

4.4 PHYSICAL FACILITY

In Sri Lanka, the hospital network, consisting of various types/categories of facilities from primary level to tertiary, is well developed and spread throughout the country, reaching the majority of the communities. However, behind this bright facade, some fundamental and structural problems exist, affecting the quality of curative services. This situation analysis makes clear what physical health care facilities exist and the problems in delivering quality services.

(1) POLICY AND STANDARDS

Providing health care services in the public sector is the responsibility of central Ministry of Health (MoH) and eight Provincial Councils. The central MoH is responsible to operate and maintain Teaching Hospitals, while the PCs are responsible to manage Provincial Hospitals, most of Base Hospitals and all facilities at district level. Many of Base Hospitals and Provincial Hospitals have been upgraded recently according to the suggestions in the 1998 Presidential Task Force Report.

The MoH is waiting for the Cabinet to approve a master plan for hospital development. The master plan is intended to facilitate a systematic and organised mechanism in strengthening the physical facility, deployment of human resources, and allocation of financial and other resources. The “New Categorization of Facilities for Curative Services” proposes to upgrade and consolidate the institutions.

Although the MoH has 558 health institutions with inpatient facilities, official guideline for hospital planning has never been prepared up to the present. Hence, most of hospital buildings, which have been constructed recently, have been designed not based on MoH’s instructions but on voluntary discussions between the hospital and the private consultant. There is no specific planning guideline laid down for such hospital installations as electricity receiving system, emergency power generators, water reservoir capacity, sewerage system and waste disposal. The manuals for hospital administrators, which are used for lectures at MRI, indicate the schedule of rooms and equipment in theory; however, they are not used as standards/guidelines practically.

Building codes on safety in case of a fire, such as using non-inflammable material, installing stairs for evacuation and securing approach roads for fire engines, are applied only to those of five stories and more. This means that most of public hospitals in the country, which buildings have one or two stories only, do not have those fundamental structures to keep patients safe in case of fire. Additional instruction to assure reliable measures for patients’ safety is not laid down in hospitals, to accommodate the weak and disabled.

(2) DEMAND AND SUPPLY

Network of Health Facilities

All hospitals in the public sector are organised into a hierarchy of several categories, from primary level institutions to tertiary teaching ones, as shown in Table 4.4.1. However, a formal referral system among these institutions has yet to be established in Sri Lanka.

Table 4.4.1 Distribution of Beds and Institutions by Referral Category, 2002

Level	Category	Competent Authority	No	No. of beds	Bed Range
3	Teaching Hospital (TH)	Line Ministry	19	17,488	>1000
3	Provincial Hospital (PH)	Prov. Ministry	7	5,629	600 - 1000
2	Base Hospital (BH)	PDHS	35	9,881	200 - 600
1	District Hospital (DH)	DPDHS	157	14,345	50 - 200
1	Peripheral Unit (PU)	DPDHS	102	5,031	20 - 80
1	Rural Hospital (RH)	DPDHS	172	4,337	20 - 40
1	Maternity Home (MH) & CD	DPDHS	85	871	10
1	Central Dispensary (CD)	DPDHS	385	110	0
2 ~ 3	Other hospitals	Line Ministry	27	2,053	150 - 400

Note: The category 'Other hospitals' include 8 Prison Hospitals, 10 Estate, 4 Special Campaign Hospitals, and 5 Other.

Source: MoH's latest statistics in 2003

In the past three decades, the number of hospitals as well as their beds and central dispensaries has shown extensive development as shown in Table 4.4.2. However, this development has covered only the increase of population during the same period, since the number of beds per 1000 population index shows no change in the same period at around 3.0.

Table 4.4.2 Number of Health Institutions and Hospital Beds, 1970-2002

Item	1970	1980	1990 ¹	2000	Dec. 2002
Hospitals ²	455	480	422	558	604
Patient Beds ²	39,173	43,389	42,079	57,027	59,635
Beds / 1000 population	3.1	2.9	2.9	2.9	?-
Central Dispensaries	332	347	278	404	385
Population	12,140,000	12,580,000	12,200,000	16,537,000	19,000,000

Note: 1. Includes Northern and Eastern Provinces.

2. Includes Maternity Homes and Central Dispensaries.

Source: Annual Health Bulletin 2000, and MoH's latest statistics in 2003

Since 2000, health facility development work has been implemented in 604 hospitals and 59,745 inpatient beds. Ten estate hospitals have been transferred from the private sector to MoH's management during this period. In contrast, the number of Central Dispensaries has fallen since 2000.

It is also notable that 160 private hospitals and maternity homes are now taking an active role with almost 8,000 beds around the country and that half of them are around Colombo. In addition, 800 fulltime general practitioners and a much larger number of part-time practitioners, 5,000 pharmacies, 5 ambulance services and 7 insurance companies are in operation. Finally, private care providers cover over 40% of outpatient care.

Distribution

1) By Level of Facility

In the distribution of hospital beds among referral categories in 2000, secondary level institutions account for 26.0% only while Teaching Hospitals at tertiary level account for 25.7% (refer to

Table 4.4.3). Considering that most of 'Other hospitals' are non-teaching but Specialised Hospitals, the proportion of tertiary level looks higher than that of secondary level.

Between 2000 and 2002, there was a slight shift in the distribution of beds. The secondary level institutions account for 16.6% only, while tertiary levels including teaching hospitals account for 38.8%. The change during the two years since 2000 (which shows that the share of the 3rd and 1st levels have increased while the 2nd has lost its share) is brought about by the upgrading of 2nd level facilities to 3rd with new establishments of 1st level care facilities.

Table 4.4.3 Share of Inpatient Beds by Referral Category, 2000 and 2002

Level	Category	2000			Dec.2002		
		No. of Institutions	No. of Beds	%	No. of Institutions	No. of Beds	%
3	TH, PH	21	19,655	34.5	19	23,117	38.8
2	BH	36	9,865	17.3	35	9,881	16.6
1	DH, PU, RH, MH&CD	481	23,212	40.7	516	24,584	41.2
1~3	Other hospitals	20	4,296	7.5	27	2,053	3.4
	TOTAL	558	57,028	100.0	604	59,635	100.0

Source: Annual Health Bulletin 2000, and MoH's latest statistics in 2003

2) By District

The present level of hospital bed capacities at 2.9 beds per 1,000 population on average may appear satisfactory. However, disparity is observed among provinces and districts, with a large fluctuation of index from 1.9 in Kilinochechi to 4.8 in Colombo (Table 4.4.4). It should be noted that all districts in Northern and Eastern Provinces fall below the national average rate of 2.9. The WHO's report 'Health System Assessment in North and East of Sri Lanka' in April 2002 says as follows:

"Hospitals in the North-East are dilapidated and deteriorating for want of maintenance. Most buildings are 50 to 80 years old. Most hospitals lack adequate water supply, sewerage system, basic diagnostic and treatment equipments and supplies. There has been very little investment in the secondary curative care facilities since 1980 until very recently."

Table 4.4.4 Government Hospital and Beds by District, December 2000

District	All Hospitals		Beds per 1,000 pop.	District	All Hospitals		Beds per 1,000 pop.
	Institutions.	Beds			Ins.	Beds	
Colombo	26	10,768	4.8	Mullaitivu	4	283	2.5
Gampaha	33	4,744	2.9	Bataloa	12	1,186	2.3
Kalutara	21	2,383	2.3	Ampara	24	1,615	2.6
Kandy	53	5,207	3.6	Trincomalee	12	807	2.4
Matale	18	1,346	2.7	Kurunegala	43	3,983	2.5
Nuwara Eliya	26	1,575	2.7	Puttalam	21	1,519	2.3
Galle	29	3,063	3.0	Anuradhapura	38	2,660	3.3

District	All Hospitals		Beds per 1,000 pop.	District	All Hospitals		Beds per 1,000 pop.
	Institutions.	Beds			Ins.	Beds	
Matara	23	1,986	2.3	Polonnaruwa	11	1,187	3.0
Hambantota	22	1,385	2.3	Badulla	33	2,500	2.8
Jaffna	23	2,020	2.0	Monaragala	18	1,202	2.7
Kilinochchi	5	252	1.9	Ratnapura	32	2,814	2.4
Mannar	4	320	2.4	Kegalle	24	1,962	2.3
Vavuniya	3	260	2.0	TOTAL	558	57,027	2.9

Note: Bold figures are below the national average.

Source: Annual Health Bulletin 2000

The distribution criteria of health facilities to assure equal access of the people have been defined not on an objective assessment basis such as demographical and epidemiological needs assessment; instead, they are based on the administrative zone, district, province and division basis. This system contributes to a disparity of facilities distribution throughout the country.

The GIS maps of Monaragala and Gampaha show the geographical disparities of health facility distributions. Gampaha has over wrapped health facility distribution with one Teaching Hospital and three Base Hospitals in the population of 1.76 million in 2001. Monaragala has scarce distribution of health facilities compared with Gampaha and there is only one Base Hospital as a highest level of hospital facility for the population of 396,000 in 2001. The ratio of a facility to the area size of Gampaha and Monaragala is $21\text{km}^2/\text{facility}$ and $182\text{ km}^2/\text{facility}$ respectively.

