftsman.

Increased Staff, additional vehicles and more funds for the purchase of vaccine have been provided under a separate project from last year, enabling the VHP Unit to extend its Control Activities throughout the island.

The impact of the intensified programme is clearly visible from the marked reduction in the incidence of human deaths from 1978. (ref. Table 11.10)

TABLE 11.10 RABIES CONTROL 1978-1981

Year	Elimination of Stray Dogs	Immunization of dogs	Human deaths
1978	7986	111,299	234
1979	22434	127,070	214
1980	36845	120,143	153
1981	37733	135,266	115*

* Provisional

11.8 National Cancer Control Programme

The National Cancer Control Programme was established at the Ministry of Health with the appointment of the Director, National Cancer Control programme in June, 1980.

The objectives of the programme are to reduce the morbidity and mortality due to Cancer in Sri Lanka by developing an overall cancer control programme with the active participation of the community in Sri Lanka and integrate with the existing public health delivery system. The components of the cancer control programme are prevention, early detection, diagnosis, treatment and follow up including statistical follow up.

Mouth (oral and pharyngeal) forms the most frequent site of Cancer in Sri Lanka forming 1/3 of all cancers and the known risk factors for mouth cancers are chewing of tobacco and betel, smoking and alcohol. The programme has given high priority for primary prevention and early detection. Aggressive anti-tobacco measures are being taken in the form of primary prevention and the services of the primary health care workers are enlisted for the early detection of oral cancer. A pilot project carried out at Kadugannawa shows that the primary health care worker can be used effectively in the screening of the population for oral precancers and cancers. (ref. Table 11.11)

The cancer registry which is presently a hospital based cancer registry at Maharagama Cancer Institute shows that cervix, breast and cesophagus are the other common sites of cancer. The data collected in 1978 is shown in Table 11.12.

A statement of Deaths attributed to cancer is in Table 11.13.

TABLE 11.11 RESULTS OF THE FEASIBILITY STUDY UTILIZING PRIMARY HEALTH CARE WORKERS TO SCREEN THE ORAL CAVITY FOR THE EARLY DETECTION OF CANCER

Total population allocated for screening	87,277
Total screened	29,425 (33.7%)
Total cases referred (suspected of oral lesion)	1,189
Total arrivals at referral points	635
% arrivals	53.4
Confirmed pre-cancers and other mucosal lesions	366
Cancer cases	4
Previously known cases of oral cancer in the community.	10

TABLE 11.12 CANCER INCIDENCE AT GOVERNMENT CANCER INSTITUTE MAHARAGAMA - 1978

Site	ICD	Total No. of Cases	%
Mouth	(140 - 145)	996	25.8
Pharynx	(146 - 149)	189	4.9
Oesophagus	150	369	9.6
Stomach	151	40	1.0
Small Intestine, Colon, Pancreas	(152 - 158)	119	3.1
Larynx	(161)	107	2.8
Lung	(162 - 163)	104	2.7
Haematopoietic and Reticuloendothelial systems	(169)	220	5.7
Bones	(170)	110	2.9
Connective Tissues	(171)	17	0.4
Skin	(173)	40	1.0
Female Breasts	(174)	359	9.3
Male Breasts	(175)	5	0.1
Uterus	(179 & 182)	32	0.8
Cervix Uteri	(180)	468	12.1
Other Genitourinary organs	(180, 183 - 189)	286	7.4
Eye and Lacrimal Gland	(190)	19	0.5
Nervous System	(191 - 192)	50	1.3
Thyroid Gland	(193)	72	1.9
Others		254	6.6
Total		3856	100.0

TABLE 11.13

DEATHS DUE TO CANCER

YEAR	CASES
1967	3245
1968	3674
1969	3661
1970	3825
1971	3988
1972	4039
1973	4219
1974	4181
1975	4261
1976	4225
1977	4091
1978	4173

Source : Registrar General

11.9 National Blood Transfusion Service

This Special Campaign has in addition to the Central Blood Bank, 20 Blood Banks and 14 Emergency Bleeding Centres which are situated in the Provincial, Base and in some of the District Hospitals. The 4 new Emergency Bleeding Centres that were established during the year 1981 were at the Lady Ridgeway Hospital, Colombo, Kethumathie Hospital - Panadura, Base Hospital Amparai and Government Cancer Institute Maharagama. The activities of the National Blood Transfusion Service are summarised at Table 11.14.

In this year 1981, 41,526 five hundred millilitre units of blood were collected from 50,353 donors of whom 48,330 donated blood free. Although the target of 40,000 units for 1981 was exceeded, the figures are 3000 donors and 2000 five hundred millilitre units short of the figures for 1980. The reason for this short fall is the field programme that is carried out by the Central Blood Bank having to be curtailed due to a reduction in the allocation for petrol for 1981. However, the percentage of free donation in 1981 increased to 96.0 from 90.4 in 1980.

The largest stock of blood recorded at the Central Blood Bank on a single day in 1981 was 1651 bottles which is the highest figure ever recorded, and that is 619 bottles more than the highest figure recorded for 1980. Three very successful mass Blood Donations were organised in 1981, of which the programme at Ratgama organised by the Chairman, Co-operative Society in September established a new record of 540 donors which is the largest number ever bled on one single day at one centre. The programme at Kuliyaipitiya in February was a close second where 482 donors were bled followed by the programme in March at Pannala where 390 donors were bled.

A new Fractionation Laboratory was opened on 28th. September 1981 where the preparation of blood components commenced with the preparation of Fresh Frozen Plasma. The preparation of Cryoprecipitate was started on 13th. October 1981. By 31st December, 113 units of Fresh Frozen Plasma, and 35 five unit packs of Cryoprecipitate were prepared and 35 Units of Fresh Frozen Plasma and 5 - five unit packs of Cryoprecipitate were issued.