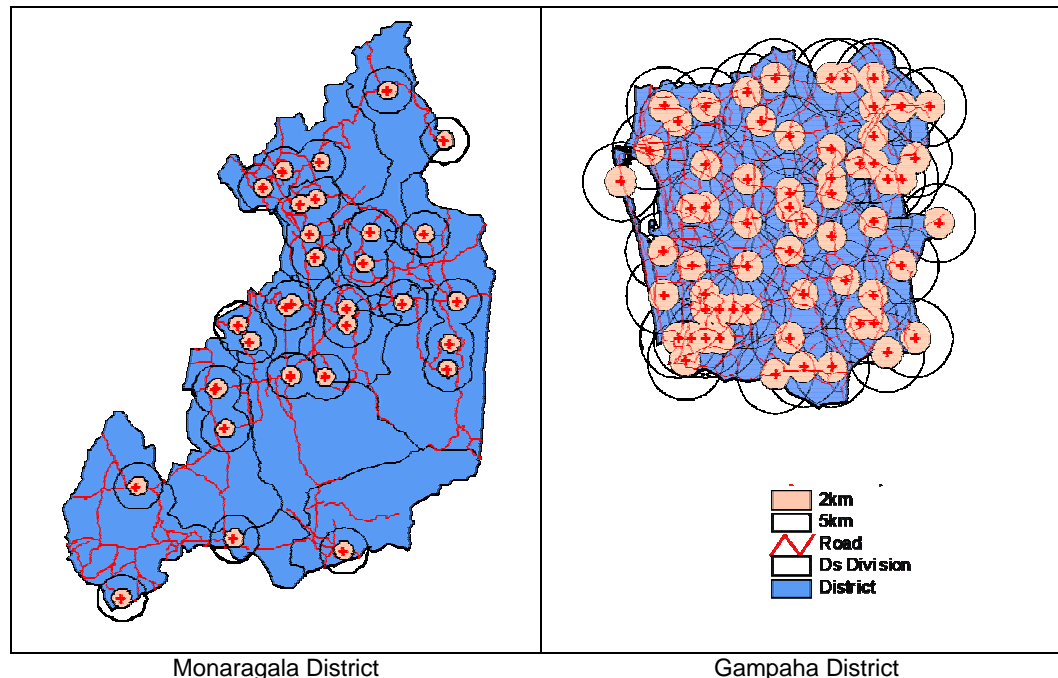


Figure 4.4.1 Service Catchment Area per Facility in Monaragala & Gampaha

The recent re-categorisation of district general and district hospitals explicitly stated the criteria based on administrative zone once more (Table 4.4.5). For the other categories, the allocation criteria have not been specified.

Table 4.4.5 Hospital Development Plan: New Categorisation of Hospitals

Referral Level	Category	Allocation criteria
APEX	Teaching Hospital	Not specified yet
3	Teaching/Provincial Hospital	Not specified yet
2	District General Hospital	Minimum 2 at 1 district
1~2	District Base Hospital	Minimum 1-2 at 1 district
1	Divisional Hospital	Not specified yet
1	Primary Medical Care Unit	Not specified yet

Variation in Hospital Size

Some of hospitals, which belong to categories of Teaching Hospital and General Hospital, have an extraordinarily large number of beds. The Colombo National Hospital has 2,800 beds, Kandy Hospital 1,700, etc at Teaching level, Anuradhapura Hospital 1,070 at Provincial, and even some of Base Hospitals have approximately 400-500 beds like Kegalle 680, Matale 545 (Table 4.4.6).

Table 4.4.6 Bed Capacity of Base, Provincial and Teaching Hospitals

District	Teaching Hospital		Provincial Hospital		Base Hospital	
Colombo	National Hospital	2,847				
	Kalubowila	829				
	Angoda Mental Hos.	1,192				
Gampaha	Ragama	1,216			Negombo	416
					Wathupitiwala	430
Kalutara			Kalutara	707	Panadura	456
Kandy	Kandy	1,717				
Matale					Matale	545
Galle	Karapitiya	1,236				
Jaffna	Jaffna	1,015				
Kurunegala	Kurunegala	1,158			Kuliyaitiya	405
Puttalam					Chilaw	429
Anuradhapura			Anuradhapura	1,070		
Polonnaruwa					Polonnaruwa	410
Badulla			Badulla	805		
Ratnapura			Ratnapura	889		
Kegalle					Kegalle(TH)	680

Source: MoH data, 2001

This large capacity must cause a massive movement of patients to bypass the smaller hospitals nearby, as well as a greater difficulty for the top management of such hospitals to control such huge and complicated organisations. It will be indispensable to set an upper limit to the bed capacity of hospitals at each level.

Greater Colombo has very specific characteristics: Large teaching hospitals, being overutilised, located in the central area, while on the other hand small lower level hospitals, being underutilised, are scattered over the growing suburbs. It needs to be pointed out that, notwithstanding their official designation or size, all hospitals carry a heavy load of primary care that could have been effectively taken care of in smaller and cheaper institutions if the latter could be better equipped and function with credibility. Similarly, tertiary institutions even carry secondary care.

Bed Occupancy and Facility Utilization Efficiency

Clear contrast of facility utilization between higher-level hospitals (Teaching, Provincial and Base) and of lower-level ones (District, Peripheral Unit and Rural) has been pointed out in many previous reports related to health. Table 4.4.7 shows very high bed occupancy rate in Teaching & Provincial Hospitals while lower rates in District, Peripheral Unit and Rural Hospitals. However, the national average shows a 75% occupancy rate, which can be said to reflect good overall performance.

Table 4.4.7 Relative Shares of Bed and Outpatient Utilization by Facility Type, 2000

Facility type	Share of beds (%)	Share of admissions (%)	Bed occupancy rate (%)	Share of outpatient visits (%)
Teaching H.	25.7	27.1	93	10.8
Provincial H.	8.8	10.5	106	4.7
Base H.	17.3	21.3	83	16.4
District H.	23.8	24.5	52	26.9
Peripheral U.	8.0	8.8	52	11.8
Rural H.	7.7	6.0	37	11.7
MH & CD	1.2	0.1	6	3.1
Other Hosp.	7.5	1.6	-	1.3
Total number	57,027	4,015,087	75	43,329,090

Source: Annual Health Bulletin 2000

Table 4.4.7 says many things:

- 1) Hospital beds are disproportionately (34.5%) distributed to higher-level hospitals of TH and PH and share of admissions (37.6%) surpass slightly even the share of beds, up to Base hospitals the share of admissions is higher than the share of beds.
- 2) For Teaching and Provincial Hospitals the occupancy rates are too high to be able to accommodate seasonal increases in disease load.
- 3) The Base Hospitals seem the most balanced, with a satisfactory share and occupancy rate.
- 4) District hospitals, which are expected to play a role of referral level facility, show very low Bed occupancy rate of 52%, and facilities of lower levels show even worse occupancy rates.
- 5) There is a discrepancy between share of admission and occupancy. In the proposed scheme, district hospitals would get more use probably to full utilisation. That will leave almost 25% of beds to be rationalized probably by making them secondary district hospitals or assigning lesser beds!

This study could only look at average performance, the rationalisation at all levels should look at seasonal occupancy rates for each facility and try to make sure that there is a safety net of 10% above maximum utilisation. The study should be done regularly as the network is being rationalised in terms of functions, referral and counter-referral. Detailed studies should be done of reasons for hospitalisation – including social reasons, observation, need for diagnostic tests etc) also of the processing of the patient in IPD and the conditions and reasons for release. These measures should be designed to permit more to design other approaches than admission, better responsive and efficient management and an earlier release of patients.

(3) DISCUSSION

Options to Strengthen and Rationalise the Facility Network

1) Structural Features of the Health Network

Comparison of the current health delivery system in Sri Lanka with the WHO’s conceptual system, which is based on Regionalised care emphasizing Primary Health Care is presented in Figure 4.4.2. Health delivery system generally consists of two (2) inseparable hierarchical systems, that is, ‘Health Administration’ and ‘Facility & Provider’. Previous studies have already pointed out issues to be addressed in the Health Administration System. In this Study, the concentration is on issues about the Facility & Provider System in terms of health facility development.

Figure 4.4.2 illustrates the comparison between the existing health delivery system in Sri Lanka and the concept proposed by the WHO. The ideal setting refers to the position of health facilities in the system and the range of coverage they are supposed to do while actual setting points to what is happening in actuality.

Conceptual System by WHO		Current Health Delivery System in Sri Lanka		
Administration Level	Delivery Hierarchy	Health Administration	Position and Coverage by Facility/Provider	
			Ideal Setting	Actual Setting
National Level	Third Referral	MoH	All TH & SH	Specific TH & SH
Provincial Level	Second Referral Level	MoH/DPDHS	PH	Most TH, PH
District Level	First Referral Level	DPDHS	BH, DH	RH <i>Very weak</i>
	First Contact Level Facility	DPDHS	PU, RH	DH <i>Too few and sometimes weak</i>
	Community Activity	MOH/DDHS	Public Health Inspector Public Health Midwife	Public Health Inspector Public Health Midwife

Figure 4.4.2 Health Delivery System in Sri Lanka in Contradistinction with WHO Concept

Comparison of Sri Lanka’s Ideal System (the system meant to be) with WHO concept clarifies that Sri Lanka has already established the full range of health delivery system from Third referral level to Community activity level, in accordance with WHO’s conceptual system. However, at provincial level, both central MoH and Provincial MoH provide the same services of the second referral level.