TABLE—11.14 ACTIVITIES DURING THE YEAR 1981 BY BLOOD BANK

Division/Blood Bank	DONORS		UNITS OF 500 ML			
	Total	Free	Collected	Requested	Cross Matched	Transfusions Given
Colombo Total	25,960	24,258	18,753.0	32,192.5	23,747.5	15,973.0
Central Blood Bank	22,671	20,977	15,666.5	24,086.5	16,154.0	12,506.0
Colombo South	1,169	1,161	1,034.0	2,332.0	2,197.5	1,061.0
Castle Street	1,238	1,238	1,236.0	3,945.5	3,870.5	1,261.0
Lady Ridgeway	531	531	498.0	1,323.5	1,029.5	836.0
Avisawella	351	351	318.5	505.0	496.0	309.0
Gampaha Total	3,214	3,211	3,000.5	6,834.0	6,269.0	2,965.0
Colombo North	1,105	1,104	1,041.0	2,336.0	2,108.0	1,120.0
Gampaha	446	444	407.5	1,572.5	1,431.5	529.5
Chilaw	858	858	820.5	1,321.5	1,262.0	702.0
Negombo	418	418	405.0	1,075.0	991.0	376.0
Wathupitawala	387	387	326.5	529.0	476.5	237.5
Kalutara Total	788	788	680.5	2,095.0	1,731.5	746.5
Kalutara	529	529	435.0	1,237.0	1,009.0	386.0
Panadura/Kethumathi	259	259	245.5	858.0	722.5	360.5
Kandy Total	4,737	4,516	4,521.5	11,958.0	10,377.0	4,449.0
Kandy	3,424	3,203	3,259.5	8,862.0	7,608.0	3,239.0
Nawalapitiya	443	443	425.5	821.0	821.0	385.0
Peradeniya	870	870	837.5	2,275.0	1,948.0	825.0
Matale	261	261	222.5	712.5	645.0	187.0
Nuwara Eliya	377	377	365.5	431.0	374.0	318.0
Galle	1,838	1,838	1,746.0	4,097.0	3,829.0	1,934.5
Matara	1,196	1,196	990.0	2,494.0	2,267.0	978.0
Jaffna Total	2,531	2,478	2,400.0	6,163.0	5,310.0	2,460.0
Jaffna	2,495	2,442	2,446.0	6,139.0	5,286.0	2,436.0
Pt. Pedro	36	36	34.0	24.0	24.0	24.0
Vavuniya (Mannar)	18	16	16.0	25.0	21.0	16.0
Batticaloa	1,054	1,043	1,046.0	2,152.0	1,978.5	968.0
Kurunegala Total	2,458	2,458	2,247.5	4,106.0	4,077.0	2,586.0
Kurunegala	1,900	1,900	1,747.5	3,098.0	3,084.0	2,017.0
Kuliyapitiya	558	558	500.0	1,008.0	993.0	569.0
Anuradhapura Total	1,719	1,695	1,564.5	3,069.0	2,781.0	1,564.0
Anuradhapura	1,518	1,509	1,381.0	2,753.0	2,466.0	1,471.0
Trincomalee	201	186	183.5	316.0	315.0	147.0
Badulla	1,157	1,157	966.5	1,861.5	1,624.0	881.0
Ratnapura	1,779	1,779	1,691.5	3,982.5	3,695.5	1,707.5
Kegalle	861	852	850.0	1,940.0	1,817.5	841.5
Private Sector Total	407	407	385.0	1,117.0	1,116.5	915.5
Central Blood Bank	268	268	246.5	896.0	896.0	705.0
Colombo South	2	2	2.0	2.0	2.0	2.0
Castle Street	115	115	115.0	159.5	159.5	159.5
Galle	9	9	8.5	44.5	44.0	25.0
Jaffna	7	7	7.0	7.0	7.0	7.0
Kurunegala	6	6	6.0	8.0	8.0	17.0
TOTAL	50,353	48,330	41,526.5	85,230.0	71,670.0	39,490.5

Source: National Blood Transfusion Service

11.10 Medical Research Institute

The activities of the Medical Research Institute include :-

- (1) Diagnostic Service
- (2) Production
- (3) Research
- (4) Teaching

11.10.1 Diagnostic Service

A total of 732,064 tests were performed on specimens submitted by Government Hospitals, Private Hospitals and General Practitioners

11.10.2 Production

1. Vaccines

- 1.1 Bacterial (Anti Typhoid 87,700 ml.)
(Anti Cholera 84,500 ml.)
- 1.2 Viral (Anti-rabies vaccine 151,591 doses)

2. Antigens

- 2.1 S.A.T. 119,200 ml.
- 2.2 Weil Felix 500 ml.
- 2.3 Streptolysin 4300 ml.

3. Antisera

- 3.1 Salmonella 242 ml.
- 3.2 Shigella 174 ml.
- 3.3 Enteropathogenic E. Coli 72 ml.
(E.P.E.C)
- 3.4 Cholera 89 ml.

11.10.3 Research

M.R.I. was engaged in 62 research projects during the year 1981. 36 projects were carried out with M.R.I. funds, 10 projects were funded by the National Science Council and 16 were funded by foreign agencies.

11.10.4 School of Medical Laboratory Technology

Two batches of students were recruited during the year 1981, 33 students commenced training on 5th February and 40 students on 1st October.

12. INDIGENOUS MEDICINE

Number of patients treated at the 16 institutions of the Ayurvedic Department during the year 1981 are as follows:-

Institution	No. of In-patients	No. of Out-patients
Colombo	185,605	3,440
Anuradhapura	76,688	1,715
Kurunegala	93,990	3,235
Ratnapura	102,767	1,097
Beliatta	49,446	1,397
Kaithady	17,927	689
Nawinna	62,541	638
Neboda	39,756	725
Mecgahajandura	21,419	462
Diyatalawa	45,977	—
Lunawa	49,093	—
Pallekele	45,116	—
Murutenna	19,645	—
Bandagiriya	19,993	—
Total	<u>829,563</u>	<u>13,398</u>

12.1 Ayurvedic Medical Council

Total number of Ayurvedic Practitioners as at 31.12.1981 excluding the number deceased.

General Practitioners	6,659
Special	4,026
Total	<u>10,685</u>

Number of Ayurvedic Practitioners registered during the year 1981.

Graduates	50
General	92
Special	144
Total	<u>286</u>

12.2 Educational and Hospital Board

Number of candidates registered for the D. A. Exam in 1981 is 228

Number of candidates sat the D. A. Exam in July 1981 is 74

Results have not been released as yet.

Results of the final examination held for the students of the Siddha College in 1981 were released in time and 14 out of 74 students who sat the exam were successful.

12.3 Free Ayurvedic Dispensaries run by Local Authorities

Number of patients treated at the 234 free Ayurveda dispensaries run by Local Authorities during the year 1981 was 1,786,259. Assistance given to these dispensaries during the year 1981 amount to Rs. 5,966,436.84.

12.4 Programme Expenditure

Recurrent Expenditure:

General administration expenditure during 1981	—	Rs.	2,677,300
Curative services	—		22,275,900
Research expenditure	—		1,570,600
Total :			<u>26,523,800</u>

Capital Expenditure:

Equipment		Rs.	700,020
Contribution to Gampaha Wickramarachchi College			1,585,000
Total			<u>2,285,020</u>

12.5 Other matters

The following information could be shown as special services rendered for the improvement of Ayurvedic System of Medicine.

1. New ward at the Ayurvedic Hospital, Kurunegala was declared open on 30.8.81
2. Ward No. 7 Ayurvedic General Hospital, Colombo was named as K. Balasingham Ward on 10.12.81.
3. Arrangements were made to supply greenleaf gruel to in-patients in Ayurvedic Hospitals.
4. Under the scheme of extending Ayurvedic system of medicine to foreign countries the services of an Ayurvedic physician was made available to Maldiv Islands in the first instance.
5. Seven Physicians following a course in Pancha Karma were sent to India on a Practical Education Tour.
6. Nine Ayurvedic books were printed and released for sale to commemorate 50 years of universal franchise. In addition to these two other books named Bhaisajja Samuchchaya mentioned in Tri Pitaka and also Bhawa Prakashaya were printed in this connection.

12.6 Sri Lanka Ayurvedic Drugs Corporation

12.6.1. Introduction

Sri Lanka Ayurvedic Drugs Corporation was established as per Gazette Notification published in the Gazette Extraordinary No. 14,853/3 of 11th May 1969 under the State Trading Corporation Act No. 49 of 1957.

12.6.2. Business Centres

Head Office: Head Office of the Corporation is housed at No 22, Sri Soratha Mawatha, Gangodawila, Nugegoda.

12.6.3 Factory - Stores and Trade Centre

Factory of the Corporation:-	No 94, Old Road, Nawiinna, Maharagama.
Main Trade Centre:	No. 176, Centre Road Pettah
Trade Centre, Jaffna	Nos. 14 & 15 New Model Market

12.6.4. Production, 1981

	Unit	Production
Arishta	682 ml.	30,200
Asawa	682 ml.	57,842
Taila (oil)	682 ml.	18,257
Syrup	682 ml.	3,147
Kuvatha	682 ml.	7,988
Guggulu (Guggulu)	1 Kg.	2,414.53
Kalka, Icha	1 Kg.	8,908.8
Churna (Powder)	1 Kg.	10,769.2
Tincture	454 ml.	25,606
Rosa	1 Kg.	647,950
Bhashma	1 Kg.	172,120

12.6.5. Value of drugs supplied to Ayurvedic Hospitals and Local Authorities in 1981

Ayurvedic Hospital	—	Rs. 1,581,204.39
Local Authorities	—	Rs. 3,473,154.34
		<u>Rs. 5,054,358.73</u>
Value of Drugs supplied to the private sector		Rs. 2,670,069.00

12.6.6. Actions during the year and review of activities

The services of a WHO Consultant were obtained for the preparation of a report on the renovation of productions and necessary steps were taken to improve the production of drugs as per said report.

Since the price of all drugs were increased with effect from 15.3.81 stocks of production piled up in stores and as a result production was very badly affected. This was subsequently reviewed and the prices of productions of the Corporation were brought in par with those of the open market or even less with effect from 29.10.81. Consequently to remedial measures this situation was rectified and it was possible to bring the productions of the Corporation back to normal.

Repairs to machines and equipment were not promptly effected as there was no scheme for same since the inception of the Corporation and this was subsequently remedied by the preparation of a scheme for same and importing the required spare parts.

12.6.7 Export Projects

Export Project No. 1

Goda Kaduru (Strychnos Nux Vonicca) to the value of Rs. 271,280/- was exported for the first time in 1981. It was also possible to stock a large quantity of this variety for export, during this year.

Export Project No. 2

Made arrangements to enter into an agreement with a Switzerland Company to export drugs.

12.6.8. Buildings

It was possible to construct a building at a cost of Rs. 776,840/- for the Nawinna Manufactory.

12.6.9 Work done for the betterment of Corporation employees

Implementation of incentive payment to cover all employees of the Corporation and incur an expenditure of Rs. 66,115/- on this behalf.

Payment of the Living Index to the employees of the Corporation was possible.

13. HEALTH FOR ALL BY THE YEAR 2000

13.1. Charter for Health Development

The National Health Policy of Sri Lanka has been governed by the commitment to provide comprehensive health care to the entirety of its population. A most significant event which further strengthened this commitment was the signing of the Charter for Health Development by the Hon. Prime Minister and the Hon. Minister of Health with the World Health Organization on 7 February 1980. The Government of Sri Lanka thereby committed itself to the attainment of an acceptable level of health for all its citizens by the year 2000 with Primary Health Care as the key approach to achieving this goal.

13.2. Organisation for HFA/2000

Chart - 13.1 depicts the health development network for achievement of health for all by the year 2000. The National Health Council established in March 1980, under the chairmanship of the Hon. Prime Minister, with the Hon. Minister of Health and Ministers of other health related Ministries as members, provides political commitment at the highest level and policy guidance for health development in an inter-sectoral framework. The Inter-Ministerial National Health Development Committee set up in December 1979, under the chairmanship of the Secretary Health, will ensure inter-sectoral co-ordination for the planning, programming, implementation and monitoring of health programmes and policies.

Six standing committees have been formed and report to the National Health Development Committee. These are (i) primary health care, which functions as the apex standing committee, (ii) health manpower development and training (iii) drug policies and management (iv) health and medical research (v) indigenous system of medicine, and (vi) technical co-operation among developing countries and appropriate technology.

The Standing committees will make recommendations and concrete programme proposals for health development within the Ministry of Health and concerned ministries regarding necessary health development efforts to achieve the goal of health for all.

In 1981, District Development Councils were elected in each of the 24 Districts of the Country. The District Development Council have designated responsibilities for district socio-economic development. This responsibility includes the planning for district health services developmental activities.

It is envisaged that below the District Development Councils Pradeshiya Mandalayas (Divisional Councils) and Gramodaya Mandalayas (Village Councils) will be established.

13.3. Primary Health Care

The eight broad areas of Primary Health Care identified at the September 1976 International Conference on Primary Health Care held at Alma-Ata, USSR, form the base on which the Standing Committee on PHC identified the following seventeen areas of activity for developing primary health care in Sri Lanka:

1. Proper and adequate nutrition
2. Safe water
3. Basic sanitation and hygiene
4. Maternal care
5. Child care- (with emphasis on the infant and pre-school child)
6. Family Planning

7. Immunization
8. Prevention and control of common communicable diseases.
9. Prevention and control of common non-communicable diseases
10. Appropriate and early management of common minor ailments and injuries.
11. Simple rehabilitation
12. Mental health
13. School health
14. Oral health
15. Occupational health
16. Prevention of blindness and visual impairment
17. Health Education & Community Organisation for PHC.

Indicators for HFA/2000, achievements and projects in respect of each of these are being developed by working groups of the Standing Committee on PHC. These indicators and projects will be examined by the National Health Development Committee prior to submission to the National Health Council for approval.

13.4. Implementation of Primary Health Care

Detailed proposals for PHC implementation were prepared and thoroughly reviewed by all levels within the Ministry of Health and at inter-sectoral group meetings. On 12 November 1981, a meeting of the National Health Council was held at which approval was given for restructuring of the District Health Delivery System to improve the accessibility of essential health care for the entire population and to enhance its effectiveness.

The system for delivery of PHC approved by the National Health Council will consist of a PHC complex consisting of Divisional, Sub-divisional and Gramodaya Health Centres, supported by the higher health facilities,

This model of delivery of health service, is graphically depicted in Chart 13.2

The envisaged PHC District Management Model is shown in Chart 13.3

A master plan has been developed for implementation of improvements to the District Health Delivery System over the ten years 1982—1991. External assistance is being sought for the developmental components of the improvements to the Health Care Delivery System.

13.5. Health and Population Project

The Asian Development Bank (ADB) showed interest in supporting the proposed improvements and sent two Missions during 1981. On the basis of the findings of these Missions and subject to further investigation by an Appraisal Mission in early 1982 it is expected that the ADB will support the proposed improvements to the health care delivery system in a few selected areas.

13.6. Health Resources Group.

Sri Lanka was selected by the Health Resources Group (HRG) of the WHO as the candidate country in South East Asia Region for strengthening of health care delivery. A proposal identifying the support required for improvements to the health care delivery system was presented to the Group in December 1981 at Geneva for possible funding by donor agencies/countries.