A plurality of kinds of facilities are placed within one delivery level in the ideal setting of delivery, e.g., PU, RH and CD are at First Contact Level, and PH and BH at First Referral Level.

There is no category of Health Centre, which is found commonly in other countries. Community services on PHC are provided from MoH/DDHS, apart from the facilities at first contact level like PU, RH and CD under supervision of DPDHS.

Figure 4.4.2 shows the following distinguishing characteristics up in comparison of the actual setting of hospitals with the formal one.

- a. Third referral level: THs and PHs are generally categorised in third referral level in Sri Lanka, but very specific THs (General and Special Hospitals) in Colombo and a few major cities like Kandy actually assume the role. In terms of referral level, most THs in the provinces play the same role of second referral level as PHs do.
- b. Higher-level hospitals, including THs tend to undertake the same role as lower ones. All hospitals stretch their services down to First contact level regardless of the categories they belong to.
- c. Although BHs and DHs are originally supposed to provide the services of this level, they cannot fully fulfil their missions. BHs have people's confidence but are not deployed effectively due to their limited number and DHs are not credible as first level referral because of their low quality services and limited range of equipment, supplies and no qualified technicians. It is this first referral level that becomes a bottleneck to permit the health delivery system in Sri Lanka to function effectively. As a group THs and PHs undertake a major share of first referral level as the population recognises them as more reliable hospitals
- d. Consequently, difference of role among many types of facilities is not clear. Plural types of hospitals with similar functions tend to fall into the first contact level as well as the secondary level, although the category they belong to and the size they have vary considerably.
 - i. DH, PU, RH and CD at district level: a group of facilities which generally do not meet the standards for a modern hospital, due to lack of essential facilities such as a reliable laboratory, imaging services such as X-ray and Ultrasound, operating theatres or hygienic waste disposal and a total lack of consultant doctors.
 - ii. TH(GH), PH and BH at provincial level: a group of facilities with qualification of modern hospitals, with diagnostic equipment above and the necessary facilities as well as consultant doctors. Except for a few THs, most of these hospitals do not show very much distinguishing features as belonging to different categories.

These are the problems, which may not be solved without redefining the role and connecting different level of facilities effectively, since adding new category to the existing system cumulatively during a long period has produced this vast array of problem in Sri Lanka's health delivery system.

2) Principles in Rationalisation

It is essential to emphasize the district as the underlying geographical unit for a self-contained health delivery system, which has the competence to meet 85% to 95% of local health needs up until the first referral level, which are due to about 20-25 different ailments. Only 5% to 15% of need has to be handled at second or third referral level.

To reach this goal, it is a challenge that inevitably arises to review and redefine the role of facilities at different referral levels. This review will lead to rationalise the priority on facility improvement and convert the category of existing facilities to other, especially in district.

High on the list of priorities for the facilities at district level is strengthening the service capacity/capability of first referral hospitals and improvement of the quality of ambulant services.

This is crucial to ease the current heavy patient burdens on the second and third referral level facilities. Concept is shown in Figure 4.4.4.

To put it concretely: a) Some District Hospitals, which are located at the centre of the local population and/or at strategically important junctions on the main traffic road, should be upgraded from first contact level to first referral level, in order to reinforce the services of this level. These form a new category with name of ‘District Hospital’ together with existing BHs in the district. These newly defined district hospitals (‘New DHs’) will be selected and upgraded from many existing district hospitals. b) Many types of facilities at first contact level, including most DHs, all of PUs and RHs, need to be categorised into one, e.g., ‘Health Centre’.

Administration Level	Delivery Hierarchy	Current Delivery System	
		Health Administration	Facility & Provider
National Level	Third Referral Level	MoH	TH (a)
Provincial Level	Secondary Referral Level	PDHS	TH (b), Provincial H
District Level	First Referral Level	DPDHS	New District Hospital*
	First Contact Level Facility	(DPDHS) MOH/DDHS	Health Centre*
	Community Activity Family & Home	MOH/DDHS	Public Health Inspector Public Health Midwife

Figure 4.4.3 Consultant Proposal on Re-defined System

Note: TH (a): TH associated with Medical Faculty.
 TH (b): TH not associated with Medical Faculty.
 * shows the name of facilities in specific category that is defined newly aiming at refining the coverage level of facility and strengthening mainly district level services.

Administration Level	Delivery Hierarchy	Current Delivery System	
		Health Administration	Facility & Provider
National Level	Third Referral Level	MoH	6 THs (APEX)
Provincial Level	Second Referral Level	MoH	Other THs, PH
District Level	First Referral Level	DPDHS	District GH District BH
	First Contact Level Facility	DPDHS	Divisional H.
	Community Activity Family & Home	MOH/DDHS	Public Health Inspector Public Health Midwife

Figure 4.4.4 MoH's Proposal on Re-Categorisation

In theory, three to six new District Hospitals will be established and deployed around the PH or TH in a district. Its bed capacity will vary according to population scale, but it is strongly suggested that function must be kept consistent in any district. Moreover, it is strongly recommended to equip a Patient Referral Unit within its organisation, which will arrange and manage the referral procedures between DH and lower/higher facilities. Minimum requirement of new DH will be:

- Consultants for major 4 disciplines: Medicine, Surgery, Paediatrics and Ob/Gyn.
- Outpatient services for Eye, ENT, Orthopaedic, Dermatology, Psychiatric & mental health, and several sub-specialties according to local needs. Most of these services may be provided by visiting consultants from PH or TH in the district of province.
- Clinical laboratory consisting of Biochemistry, Haematology and Blood Bank.
- Imaging services of X-ray, Ultra Sound.
- Surgical operating theatre.
- Intensive care unit for inpatients in critical/serious condition.
- Emergency care unit with sufficiently trained ICU nursing staff and necessary equipment and supplies around the clock.
- Primary Care Unit or attached Health Centre: This should have same functions as Health Centre, and receive all non-referral patients to screen and treat properly.
- Discharge Unit/Patient referral unit: Every referral procedure must be handled by this unit, e.g., to arrange the ambulance to transport patients, to contact hospitals for patients referral, to arrange necessary papers and medical records.

When it comes to Health Centres & Central Dispensaries, the variety of lower level facilities should be rationalised. Some may need relocation; some could be closed if they are in the vicinity of others that will be maintained. Those to be maintained should be upgraded to Health Centre with at least one MO and nurses, and with good integrated primary health care including detection of first level curative care, integrated prevention and promotion, NCD detection and follow-up, first aid in emergency and 5 to max 10 beds for observation and stabilisation of patients until their transfer to higher-level hospitals, and access to ambulances. In addition, clinic hours of HC must be extended to 8 or 9 o'clock in the evening from the current 4 o'clock, for the sake of lower income people who have to work long hours during the day.

Regarding Primary Care Unit in the hospital, any type of hospitals needs to be equipped with a Primary Care Unit or Health Centre in the same complex or at a very short distance, in order to provide services to patients who arrive without referral and are not emergency cases. These units should be able to refer to the main hospital.

In principle, Teaching Hospital should provide services only to referred patients and complicated inpatient cases. First contact and first referral level services should never be their role. New DHs around it and attached Primary care unit (or HC) will enable it to concentrate on its designated services. However, some teaching hospitals, which are not associated with Faculty of Medicine, should be taken as hospitals at same level as Provincial Hospitals.

As to Provincial Hospitals, to strengthen their diagnostic capacity and capability is indispensable, as well as to expand services in specific area such as emergency service for Multi-trauma, Cancer, Cardiac, Metabolic and Acute mental cases.

There should be no necessity to increase bed capacity of Teaching and Provincial Hospitals up to 2015 especially if new DHs and HCs are successfully established and function as planned.

(4) BUILDING MANAGEMENT

Conditions of Building and Utilities

The MoH-JICA Study Team carried out a field survey about the conditions of buildings and utilities in three provinces: Western Province, Sabaragamuwa and North Central Province. Preliminary results of the survey are shown in Table 4.4.8. It reveals several interesting findings. One, infrastructure conditions at the OPD are quite variable. Some are in good condition due to recent renovation works but some are in bad condition. Generally, hospitals in the Sabaragamuwa Province are good, while those in the North Central areas are bad. Two, alarm systems and indications of escape routes are furnished only in two tertiary hospitals. In the NHSL, some newly constructed buildings have been equipped with this safety system. None of the hospitals has fire prevention alarm systems or signage for evacuation. Three, only one hospital has an incinerator for garbage disposal. Most hospitals dispose of garbage, including used injection needles, by burning or burying them in a dug hole. None of the hospitals has incinerators for waste disposal. Finally, all hospitals surveyed have a 24-hour water supply.