CHART 13.1 HEALTH DEVELOPMENT NETWORK IN SRI LANKA

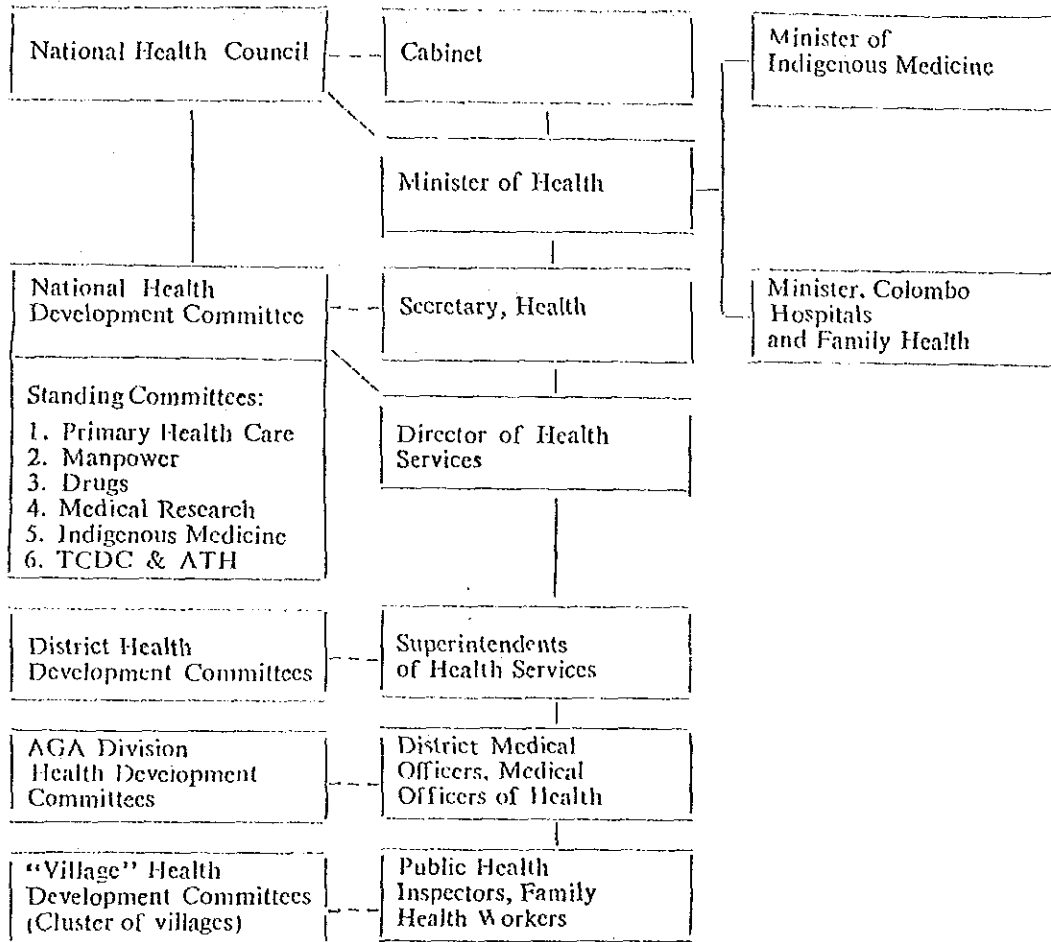


CHART 13.2:

PHC DELIVERY AND SUPPORT SYSTEM

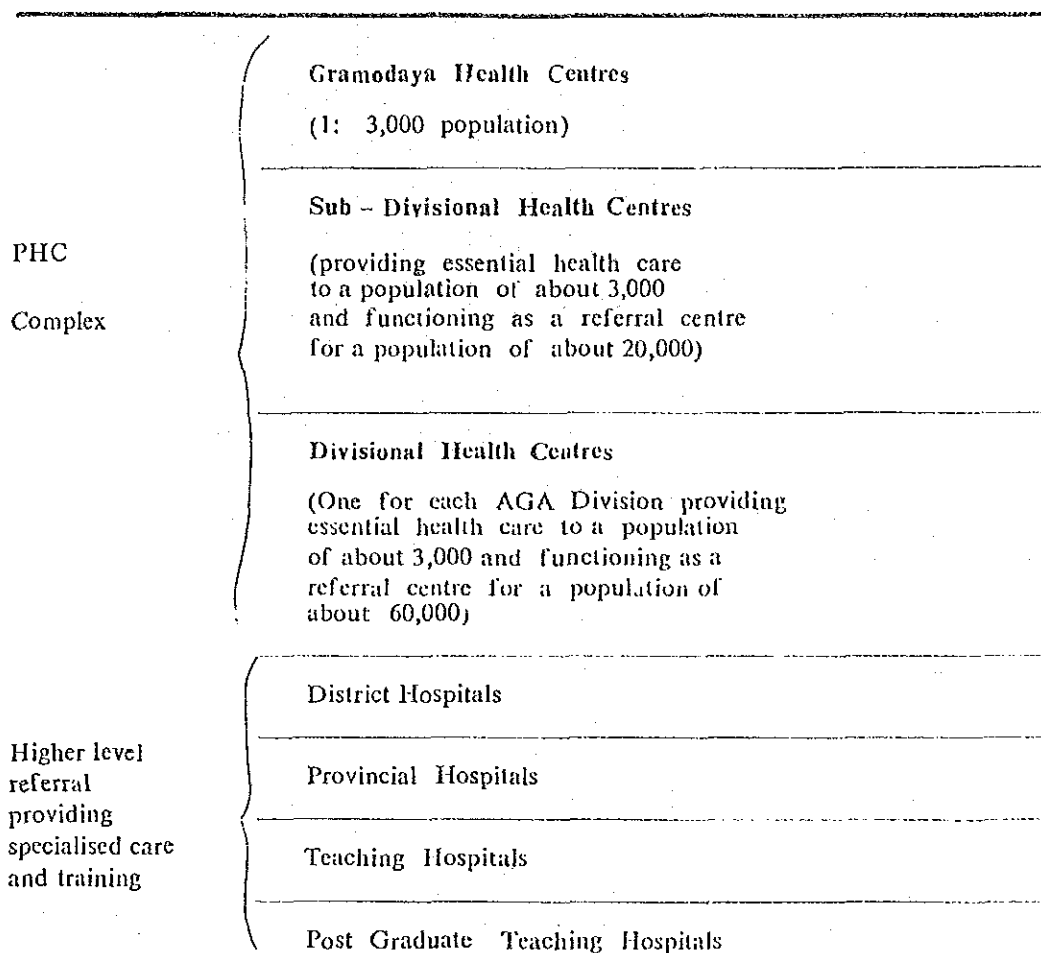
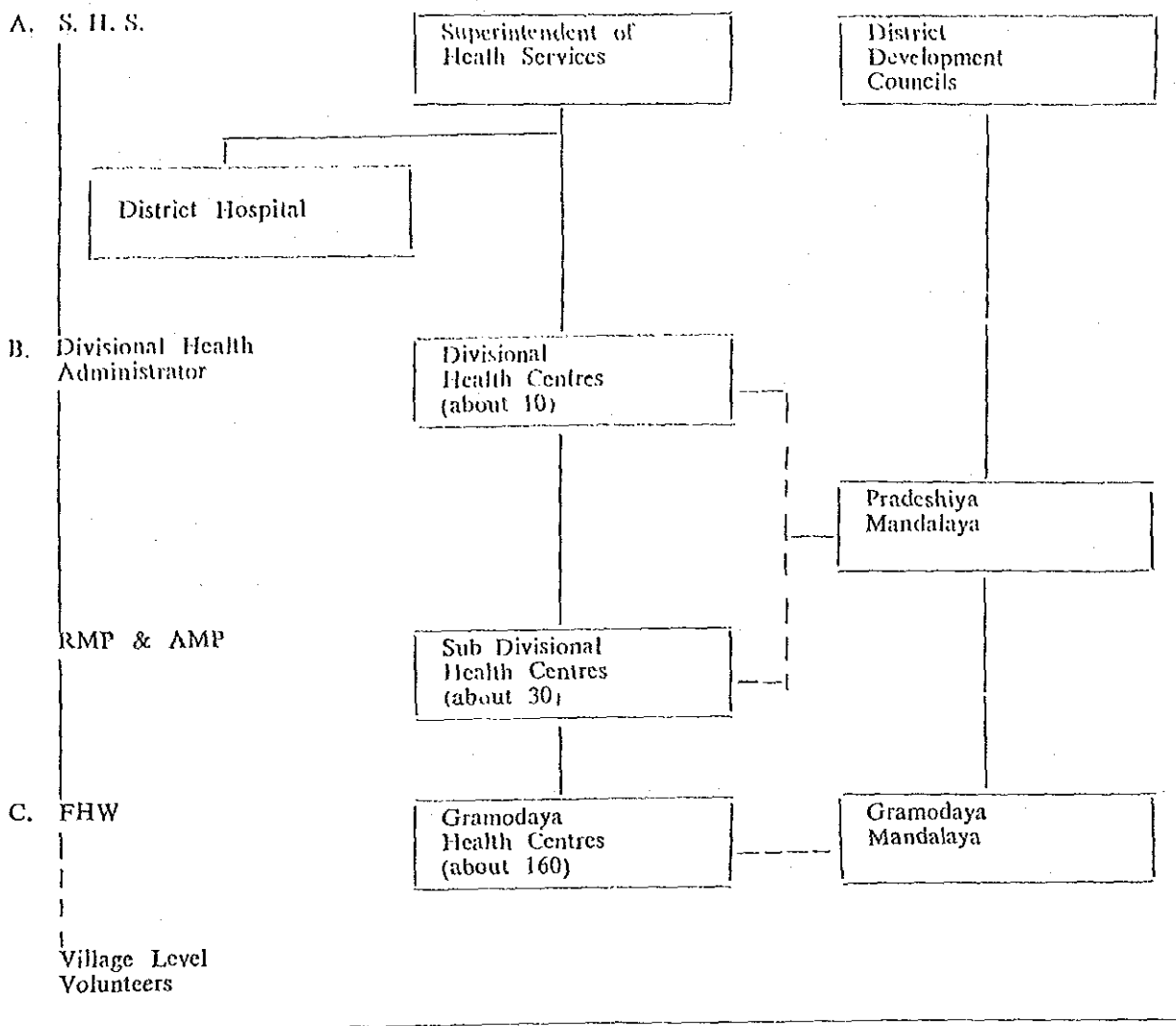


CHART : 13.3. PHC DISTRICT MANAGEMENT MODEL



- A. Multi sectoral representations; integrated District Development Planning identification of health related activities of other sectors.
- B. In principle, the same linkages as above, but at Divisional level.
- C. Focus on promotion of community participation as well as self-help and self-reliance, supported by village level volunteers.

14 DISABILITIES

Based on the 1981 Census, a statement of the physically disabled by District and of persons with multiple disabilities is given in *Tables 14.1* and *14.2* respectively.

It is observed that around 49.2 persons in a population of 10,000 in Sri Lanka suffer from some form of physical disability. The following are the actual statistics:-

Condition	Number	Rate per 10,000 Population
Blind	9,531	6.3
Deaf	3,459	2.3
Dumb	11,845	8.0
Deaf Mute	9,541	6.3
One hand	9,279	6.3
Both hands	4,285	2.9
One leg	13,894	9.4
Both legs	11,679	7.9
Total	73,513	49.2

No accurate statistics are available in respect of those mentally retarded or suffering from other forms of psychiatric disability.

The number in need of rehabilitation is estimated to be about 1.5 percent in the population around 210,000 persons.

Among the Ministries of the Government, the responsibility for physical (and mental) rehabilitation of the disabled lies with the Ministry of Health and the social rehabilitation with the Ministry of Social Services. The division is somewhat thin and the two Ministries often complement each other. There are other Ministries such as Local Government which play a role in rehabilitation. Further, numerous State organisations and Non-Governmental Agencies (NGOs) participate in these activities.

The relevant activities carried out by the Ministry of Health in 1981 may be summarised as follows:-

- i. Prevention and early detection of impairments and disabilities at medical and health institutions throughout the country. There are over 1,000 such institutions with accessibility to the people within a radius of about 3 miles. Services at these institutions are free of charge.
- ii. Specialised treatment of the disabled at special institutions maintained by the Department of Health which include:-
 - a) A Rehabilitation Hospital.
 - b) A Department of Rheumatology and Rehabilitation in major hospitals.
 - c) A Department of Physiotherapy in major hospitals.
 - d) A Department of Occupational Therapy at the main Rehabilitation Hospital.
 - e) Two Mental Hospitals, close to the Capital city of Colombo.
- iii. Provision of artificial limbs etc., from several institutions maintained by the Health Department.

PHYSICALLY DISABLED BY DISTRICT 1981 (CENSUS DATA)
(Number & Rate per 10,000 Population)

DISTRICT	BLIND NO. RATE	DEAF NO. RATE	DUMB NO. RATE	DEAF-MUTE NO. RATE	ONE HAND NO. RATE	BOTH HANDS NO. RATE	ONE NO. RATE	LEG NO. RATE	BOTH LEGS NO. RATE
Sri Lanka	9331	3459	11845	9341	9279	4285	13894	9.4	11679
Colombo	795	228	1016	855	882	364	1435	8.4	1029
Gampaha	1079	300	1174	1016	1011	480	1419	10.2	1236
Katutura	504	181	757	566	510	254	809	9.8	672
Kandy	788	331	974	717	618	301	1033	9.2	875
Natala	284	95	324	280	292	99	445	12.4	311
N'Eliya	297	89	321	165	298	132	424	8.1	362
Galle	531	208	852	552	559	308	799	9.8	796
Matara	466	164	707	524	416	242	614	9.5	648
Hambantota	333	174	464	322	321	163	463	11.0	411
Jaffna	495	370	704	420	500	326	771	9.3	862
Manar	70	31	53	46	90	32	131	12.2	14
Vavuniya	49	26	55	40	55	27	100	10.4	67
Mullaitivu	38	31	60	36	58	22	88	11.4	46
Batticaloa	238	71	203	107	190	101	304	9.2	253
Amparai	248	69	279	190	261	109	335	8.6	282
Trincomalee	151	46	186	125	174	64	288	11.2	184
Kurunegala	583	284	972	884	855	330	1237	10.2	926
Puttalam	281	64	315	404	297	121	376	7.6	324
Anuradhapura	286	107	405	434	295	129	499	8.5	402
Polonnaruwa	83	23	116	80	97	27	127	4.8	118
Badulla	449	101	431	406	322	133	413	6.4	385
Moneragala	201	49	207	177	172	77	261	9.3	189
Ratnapura	622	259	686	515	514	233	797	10.0	611
Kegalle	460	158	584	480	492	211	721	10.6	606

1981 was significant as it was declared the International Year for the Disabled Persons (IYDP). A National Committee was set up under the Ministry of Social Services to coordinate activities in respect of IYDP. The Ministry of Health was also represented in this Committee and its personnel played an active role in the activities of the IYDP. They included the following :-

- i) Creating an awareness in the community about the problem of disability.
- ii) Programmes with the active participation of disabled persons.
- iii) Programme for prevention of disability.
- iv) Community education.
- v) Expansion of services.
- vi) Training and research.
- vii) Resource mobilization.

An opportunity was also provided for disabled persons to participate in a number of national contests and one international contest, (the international Abilympic Contest held in Tokyo, Japan in September '81), devoted to the encouragement of skill and talents (including sports) among them.

While the concerted national effort started in 1981 will continue in the years to come, the Ministry of Health will in particular attend to the following :-

- i) Improvement of the Rehabilitation Hospital.
- ii) Development of the Orthopaedic clinic of the General Hospital Colombo.
- iii) Improvement of the Orthopaedic Workshop, Ragama.
- iv) Improvement of the Orthopaedic Workshop, General Hospital, Colombo.
- v) Improvement of Orthopaedic Workshops at other hospitals.
- vi) Appointment of multi - purpose health cadres.
- vii) Training programmes.
- viii) Intensification of preventive vaccination to achieve 100% coverage.
- ix) Community participation projects in rehabilitation work.
- x) Publication of a Manual in the national language for rehabilitation work.