Table 4.4.8 Building Conditions in Three Provinces

PROVINCE	WESTERN					SABARAGAMUWA					NORTH CENTRAL				
AREA	COLOMBO/NHSL	PANADURA	MINUWANGODA	ATHURUGIRIYA	BULATHSINHALA	RATNAPURA	BALANGODA	RAMBUKAKA	DEMAPITIYA	NIVITIGALA	ANURADAPURA	POLONARUWA	MEDIRIGIRIYA	HABARANA	MIHINTALE
Category	TH	BH	DH	RH	PU	GH	BH	DH	RH	PU	GH	GH	DH	RH	PU
Building Condition	A,C	B	B	A	B	A	A	A,C	A	C	A,C	C	C	-	A
1.1. No. of Toilets	N/A	N/A	N/A	A	A	N/A	N/A	A	A	N/A	N/A	N/A	N/A	A	A
1.2. Water Closet System	FW	FW	FW	FW	FW	FW	FW	FW /BUC	FW	FW	FW /BUC	BUC	FW /BUC	BUC	BUC
1.3. Sanitary Condition	P	P	P	F	F	P	VP	F	F	VP	VP	P	VP	VP	P
2. Electrical: KVA of Generator	2340	710	5	-	60	700	-	15	-	15	628	200	12.5	-	40
3. Communication Method	TEL /FAX	TEL /FAX	TEL	TEL	TEL	TEL /FAX	TEL /FAX	TEL	TEL	TEL	TEL /FAX	TEL	TEL	TEL	TEL
4. Medical Gas Supply	CEN /IND	CEN /IND	IND	IND	IND	CEN	IND	-	-	-	IND	CEN	-	IND	IND
5. Injection Needle Disposal	BUN	BUN	BUN	BUN	BUN	BUN /INC	BUN	BUN	-	BUR	BUN	BUN	BUN	BUN	BUN
6. Garbage Disposal	CP	CP	CP	BR	BR	DUM /BR	CP	-	BR	BR	CP	CP	CP	DUM	DUM

Note : **Category** – (TH) – Teaching Hospital. (BH) – Base Hospital. (DH) – District Hospital (RH) – Rural Hospital. (PU) – Peripheral Unit

Building Conditions – (A) – Good. (B) – Needs cleaning. (C) – Needs repair

No. of Toilets – (N/A) – Not Adequate. (A) – Adequate.

Water Closet System – (FW) – Flush Water. (BUC) - Bucket

Sanitary Condition – (F) – Fair. (P) – Poor. (VP) – Very Poor.

Medical Gas Supply – (CEN) – Central. (IND) – Individual.

Injection needle disposal – (BUN) – Burn in dug hole. (INC) – Incinerated/Garbage disposal –(CP)- Container pick up. (BR) – Burning. (DUM)- Dumping.

Source: Survey of hospital building conditions 2003, MoH-JICA

The following physical problems are found commonly by visiting various categories of hospitals:

- Old fashioned, overall superannuated facilities;
- Primary level facilities that seem like care houses rather than modern hospitals;
- Low quality of facilities due to little physical maintenance;
- Complicated layout of buildings in huge hospitals can make one disoriented. This will become the biggest risk factor to evacuate patients in case of fire;
- Inpatient beds located in corridors or out of wards;
- Little effort to keep internal environment clean;
- Physical conditions differ from hospital to hospital; the standard is affected greatly by the director's attitude; and
- Unsafe treatment of waste, especially insufficient disinfections as well as disposal of hazardous needles and plastic products.

Constrained Technical Capacity

In the MoH, the Director of Buildings (Engineering) under Deputy Director-General (DDG) for Buildings & Logistics is in charge of maintenance, renovations and construction of buildings. Out of his limited cadre of seven, only three are filled up. They are all responsible for the supervision of thousands

of buildings comprising 558 hospitals. The shortage of technical staff is hampered by the absence of Hospital Maintenance Units even in major hospitals and an Engineering Services Unit in the MoH.

Table 4.4.9. Building (Engineering) in DHS Cadre

Post	Approved for 2002	Present Strength	Vacancies
Civil Engineer	4	1	3
Electrical Engineer	1	1	0
Mechanical Engineer	1	0	1
Civil Technical Officer	1	1	0
TOTAL	7	3	4

Source: Director, Building (Eng.) 2002

As to the Provincial Councils, little information has been obtained to measure their capacity on maintenance. Table 4.4.10 is a summary of a limited survey commissioned as part of the Health Master Plan Study. Among the three provinces examined, the North-Central Province is the only one that avails itself of the services of a Provincial Engineering Department in lieu of putting up an in-house capacity. Its budget for maintenance and improvement in 2002 was even comparable to and, for new construction, is even more than that of Western Province. The Annual budget for renovation and construction works for hospital buildings was approximately Rs.100 million on the average in 2002 and almost 1/3 of it was spent on maintenance and improvement works in the hospitals in the three provinces surveyed. Consistent among all the PDHS and DPDHS is the absence of a specific unit for planning and maintenance of physical facilities.

Table 4.4.10 Maintenance Capability of Buildings in the Three Provinces

	Western		Sabaragamuwa		North Central	
	PDHS Maligawatta	DPDHS	PDHS Ratnapura	DPDHS Ratnapura	PDHS Anuradhapura	DPDHS Anuradhapura
1. Dept. in charge of Planning & Maintenance	Nil		Nil	Nil	Nil	Nil
2. Person in charge	DPDHS		DPDHS	PDHS, DPDHS	Prov. Eng. Dept	Prov. Health Dept.
3. Inventory System	Nil		Yes (DPDHS)	Nil	Yes (in progress)	Nil
4.1 Budget for Maintenance. & Improve. in 2002	Rs.32.0m		Not specified	Rs.1.9m	Rs.31.5m	Rs.12.5m
4.2 Budget for new construction in 2002	Rs.60.8m		Not specified	0	Rs.83.7m	Rs.55.5m
4.3 Total Budget	Rs.98.8m		Rs.100.0m	Rs.1.9m	Rs.115.2m	Rs.68.0m
5. Priority Criteria	Yes, but difficult		Yes	Nil	On budget allocation	Nil
6. Decision Maker	Minister, DPDHS, etc		Secretary of Prov.Min.	Prov. Minister	Prov. Minister	DPDHS
7. Future Plan for renovation or improve.	No answer		Accord. to urgency	Yes, 5-year plan include. 130 works	According to needs, Expansion	To establish Dept. Hospital Building

Source: Survey of Hospital Building Conditions in 2003, MoH-JICA Study Team

No or Inefficient Systems

National inventory of physical infrastructure has not been prepared both in central and provincial levels so far. Consequently, there have been no rational and objective criteria to prepare the long-term plan for rehabilitation, renovation and maintenance of hospital facilities.

Total funds allocated for repair and investment of capital assets and construction of buildings has increased remarkably since 2000 to reach around Rs.1,800 millions in 2001. In case of maintenance and renovation works, MoH calls tenders for each individual job. However, this system is cumbersome and not efficient enough to cater to the urgent needs in the hospitals.

Table 4.4.11 Change of Investment Funds for Buildings under MoH

(Unit: Rs.Millions)

Year	Repair, improvement and construction	Acquisition of Equipment	Total funds allocated
1998	554.50	122.50	677.00
1999	607.70	184.15	791.85
2000	1,148.50	528.35	1,676.85

Source: Building (Eng.) department's paper, MoH

In addition, inefficient ongoing contracting system for repair works makes it hard to respond quickly to the urgent needs from hospitals.

At central/provincial level, no regular inspection of facilities conditions and no preventive maintenance are done, only unscheduled repairs. In addition, no regulations to force the hospital administrators to address the deficiencies are laid down. At hospital level, the director's attitude makes a big difference in conditions of facilities. Low priority of investment on facilities management/maintenance leads clearly to deteriorating quality of infrastructures.

4.5 FUNDS

Discussion on the management of funds includes the policy context and trends of health financing as well as allocation of government resources. The issues related to equity and efficiency of financing are taken up in Chapter 7.

(1) THE HEALTH FINANCING POLICY CONTEXT

Since 1990, the health sector has been subjected to a number of planning and policy formulation exercises. There have been a number of recommendations made over this period since on how to improve resource mobilisation, allocation and utilisation.

In 1992, a Presidential Task Force was established, and it developed and published a national health policy for the country. There were many items in the policy pertaining to health financing. First, it was suggested to introduce two earmarked taxes for use by the sector: taxes on items of consumption that pose danger to health, e.g., alcohol and tobacco, as a share of the total price of the product, and also a tax imposed on international travellers as they exit. Secondly, it was recommended to establish pay wards in governmental hospitals where fees would be charged for a higher bed and service quality. Third, auto insurance should include coverage for the medical expenses incurred if an accident were to occur. Fourth, the use of voluntary health insurance should be promoted. Fifth, the government allocation for health should be increased to 3.5% of GDP by 2000. Sixth, all international support for health should be directed to the support of the 1992 National Health Policy. Finally, local donations will be encouraged from the community only after an evaluation is conducted on how best to manage and allocate it.

In 1997, another Presidential Task Force study was conducted. It recommended many responsibilities to be devolved to local entities of government, including procurement; to encourage greater financial autonomy of most publicly owned health facilities especially hospitals; to develop alternative financing mechanisms. Finally, many other recommendations focused on facility management structures leading to greater autonomy.

Professor William Hsiao conducted a preliminary assessment of Sri Lanka's health sector in 1997 and made a number of findings. They included: a) the importance for the development of an overarching strategy to address issues of under-funding, and a public-private mix, and b) inefficiency is not a major problem such that management and organisational reforms would yield few gains. He also thought that a number of areas required more in-depth study. First, it is important to conduct an analysis of private sector financing, including the determinants of health care demand. Second, an analysis of the current funding of health care provided by the public sector, especially the resource allocation criteria used in the public sector along with reasons for emerging financing gaps between expected and required resources. Third, financing options including social health insurance should be assessed. Finally, an evaluation should be conducted of resource allocation for promotion, prevention, and community care, including options for improvement.