TABLE 14.2 MULTIPLE DISABILITIES - 1981 (CENSUS DATA)

Disability	Disability in		Total	Disability	One leg		Both legs		Total
	Hands	Legs			Lost	Paralysed	Lost	Paralysed	
Blind	253	230	483	One hand lost	154	43	11	19	227
Deaf	143	107	250	One hand paralysed	58	3499	20	353	3930
Dumb	1174	613	1787	Both hands lost	7	10	53	19	89
Deaf - Mute	511	229	740	Both hands paralysed	11	118	28	1996	2153
Total	2081	1179	3260	Total	230	3670	112	2387	6399

資料(2) 無償資金協力にて設置される医療機器リスト

Item No.	Description	Q'ty	Room
<u>100-200 General Equipment</u>			
101	ICU/CCU Bed, with Mattress	12	ICU
102	General Orthopaedic Gatch Bed with Mattress	68	WRD-01
103	Paediatric Bed, without Mattress	32	WRD-01(30), OPD-02(2)
104	Pay Patient Bed with Mattress	104	WRD-01
105	Standard Bed, without Mattress	693	EMR-02(5), WRD-01
106	Gatch Bed with Mattress	38	WRD-01
107	Special Bed, with Mattress	1	A BLOCK LEVEL-2
108	Observation Bed (Wheel Stretcher Type)	19	EMR-01(5), OTU-04(14)
110	Labour Pain Bed	7	DEL-01(4), 02(3)
111	Bassinet Stand	14	WRD-01(10), 06(4)
112	Infant Incubator	4	WRD-06
113	ICU Infant Incubator	1	ICU
114	Standard Mattress	693	EMR-02(5), WRD-01
115	Paediatric Mattress	32	WRD-01(30), OPD-02(2)
121	Over-Bed Table	370	WRD-01
123	Over-Bed Cradle	17	WRD-02, Surg.(15), Orth.(2)
130	Wheel Stretcher	56	EMR-01(3), AUT, DEL-03, WRD-01(51)
131	Folding Wheel Chair	34	WRD-01
132	Litters, Folding Type	17	WRD-01
133	Baby Stretcher, for 4-baby	2	DEL-03
134	Monkey Bar	60	WRD-01
140	Baby Treatment Table	2	DEL-03, 04
141	Instrument Table	32	EMR-03, OTU-01(24), DEL-01, 02, 03, 04, WRD-06(2), AUT
142	Treatment Carriage	8	EMR-01(2), BB, OTU-04, ICU(4)
144	Instrument Tray Table, Mayo Type	13	EMR-03, OTU-01(8), DEL-02(3), 04
145	Anesthesia Instrument Table	7	EMR-03, OTU-01(4), ICU, DEL-04
146	Plaster Bandage Table	1	OPD-03
147	Film Loading Table	1	XR-05
150	Instrument Cabinet, Small Type	2	OPD-06, 07
151	Instrument Cabinet, Medium Type	28	OPD-01, 02, 03, 04, 05, 09, EMR-01, BB, ICU(2), NL, WRD-01(17)
152	Instrument Cabinet, Large Type	10	EMR-03, AUT, CSSD(7), DEL-04
154	Recessed Type Instrument Cabinet	8	OTU-01
155	Instrument Pass-Box	4	OTU-01

Item No.	Description	Q'ty	Room
158	Slide Storage Cabinet	1	PAT-01
170	Utility Cart A	3	PAT-05
171	Utility Cart B	4	OPD-10(2), IND(2)
172	Utility Cart C	18	WRD-01(17), 07
173	Dressing Trolley	17	WRD-01
177	Waste Receptacle with Foot Pedal	34	OPD-01(2), 02(2), 03(2), 04(2), 05(3), 06, 07, 09(2), EMR-01(2), WRD-01(17)
178	Kick Bucket	9	EMR-03, OTU-01(8)
179	Cassette Trolley,	1	XR-05
201	Operating Stool	26	OTU-01(24), EMR-03, DEL-04
203	Examination Couch	57	OPD-01(6), 02(4), 03(8), 04(7), 05(5), 06, 07, 09(3), BB(2), EMR-01(2), NL, WRD-01(17)
204	Arm Rest for Injection	3	OPD-09
205	Dressing Drum Stand, ø27cm	37	OPD-03(2), 04(2), 09(2), EMR-01(2), 03(2), OTU-01(8), DEL-02, 04, WRD-01(17)
206	Dressing Drum Stand, ø18cm	11	OPD-03(2), 04(2), 09(2), EMR-01(2), 03, DEL-02, 04
207	Irrigator Stand, Double Hook	46	EMR-01(2), OTU-04(4), WRD-01(40)
209	Foot-Stool, for One-Step	11	OPD-02(2), 03, OTU-01(8)
210	Foot-Stool, for Two-Step	2	OPD-05
211	Bedpan Washer	35	WRD-01(34), ICU
213	Bedpan Rack Stand	1	ICU
214	Mixer with Dispenser	1	WRD-07
215	Milk Warmer	2	WRD-07
217	Ice Maker	1	WRD-01
220	Refrigerator	27	EMR-01, PAT-01, 02, 03, 04, BB, XR-05, DEL-03, WRD-01(17), 07(2)
221	Medical Refrigerator	4	OPD-10(2), IND(2)
223	Mortuary Refrigerator for 2 and 4-Body	1,4	AUT
224	Blood Bank Refregerator	2	BB
227	Bedpan Trolley	34	WRD-01
228	Stainless Steel Bucket, with base and cover	2	WRD-06
229	Water Pitcher, 2 Lit.	40	GSSD
230	Bedpan, Stainless Steel, L (Adult) S (Child)	200 20	WRD-01 WRD-01
231	Male Urinal	140	WRD-01
232	Female Urinal	70	WRD-01
124	Safety Sides	102	WRD-01

Item No.	Description	Q'ty	Room
<u>300 Washing and Sterilizing Apparatus</u>			
301	Instrument Boiling Sterilizer, Desk Type	29	OPD-01, 02, 03, 04, 05, 06, 09(2), PAT-05, AUT, WRD-01(17), EMR-01, DEL-03
303	Desk Type Autoclave	4	EMR-03, PAT-05, DEL-04, ICU
304	Compact Steam Sterilizer, High Speed Type	4	OTU-02(2), 03(2)
305	Large Steam Sterilizer	2	CSSD
306	Small Steam Sterilizer	1	CSSD
307	Ethylen Oxide Gas Sterilizer	1	CSSD
311	Nursing Bottle Sterilizer	2	WRD-07
314	Hot Air Sterilizer	3	PAT-03, 05, CSSD
315	Laboratory Sterilizer	1	PAT-03
335	Auto Still	6	PAT-01, 02, 03, 05, IND, OTU-03
350	Ultrasonic Cleaner	1	CSSD
351	Needle Washer	1	CSSD
352	Automatic Pipette Washer	1	PAT-05
360	Hot Air Dryer	1	PAT-05

Item No.	Description	Q'ty	Room
<u>400 Treatment Apparatus</u>			
400	Operating Table, Simple	1	EMR-03
401	Operating Table	4	OTU-01
402	Operating Table, Universal	4	OTU-01
403	Leg Traction Unit	1	OTU-01
405	Obstetric Delivery and Operating Table	1	DEL-04
407	Gynaecology Examining Table	4	OPD-05(2), WRD-02(2)
410	Examination Lamp	36	OPD-01, 02, 03, 04, 05(2), 06(2), 07, DEL-01(2), EMR-01(2), 03, ICU(2), OTU-01, 04(2), WRD-01(17)
411	Operating Room Light, Large, Ceiling Type	8	OTU-01
412	Operating Room Light, Medium, Ceiling Type	1	DEL-04
413	Operating Room Light, Stand Type	12	EMR-03, OTU-01(8), DEL-02(3)
431	Electro-Surgical Unit	8	OTU-01
432	Cryosurgery for Gynaecology	1	DEL-04
433	Vacuum Extractor	2	DEL-02, 04
434	Electric Suction Unit, Heavy Duty	10	EMR-01, 03, OTU-01(4), OPD-06(2), WRD-02(2)
435	Electric Suction Unit, Portable	16	WRD-01
436	Low Pressure Continuous Suction Unit	2	ICU
437	Oxygen Inhaler	52	WRD-01(51), 06
438	Oxygen Tent for Infant	3	WRD-02(2), 06
439	Resuscitator, Hand-Driven Type	22	EMR-01, ICU(4), WRD-01(17)
440	Automatic Resuscitator for Infant and Adult	4	EMR-01(2), DEL-02, ICU
441	Automatic Resuscitator for Infant	1	WRD-06
442	Traction Apparatus	20	WRD-02
443	Gypsum Cutter, Electric	5	OPD-03(3), WARD-01(2)
444	Electro-Dermatome	1	OTU-01
445	Photo Therapy Unit	1	WRD-06
447	Automatic Respirator, Portable Type	11	ICU(6), OTU-01(5)
448	Automatic Respirator, ICU Type	1	ICU
449	Anesthesia Apparatus, Major	2	OTU-01(2)
450	Anesthesia Apparatus	9	EMR-03, OTU-01(6), ICU, DEL-04
451	Endotracheal Tube Set for Adult	11	EMR-03, OTU-01(8), ICU, DEL-04
452	Endotracheal Tube Set for Infant	7	EMR-03, OTU-01(5), ICU
453	Invalid Walker	2	WRD-02