The Sri Lankan government recently completed a review to facilitate charting a public course of action regarding macro-economic reforms along with improving health status and strengthening governance and institutional reforms.²⁹ It sought to provide guidance for public action designed to achieve high economic growth and retain the social equity the country has been known for into the second decade of the 21st century. The document had many goals for improved macro-economic performances along with goals for health status improvement, many of which focused on health problems of ageing, and vehicles to mitigate those problems, especially via the private provision of specialised health care. It also

²⁹ See Visions 2010 (Colombo, Government of Sri Lanka, 2001).

addressed key constraints, which required reforms, including strengthened management of public financial resources, and establishing new systems of resource allocations, including in the MoH.

Finally, over the last several years there has been an ongoing dialogue between the Sri Lankan government and the international community via the development of a poverty reduction strategy paper known as the PRSP. This dialogue has noted a number of health policy issues generally, but specifically targeted reform proposals to alter health financing, with better efforts to mobilise and manage financial resources in both the public and private sectors. It recommended the introduction of performance-based budgeting within the public health sector, the development of a medium-term budget framework, improving the targeting of subsidies to the poor, reducing the regional disparities in per capita public outlays, and increasing real public outlays for health to 8% to 10% of total government spending (equal to 2% to 2.5% of GDP).

Summary of Health Financing Policy

In summary, all policy reviews thought that it would be important for the future financial vitality of health care delivery systems to find new mechanisms for resource mobilisation, especially by employing some form of social health insurance. Further, most observers have thought that relationships between the public and private sectors made any assessment of financing options more complicated, as many private providers also worked within the public sector. Most thought the public sector operates relatively efficiently, but there were calls to review and assess the empirical evidence of those making that claim. Further autonomy of facility management and more decentralisation of decision-making have been advocated to improve efficiency and strengthen service quality. Finally, concern about the poor was raised and various recommendations were made to ensure high equity of access and financing, and to achieve that in the near term it required greater public allocations to at least 2% to 2.5% of GDP.

(2) TRENDS IN FINANCING HEALTH CARE

Increasing Total Health Expenditure

From 1990 to 1999, the economy expanded from 0.3 billion rupees GDP to 1.1 billion rupees. During the same period, the Total Health Expenditure (THE) increased by 35 rupees for every thousand rupees increase in GDP (Figure 4.5.1).

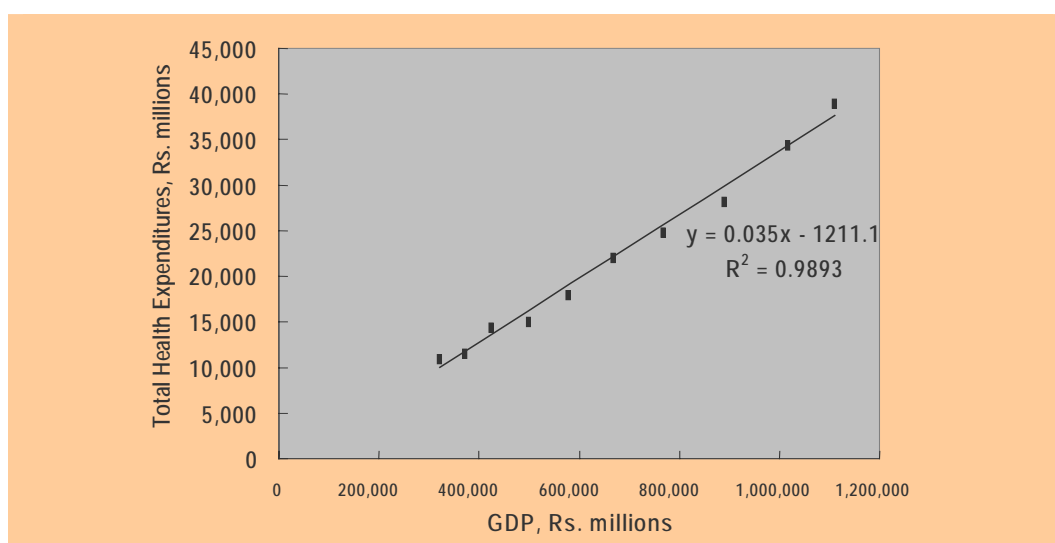


Figure 4.5.1 Direct Relationship between Total Health Expenditure and Gross Domestic Product in Sri Lanka, 1990-1999

Source: National Health Accounts, compiled by MoH-JICA Study Team

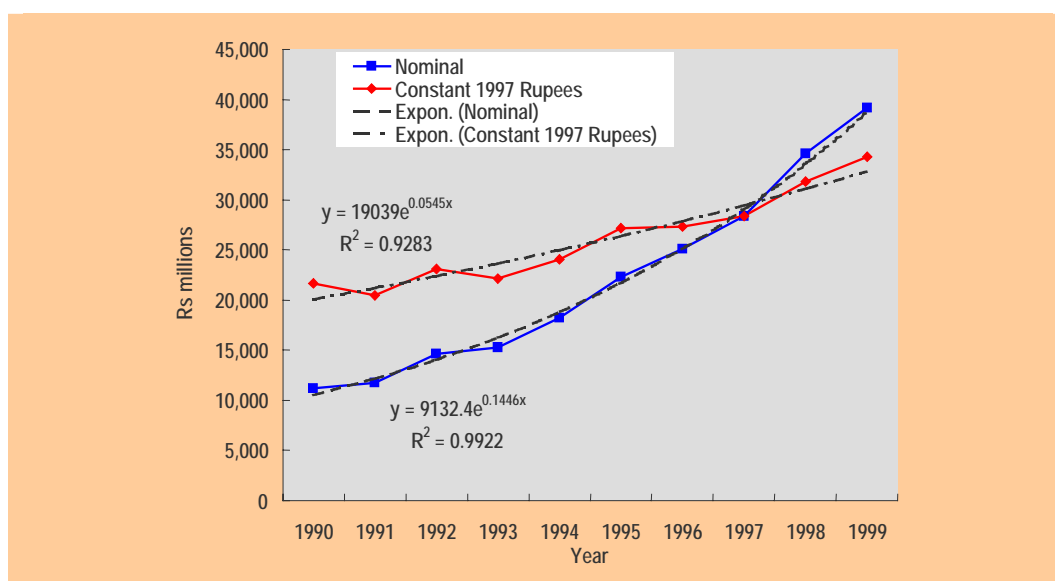


Figure 4.5.2 Trends in Total Health Expenditure: Nominal vs. Real Prices, 1990-1999

Source: National Health Accounts, compiled by MoH-JICA Study Team

The remarkable increases in health expenditure are not only due to inflation but they reflect real expansion. Figure 4.5.2 demonstrates the upward trends in both the nominal values and constant 1997 prices, though the former has faster exponential growth than the latter.

Sources of Funds: Households, Central MoH and Provincial MoH

Who has been shouldering the increases in expenditure? Based on available data from 1990-1997, it seems that the **household**, through out-of-pocket payments, has been consistently the primary financier of health expenditure (Figure 4.5.3). The other top contributors are the **central MoH** (Ministry of Health) and **provincial MoH**. Despite the decentralisation of health services in 1987, the purse of the Central MoH remains bigger than that of the provincial MoH. The combined average of the two government sources is even one percent short of the average for the share of households (Table 4.5.1). The other sources of funds to finance health expenditure were the employers, other government agencies, non-profit organisations, local governments, and insurance companies. It seems that for every 100 rupees spent for health from 1991 to 1997, the households contributed 45 rupees, central MoH 27 rupees, provincial MoH 17 rupees, employers 4 rupees, other government agencies and non-profit organisations 2 rupees each, and local governments and insurance companies 1 rupee each (Table 4.5.1).

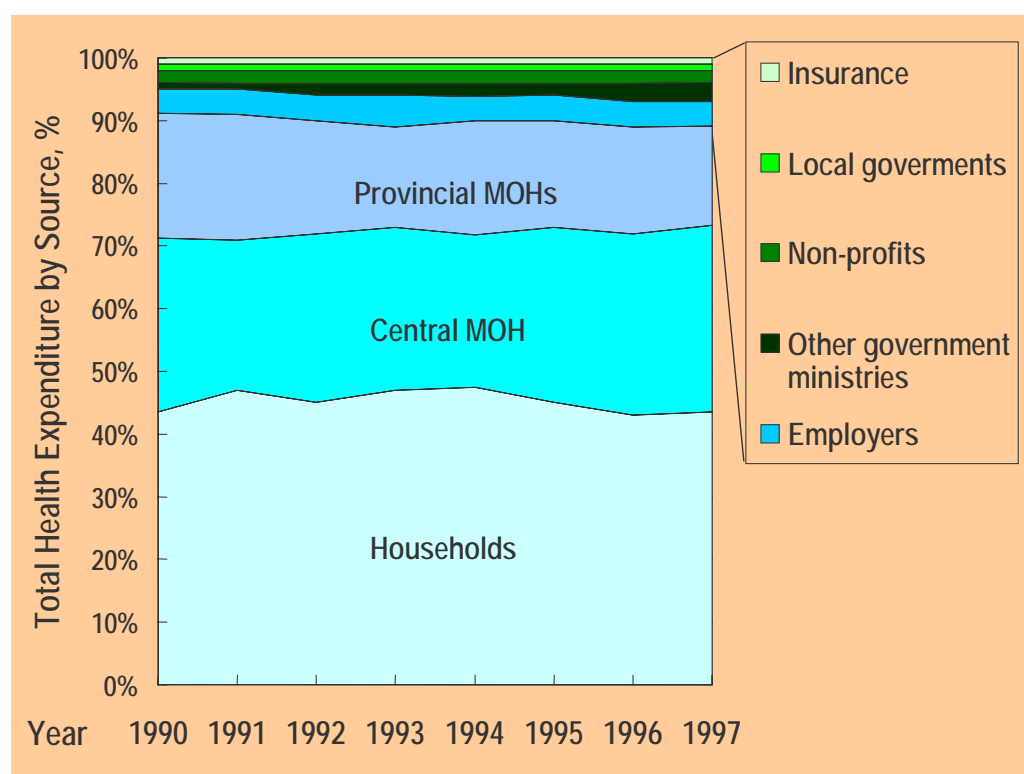


Figure 4.5.3 Trends in Total Health Expenditure by Source, 1990-1997

During the eight-year period, has the burden of financing health expenditure changed? Comparing the shares in 1991 and the average shares for the period, **three patterns** can be observed. One, the share of the provincial MoH declined by 3 percentage points and that of central MoH, by 1. Two, the **burden shifted mainly to the households** with their shares swelling from 41% to 45% of the total health expenditure and minimally to other government ministries, departments and agencies, which saw the rise in their expenditure by one percentage point. Three, the shares of the other sources of funds were essentially stable such that the average shares for the eight-year period were the same as those for 1990.

Table 4.5.1 Shares of Total Health Expenditure, 1990-1997

Source of Expenditures	Percentage of Total Health Expenditures, %			Remarks
	1991	1997	Average for 1991 to 1997	
Households	41	44	45	Increased, absolute
Central MoH	28	30	27	Decreased in terms of average but increased with respect to 1997
Provincial MoH	20	16	17	Decreased, absolute
Employer	4	4	4	No change
Other government ministries, departments & agencies	1	3	2	Increased, absolute
Non-profit organisations	2	2	2	No change
Local governments	1	1	1	No change
Insurance	1	1	1	No change

Source: IPS

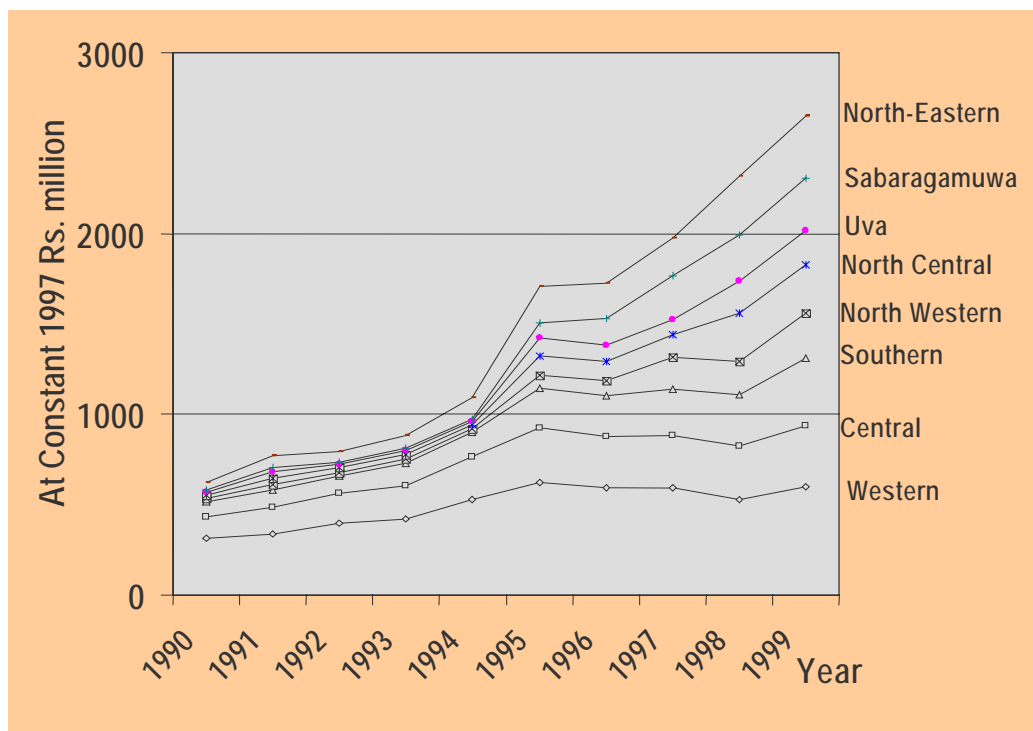


Figure 4.5.4 Trends in Per Capita Health Expenditure by Central Government at Constant 1997 Rupees, 1990-1999

Source: Sri Lanka National Health Accounts, June 2002.

Once more, despite the passage of the 13th Constitutional Amendment and the Provincial Councils Act No. 42 of 1987, the provincial authorities appear to be losing power over financial resources for health or it could also be that they themselves are investing less. The latter seems to be the case. On a per capita basis, the central government continues to increase its health investments in all provinces from 1990 to 1999 (Figure 4.5.4). On the contrary, only North-Eastern, Sabaragamuwa, Uva, and North-Central provinces have overall upward trends of health expenditures (Figure 4.5.5) while the other provinces had relatively flat trend.

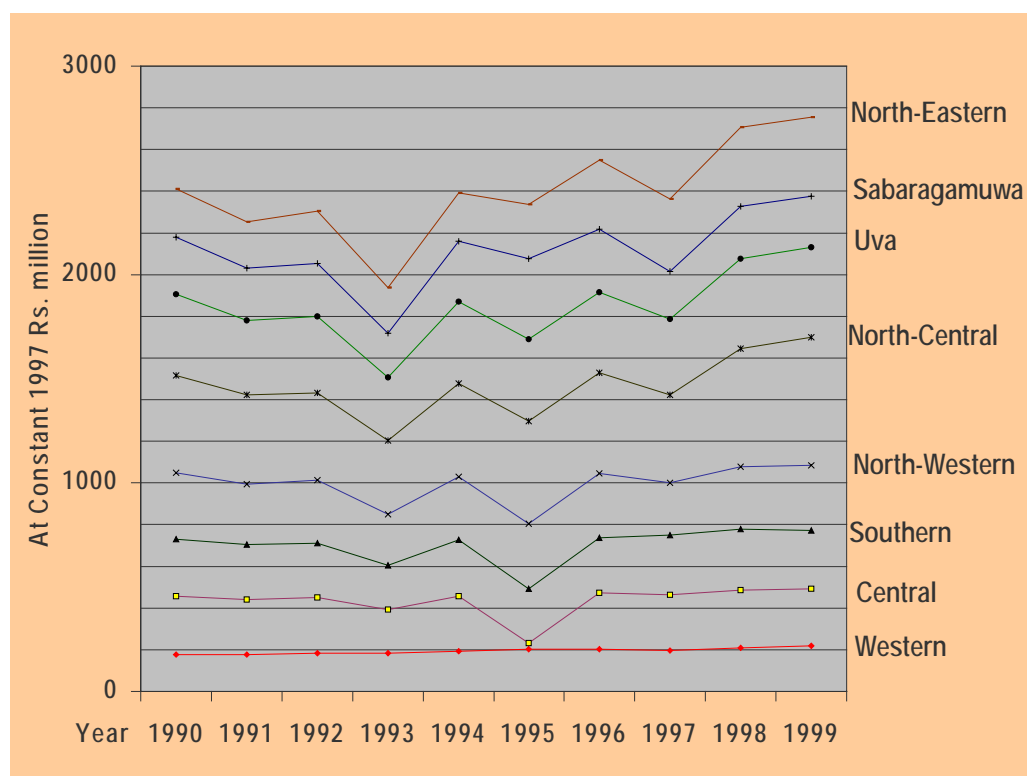


Figure 4.5.5 Trends in Per Capita Health Expenditure by Provincial Council and Local Government at Constant 1997 Rupees, 1990-1999

Source of Data: Sri Lanka National Health Accounts, June 2002.

Declining Trends in Public Financing

Since gaining its independence in 1948, Sri Lanka has been globally known for the strong performance of its health sector in achieving very high health status indicators. Few countries have surpassed Sri Lanka's achievements in reducing infant mortality and maternal mortality, and raising life expectancy to more than 70 years. At the same time, the health care system operated by the government has been gradually deteriorating as financial support has been eroding. A record low level of financial support has occurred over the last four years as the MoH share of GDP has dropped to just above 1% during this period of economic stress as the country's economy has experienced its most severe recession since its independence (Figure 4.5.6).