Item No.	Description	Q'ty	Room
455	Operating Room Light, Twin Stand	4	OTU-01
457	Rubber Mask, Large	20	OTU-01(8), 04(2), ICU(10)
458	Rubber Mask, Small	20	OTU-01(8), 04(2), ICU(10)
459	Suction Tube Set	20	OTU-01(8), 04(2), ICU(10)
462	Bellow System for Anesthetic Ventilator	5	OTU-01
463	Humidifier	8	OTU-01

Item No.	Description	Q'ty	Room
<u>500 Diagnostic Instrument</u>			
501	Sphygmomanometer, Stand Type	21	EMR-03, OTU-01(8), 04(4), ICU(6), DEL-01, BB
503	Weighing Scale	2	OPD-01, 05
504	Weighing Scale, Health Meter	2	OPD-02, BB
505	Infant Scale with Bassinet	1	OPD-02
506	Infant Scale	1	DEL-03
507	Measuring Rod	4	OPD-01, 02, 05, BB
508	Autospirometer	1	ICU
510	1-channel Electrocardiograph	5	OPD-01, WRD-02(4)
511	3-channel Electrocardiograph	1	ICU
512	Electro/Phonocardiograph	1	OPD-01
515	Tocomonitor (Fetal Monitoring System)	1	DEL-04
516	Bedside Monitor (Cardiosuper) with Trolley	6	ICU
517	Central Monitor (Cardiosuper) without Trolley	2	ICU
518	Bedside Monitor (Cardiosuper) ECG/ H.G./R.R./TEMP/B.P. Monitor with Trolley	2	ICU
519	Central Monitor for 2 Patients without Trolley	1	ICU
520	External Demand Pace Maker	3	ICU
521	Cardiopac Difibrillator	4	EMR-01, ICU(2), OTU-01
522	Kymographic Insufflation Apparatus with mobile stand	1	OPD-05
523	Doppler Fetus Detector	2	OPD-05, DEL-01
524	Gynaecology Examining Unit	2	OPD-05
525	Auto-Diagnostic Apparatus	1	OPD-01
526	Oxygen Analyzer	2	ICU, WRD-06
527	Proctoscope Set	1	OPD-04
528	Sigmoidoscope Set	1	WRD-02
529	Sphygmomanometer, with Bed Attachment	3	DEL-02
551	Examination Instrument Set (Medical)	3	OPD-01
552	Examination Instrument Set (Paediatric)	3	OPD-02
553	Examination Instrument Set (Orthopaedic)	3	OPD-03

Item No.	Description	Q'ty	Room
554	Examination Instrument Set (Surgical)	3	OPD-04
555	Examination Instrument Set (Gyne./Ob)	3	OPD-05
556	Examination Instrument Set (ENT)	1	OPD-06
557	Examination Instrument Set (Eye)	1	OPD-07
558	Examination Instrument Set (Emergency)	3	EMR-01
560	Examination Instrument Set (WARD)	17	WRD-01
565	Operating Instrument Set	1	OTU-01, DEL-04
571	Instrument Tray with Cover,		
	30 x 24 cm	150	CSSD
	27 x 21 cm	150	CSSD
	24 x 18 cm	150	CSSD
	21 x 15 cm	150	CSSD
572	Dressing Drum, ϕ 27 cm	50	CSSD
	ϕ 18 cm	80	CSSD
	ϕ 12 cm	80	CSSD
573	Forceps Jar, ϕ 9 cm	120	CSSD
	ϕ 7.5 cm	200	CSSD
	ϕ 6 cm	160	CSSD
574	Dressing Jar, 105 x 70 mm	260	CSSD
	124 x 175 mm	260	CSSD
	155 x 184 mm	100	CSSD
575	Pus-Basin, 20 cm	110	CSSD
	24 cm	110	CSSD
	30 cm	100	CSSD
576	Bowl, 167 x 62 mm	70	CSSD
	199 x 74 mm	90	CSSD
577	Catheter Tray, 435 x 110 x 50 mm	70	CSSD
	137 x 93 x 44 mm	90	CSSD

Item No.	Description	Q'ty	Room
<u>600 Laboratory Instrument</u>			
601	Automatic Tissue Processor	2	PAT-01
602	Automatic Microtome Knife Sharpener	1	PAT-01
603	Shaker (for Tissue Fixation)	1	PAT-01
604	Paraffin Oven	1	PAT-01
605	Slide Warmer	2	PAT-01
606	Paraffin Spreading Apparatus	1	PAT-01
607	Slide Staining Set	1	PAT-01
608	Cyto-Centrifuge	1	PAT-01
609	Large Sledge Microtome	1	PAT-01
610	Large Rotary Microtome	1	PAT-01
611	Incubator	4	PAT-01, 02, 03, 04
612	Counter Balance	6	OPD-10, PAT-02, 03, IND(3)
613	Top Loading Balance	2	PAT-01, IND
614	Direct Reading Balance	2	PAT-04, 03
615	Monocular Microscope	2	OPD-11, NL
616	Binocular Microscope	10	PAT-01(2), 02(4), 03(2), 04(2)
617	Binocular Microscope, Multi-Discussion Type	1	PAT-01
618	Trinocular Microscope System	1	PAT-01
619	Operating Microscope for Eye and ENT	1	OTU-01
620	Freezing Microtome	1	PAT-01
621	Drying Oven	3	PAT-01, 02, 04
622	Magnetic Stirrer	2	PAT-01, 02
623	Specimen Making Instrument Set	1	PAT-01
624	Differential Leucocyte Counter, 12-Key	3	OPD-11, PAT-02(2)
625	Automatic Microcell Counter System	1	PAT-02
626	Water Bath	7	PAT-02(2), 03(2), 04(3)
627	Shaking Rack Unit	1	PAT-02
628	Pipette Shaker	1	PAT-02
629	General Laboratory Centrifuge	5	OPD-11, PAT-02, 03, 04(2)
630	Micro Centrifuge for Cell Washing	1	PAT-02
631	Hematocrit Centrifuge	1	PAT-02
632	Coagulometer	1	PAT-02
633	Micro Titter System	1	PAT-02
634	Gas Pack System	2	PAT-03
635	pH Meter	1	PAT-04

Item No.	Description	Q'ty	Room
636	Hand Protein Refractometer	2	PAT-04, BB
637	Vacuum Pump	1	PAT-04
638	Electrophoresis Equipment Unit	1	PAT-04
639	Densitometer	1	PAT-04
640	UV-VIS Spectrophotometer, Single Beam Type	4	PAT-04(3), NL
641	UV-VIS Spectrophotometer, Double Beam Type	1	PAT-04
642	Chloride Counter	1	PAT-04
643	Deep Freezer	1	PAT-04
644	Van Slyk's Gas Analysing Apparatus	2	PAT-04, ICU
645	Flame Photometer with Compressor	1	PAT-04
648	Autopsy Table with Scale	2	AUT
649	Autopsy Light	2	AUT
650	Dissecting Instrument Set	1	AUT
651	Organ Photographic System	1	AUT
652	Disposal Microtome Blade with Microtome Blade Holder Set	50	PAT-01
654	Blood Shaker, Horizontal Type	1	PAT-02
656	Ager-Immuno Electrophoresis Apparatus	1	PAT-04
657	Low Temperature Cabinet	1	PAT-03
658	Colony Counter	1	PAT-03
659	Hemacytometer	1	BB
660	Laboratory Glassware	2	PAT-05
661	Hand Centrifuge	2	BB