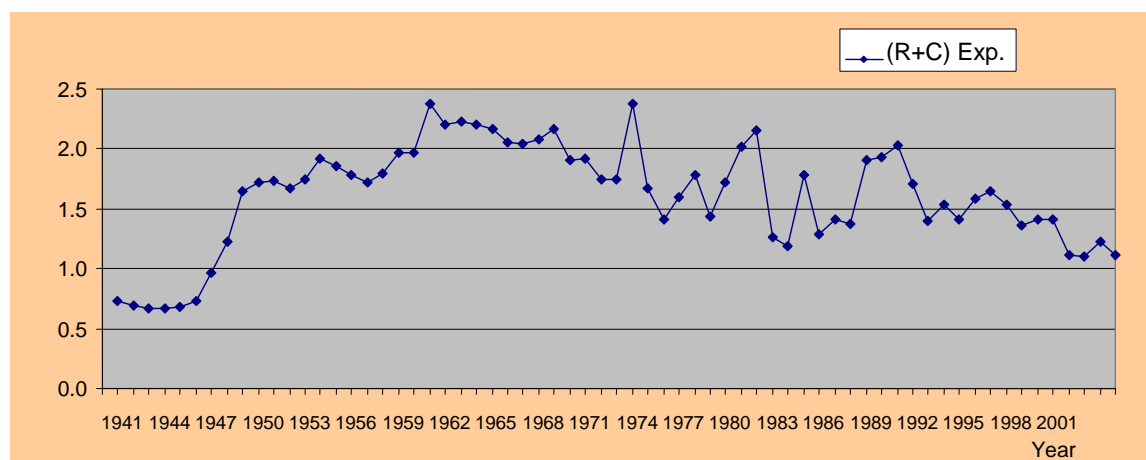


Figure 4.5.6 Trend in Government Financing of Ministry of Health Care Services Expressed as a Share of GDP, 1939-2003

Source: MOH, Data compiled by MoH-JICA Study Team

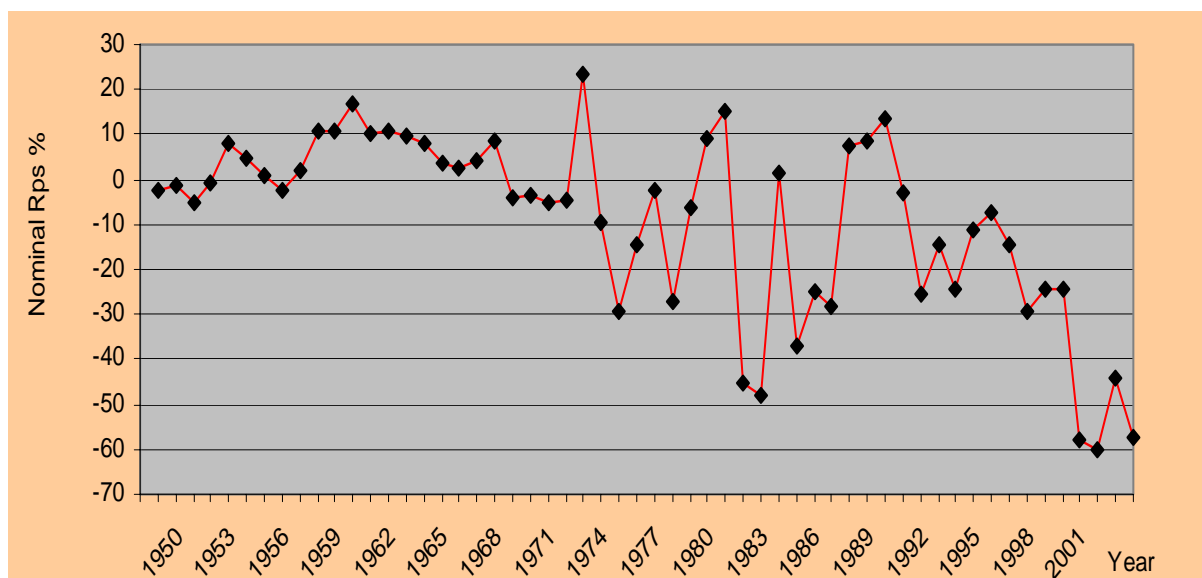


Figure 4.5.7 Public Financing Gap Expressed as a Share of Actual Expenditure. The Criteria for a Gap is Defined as the Average Share of GDP Spent by the MOH (1.76%) Over the 55 Years since Sri Lanka’s Independence, 1948-2003

Source: MoH, Data compiled by MoH-JICA Study Team

Right after Sri Lanka’s independence and through the decades of the 50s and 60s, the MoH expenditure share of GDP gradually rose from about 1.6% to over 2.0%. However, after that period of growth, lasting into the late 1960s, its share of GDP has declined year by year, and has dropped to new lows after a rather stable period of funding during the 1990s when the MoH share was around 1.4% to 1.5% of GDP. The average share over the entire independence period of 55 years has amounted to nearly 1.8% (actual = 1.76%) of GDP. During the last three-year period from 2000 to the current year, 2003, has experienced only 1.1% to 1.2% of GDP allocated to MoH programs and activities. This level of expenditure represents a financing gap relative to the historical trend over the last 55 years of nearly 60% for each year (Figure 4.5.7).

This declining trend in MoH allocations as a share of GDP is also reflected in its declining share of total government spending (Figure 4.5.8). Figure 4.5.8 shows a similar decline in the share of total government expenditures allocated to the MoH. In the early period to 1975, the government share varied between 8% and 10%. However, afterwards, it has generally declined to a current low around 4% over the last four years. The only time it reached this low level was during the beginning of the long period of civil strife, which started in 1981.

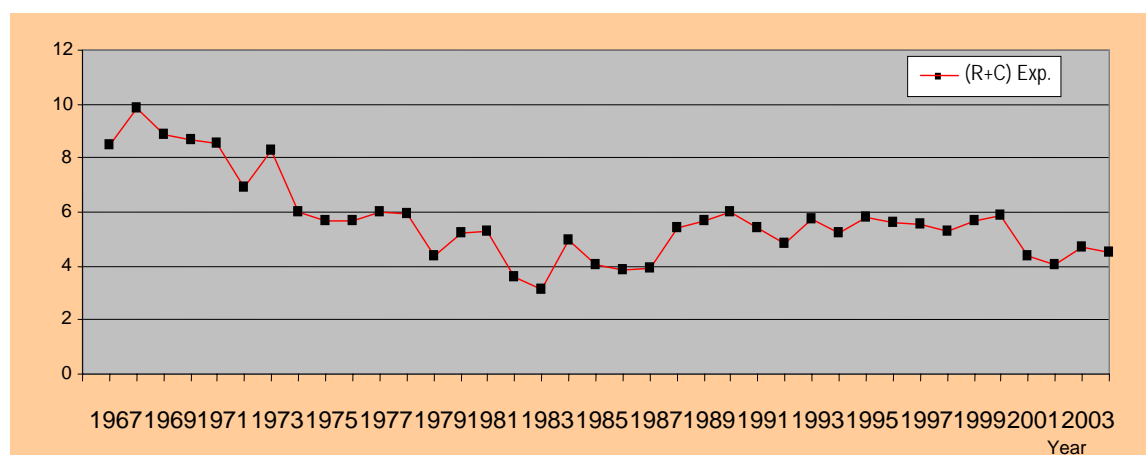


Figure 4.5.8 Trend of MoH Expenditure, Expressed as a Share of Total Government Expenditure, 1966-2003

Source: MoH, Data compiled by MoH-JICA Study Team

Given the above trends it is clear that publicly funded health care facilities and services have been systematically squeezed during the last 20 years of the 20th century. The funding gap can be expressed in various ways, but the main point is that financial resource scarcity has become a chronic health problem of the sector, and has undermined the capacity of the system to contribute to further improvements in the health status of the Sri Lankan people. This downward turn in health status indicators in the most recent period, e.g., the rise in age and sex-specific mortality rates in 1996,³⁰ relative to earlier periods reflects the seriousness of the problem.

Private Health Insurance

Private health insurance in Sri Lanka still has quite small coverage (less than 2% of the total population and 1% of the total health expenditure) but it is growing. The 1997 study by IPS (Table 4.5.2) shows that most claims, 95.9%, cover health care in the private sector. Still IPS concluded that insurers have little power even over the private provision of health care. It also concluded that, in addition to oversupply of services, there is evidence of cost-escalation in the insured market, especially rapid increases in fees for those with private health insurance coverage.

Table 4.5.2 Utilisation by Type of Provider for Insured Patients

Provide Type	Percentage of Total Claims		
	Outpatient Claims (%)	Inpatient Claims (%)	All Claims (%)
Government Hospital	1.0	7.4	4.1
Private Hospital	32.7	91.4	60.5
Private Dispensary	38.7		20.4
Private Doctor	21.1		11.1
Ayurvedic Hospital	0.0	0.9	0.4
Ayurvedic Doctor	0.5		0.3
Other	1.7		0.9
Pharmacy	4.2		2.2
Foreign Hospital	0.0	0.2	0.1
Total	100.0	100.0	100.0

Source: IPS

³⁰ Annual Health Bulletin 2000, (Colombo: MoH, 2002).

Community-Based Health Care Financing in Sri Lanka

In Sri Lanka, as described previously, the funding mechanism in health sector has been limited to taxed-based health care financing and “out-of-pocket” financing. Private insurance is not widely used among the population. However, in a review of rural credit institutional data, it was found that there are between 30,000 and 35,000 such societies throughout the country many of which finance health care to their members.

This review included information from the Annual Reports of the Central Bureau of Statistics, the 45th Annual Report of the organisation known as Sarvodaya and documents and reports from the organisation known as YASIRU (The All Ceylon Community Development Council (ACCDC) Mutual Provident Society). An interview with the chief executive of YASIRU, Mr Sunil Silva, has confirmed a rapidly growing provident mutual fund health and welfare insurance program with death, disability and hospital benefits for its members.