Item No.	Description	Q'ty	Room
<u>700 X-Ray Apparatus and Accessories</u>			
701	Diagnostic X-Ray Apparatus	1	XR-01
702	Diagnostic Radiography/Fluoroscopy X-Ray TV System	1	XR-02
703	Diagnostic X-Ray Layergraph Unit	1	XR-03
704	C-Arm Mobile X-Ray TV Unit	1	OTU-01
705	Capacitor Discharge Mobile X-Ray Unit	2	XR-05
706	Automatic Film Processor	1	XR-05
707	Film Processing Tank	1	XR-05
708	Cassette Pass-Box	2	XR-05
709	Film Dryer	1	XR-05
710	Interval Timer, Desk Model	1	XR-05
711	Cylindrical Liquid Thermometer	5	XR-05
712	Chest Thickness Measure	4	XR-05
713	Film Marker, Alphabet	3	XR-05
714	Film Marker, Figure	3	XR-05
715	Film Hanger, 35 x 43 cm	40	XR-05
	35 x 35 cm	40	XR-05
	30 x 40 cm	40	XR-05
	24 x 30 cm	40	XR-05
	18 x 24 cm	20	XR-05
	13 x 18 cm	20	XR-05
716	Cassette, 35 x 43 cm	10	XR-05
	35 x 35 cm	20	XR-05
	30 x 40 cm	30	XR-05
	24 x 30 cm	20	XR-05
	18 x 24 cm	10	XR-05
	13 x 18 cm	10	XR-05
717	Intensifying Screen, 35 x 43 cm	10	XR-05
	35 x 35 cm	20	XR-05
	30 x 40 cm	30	XR-05
	24 x 30 cm	20	XR-05
	18 x 24 cm	10	XR-05
	13 x 18 cm	10	XR-05
718	Spectacle for Adjusting Eyes to Darkness	3	XR-05
719	Protective Apron	6	XR-05
720	Protective Gloves	6	XR-05
721	Lead Rubber Sheet	5	XR-05
722	Corner Cutter	1	XR-05
723	Film Illuminator, 14"x17"/2-bank, Desk Type	17	WRD-01

Item No.	Description	Q'ty	Room
724	Film Illuminator, 14"x17"/2-bank, Wall Hanging Type	13	OPD-01(2), 02, 03, 04, 05, 06, EMR-01, XR-05(3), EMR-03, DEL-04
725	Film Illuminator, 14"x17"/6-bank, Mobile Type	1	ICU
727	Film Illuminator, 14"x17"/12-bank, Wall Hanging Type	1	XR-05
728	Film Illuminator, 14"x17"/4-bank, Recessed Type	4	OTU-01
729	Film Illuminator, 14"x17"/2-bank, Recessed Type	4	OTU-01

Item No.	Description	Q'ty	Room
	<u>800 Rehabilitation and Physiotherapy Apparatus</u>		
801	Micro Wave Therapy Apparatus	1	OPD-08
802	Ultra Short Wave Therapy Apparatus	1	OPD-08
803	Infrared Ray Lamp	1	OPD-08
804	Heat-Less Ultra Violet Ray Lamp	1	OPD-08
805	Hirschman's Galvanic and Faradic Apparatus	1	OPD-08
806	Exercise Bicycle, Adult Size	1	OPD-08
808	Wrist Roll	1	OPD-08
809	Training Bed	6	OPD-08
810	Paraffin Bath Unit	1	OPD-08
811	Over Head Frame	1	OPD-08
812	Turning Wrist	1	OPD-08
813	Restorator	1	OPD-08
814	Ultrasonic Therapy Apparatus	1	OPD-08

Item No.	Description	Q'ty	Room
<u>850 E.N.T. and EYE</u>			
851	ENT Treatment Unit, One Sided Type	1	OPD-06
853	ENT Treatment Chair	4	OPD-06(3), WRD-02
854	Clinical Audiometer	1	OPD-06
855	Head Mirror	6	OPD-06(4), WRD-02(2)
856	Cold Light Power Supply	1	OPD-06
857	Laryngoscope Angled View, Fiber Lighting Solid Type	1	OPD-06
859	Distance Test Chart, International Type	1	OPD-07
860	Eye Test Chart Book, 38-plate	1	OPD-07
861	Motorized Refracting Unit, Complete with Counter-Balanced Arm and Sight Tester	1	OPD-07
862	Meniscus Trial Lens Set, 35 prs.	1	OPD-07
863	Cross Cylinder Set, Set of 4	1	OPD-07
864	Universal Ophthalmic Measure	1	OPD-07
865	Universal Trial Frame	1	OPD-07
866	Eye Treatment Unit Set with Eye Bath Basin	1	OPD-07
867	Schiotz Tonometer	1	OPD-07
868	Ophthalmodynamometer, Mueller	1	OPD-07
869	Ophthalmoscope	1	OPD-07
870	Streak Retinoscope	1	OPD-07
871	Indirect Ophthalmoscope	1	OPD-07
872	Skiascopy Racks, KOMOTO	1	OPD-07
873	Ogawa's Perimeter	1	OPD-07
875	Slit Lamp Microscope	1	OPD-07
876	Ono Jackson Endoscopic Instrument Set	1	OTU-01
877	TORX or Type Micrometer Hand Drill with 2 handpieces	1	OTU-01
878	ENT Treatment Microscope	1	OPD-06

B WORK OF MEDICAL EQUIPMENTS

Item No.	Description	Q'ty	Room
<u>B 900 Ancillary Equipments</u>			
B 901	Steel Chair with Backrest	2	OTU-01
B 902	Gypsum Cutter, Electric, with Vacuum Attachment	1	OTU-01
B 903	Cardiopac Difibrillator	1	WRD-02
B 904	Ultrasonic Scanner	1	OPD-05
B 905	Automatic Blood Gas Analyser	1	ICU
B 907	Anesthesia Instrument Table	4	OTU-01
B 908	Ultra-short Wave Therapy Apparatus	1	OPD-08
B 951	Hospital Wear		LAUNDRY
	a) Doctor's Gown, male white	140	
	b) Doctor's Gown, female white	60	
	c) Side Button Coat, both white	150	
	d) Nurse Gown, short sleeve	1200	
	e) Nurse Cap	1200	
	f) Nurse Shoes	600	
	g) Barrier Gown, apron type	200	
	h) Operating Gown, blue	250	
	i) Operating Gown, green	250	
	j) Surgeon Cap, male blue	60	
	k) Surgeon Cap, female blue	60	
	l) Surgeon Cap, male green	60	
	m) Surgeon Cap, female green	60	
	n) Surgeon Mask, blue	120	
	o) Surgeon Mask, green	120	
	p) Operating Under Suits, male blue	60	
	q) Operating Under Suits, female blue	60	
	r) Operating Under Suits, male green	60	
	s) Operating Under Suits, female green	60	
	t) Sandles for Operating Theatre Unit	200	
	u) Wear for Minor Staff, male	600	
	v) Wear for Minor Staff, female	600	
	w) Sandles for Minor Staff	600	
	x) In-patient pajamas, male	2000	
	y) In-patient pajamas, female	1000	
	z) In-patient Sandles	1000	
B 952	Linen		
	a) Towel Blanket, 1500x2200	1200	
	b) Pillow Case, 430x630	2000	
	c) Pillow Cover, 500x900	3000	
	d) Sheet, 1500x2700	5000	
	e) Gauze, 300x10m	1000	
	f) Bandage, 60x9m	1000	
	g) Bandage, 100x9m	150	
B 960	Diagnostic X-Ray Apparatus	1	XR-04

JICA