1) Membership and Organisation

The YASIRU Mutual Provident fund was established in 1997. By 2000, it had grown to nearly 7,000 members residing in three districts. By mid-March 2003, the fund has enrolled more than 100,000 individual members in at least seven districts via the Community Benefit Organisations (CBOs) generally known as death/funeral societies. Since its beginning in 1997, YASIRU via ACCDC has operated as a reinsurance entity for qualified CBO funeral societies with the financial backing of a Dutch firm known as Interpolis RE, affiliated with the Rabobank group. People can only become a member in the YASIRU Mutual Provident Fund by being a member of a qualified and enrolled CBO funeral society. Each of these societies is organised at the village level and often have between 60 and 100 members, depending on location.

Members of the qualified CBOs, which can join the hospital, disability and death components of the YASIRU scheme, are above the age of 18 and below 65 years. They can enrol their dependents, including husband, wife, son, daughter, brother, sister, mother, father, cousin, niece, nephew, uncle or aunt.

Finally, if a person obtains “regular employment” they must forgo their membership, as the program is only designed for the poorest subset of the population.

2) Premiums/Payment and benefits

Individual members can enrol at varying levels of payment and related benefits. This feature enables individual persons and households to decide what they can afford and what they would like to obtain as benefits. Currently the options are from Rs.10 per month, or Rs.120 per year to Rs.100 per month, or 1200 per year.

Inpatient care is the only health benefit in this scheme at present, although other health care services are being looked into as well. Thus, the hospital benefit of the member or his/her dependent can be as low as Rs.30 per day for 30 days (total of Rs.900), to as high as Rs.300 per day for 30 days (total of Rs.9,000) each year for one inpatient stay per year. If a person is disabled due to an auto accident or a fall, he/she can also qualify for a disability payment based on the degree of disability, with the minimum payment being Rs.12,000 and the maximum Rs.120,000 .

3) Provider Payment

Providers can be paid directly by patients who then get reimbursed by documenting their claim and processing it with the local office of YASIRU. That office sends it through the district and zone (nearly equivalent to a province) to the headquarters located in southern Colombo where it is reviewed for accuracy and completeness. Medical authorization at the provincial level is also required to certify the accuracy of the claim. Alternatively, occasionally hospitals are reimbursed directly by the YASIRU office.

4) Backing of the Scheme by an International Reinsurance Entity

The unique feature of this community-based health care fund system is the financial back-up from an international reinsurance entity, known as Interpolis RE. Interpolis provided ACCDC with technical assistance to develop and implement a claims processing function. All the information of individual data and claims are computerized and is electronically sent to Interpolis in the Netherlands. Interpolis experts regularly come to Colombo to discuss how the system is working and how societies with which it is affiliated are working, as well as developing new insurance products it might offer in the future.

5) A Possible Future Prospect

YASIRU is close to finalizing an arrangement with several large CBO groups, which will significantly expand its membership base. Most notably, the Sarvodaya NGO organisation of village-based development and micro credit organisations will be entering into an agreement with YASIRU that will extend membership to about 350,000 of its current members. YASIRU has also held extensive discussions with a consortium of NGOs operating in the North-East area of the country which will bring a number of other small funeral societies and micro-credit groups with at least 30,000 members into the YASIRU.

The future looks bright for this fund and it looks like a very intriguing program that warrants the international community's support.

Facility-Based Strategies to Generate Resources

The management of hospitals has not been duly emphasized in the health system because it was not necessary to give it much priority within a historical budgeting system. However, hospital directors who participated in the Study planning workshops expressed the need for them to be given more authority to perform their new devolved roles and responsibilities. When it comes to mobilising resources for health, some hospitals have actually engaged in one form or the other.

A survey commissioned by JICA on resource generation and financial management was carried out in 2002³¹ by the Institute of Policy Studies Sri Lanka. The survey identified three broad mechanisms of revenue generation at the level of the government health institutions. They are:

- Charging of user fees for all or selected patient services;
- Donation in money or kind to the institutions by households, enterprises and non-profit agencies; and
- Generation of income from non-patient treatment activities.

³¹ JICA - MoH Survey No. 4.1(Supporting Document II)

Government health services have levied user fees for patient services in some form or other, since the inception of public sector medical provision in the 19th Century. In the first half of the 20th Century, user fees were chargeable for all patient services, but in order to protect the poor, they were exempt from all charges. By the 1940s, the principle of free treatment for the poor had been established, with all those earning less than Rs.50 per month entitled to free treatment. Above this income level, user fees were chargeable in two bands, depending on the income of the individual. However, as noted by the Commission on Social Services (1947), in practice very few patients paid any charges. Other than the fact less than 5% of the rural population at that time earned more than Rs.50 per month, the administrative machinery did not exist in government facilities to check patients' income, so government health institutions relied on self-reporting of income. It was and almost certainly remains the case today that the cost of establishing such administrative machinery to reliably identify richer patients without mistakenly labelling poor patients as wealthy would be greater than the gross revenues that might be generated. It is argued that there is no reliable system of assessing an individual's income today than it was fifty years ago. Less than 0.4% of the population was registered as personal income taxpayers in 2001, when the level of income eligible for taxation was no higher in relation to average income than the qualifying income level for user fees was in 1948.

The system of means-tested user fees was abandoned by the UNP government in 1950, without any substantial loss in revenues for the state. A flat-rate system of user fees for all outpatients was then introduced by the Marxist finance minister of the United Front government in 1971. Although the fee was a token 25 cents and inpatients were exempted, this policy discouraged patient utilisation, which fell 30% at MoH facilities. This substantial reduction in service output was, however, associated with only a 2% gross cost-recovery rate, so it is apparent that the negative impacts of the policy far outweighed the financial benefits. The political costs were also considerable, with the policy being used against the government in the subsequent general elections. In 1977, the returning UNP administration again abolished the user fee system (Rannan-Eliya and Mel, 1997) again without any significant financial cost. Public opinion surveys since the mid-1990s have repeatedly demonstrated that a significant and increasing percentage of the public continue to oppose user charges for general services at government facilities (Table 4.5.3).

Table 4.5.3 Trends in Public Opposition to User Fees at Government Hospitals

User fee option	Number of respondents in 1996	Number of respondents in 2001	Percentage of respondents disapproving, 1996	Percentage of respondents disapproving 2001
Fees for medicine	2,250	1892	79.8	85.7
Fees for doctor's consultation	2,247	1886	84.4	91.5
Fees for inpatient treatment	2,244	1881	87.4	90.3

Sources: Survey conducted nationwide (excepting Northern and parts of Eastern provinces), by Research International on behalf of IPS. JICA - MoH Survey No. 4

In the absence of standard user charges (with the exception of charges for family planning commodities), the only source of patient fees is from pay-beds. Paying wards have been found in government hospitals since the end of the 19th Century (Uragoda, 1987). Unlike the normal wards, admission to these beds is by choice, and requires the approval of a consultant and the hospital director. In general, these beds have been located in higher-level, urban hospitals, and their total number has been declining over time. Since use of these beds is voluntary, they in theory offer a mechanism for price differentiation, with self-targeting of user fees, whilst protecting the genuinely poor (de Silva et al. 1997). Revenues from this source, however, have remained small.

There were several other fund raising mechanisms by public sector hospitals, leaving aside pay-beds. During the survey, it was noted that funds were generated by hospitals in 2001 through donations from individuals, charity organisation, non-governmental organisations, and voluntary payments by patients. Donations were most likely in kind, such as hospital furniture, goods, consumables, drugs, equipment, patients' special diets, and services (e.g., painting of wards and buildings), because hospitals do not accept cash donations.

It was also noted that in addition to donations health institutions also generated funds through non-patient services. A few important sources of such funds are listed below:

1) Funds collected through hospital-affiliated organisations

The important sources of additional funds include Hospital Committees, Hospital Development Committee, Seva Vanitha, Welfare Societies (mainly from renting out of building for hospital cafeteria), trusts for Specific Purposes (e.g., NSU Trust of the National Hospital, Suba Sara Fund of the Horana Base Hospital).

2) Commercial Establishments

Many hospitals have links with garment factories, banks, tourist hotels, etc. On specific occasions, these establishments provide goods and services to the hospital as a token of appreciation. Some pharmaceutical companies sponsor training programmes, and donate books, stationary and brochures. Much of this depends on the head of institution to reach out to such organisations.

3) Leasing out space and buildings to commercial organisations (e.g., banks)

This mechanism, which maximises returns from the Ministry of Health estate, is not systematically encouraged.

4) Foreign funds channelled through local agencies

Some hospitals have received donations of ambulances, specialised units, wards and equipment through such agencies.

The survey³² concluded with the following recommendations with regard to resource generation at government health institutions. One, there is potential for additional resources to be raised at the facility level from donations, better management of hospital estate, and commercial exploitation of tangible and intangible assets. However, none of these mechanisms is likely to become a substantial source of revenue. In certain instances, they will have a significant impact on individual facilities, but not all facilities have the resources or the opportunities to benefit equally from these opportunities. Extensive reliance on these mechanisms will need to be accompanied by safeguards to ensure that equity between richer and poorer areas is not negatively impacted.

Two, the MoH can and should support efforts to exploit these opportunities. It should provide more systematic guidance to hospital directors on the various opportunities, review administrative procedures to facilitate those which are beneficial, provide specific training to directors in managing these mechanisms, and disseminate knowledge on successful experiences and best practices within the service.

Three, there is potential for continuous savings to be made in the routine operations of hospital services. For the most part these will rely on improving the general quality of management and administration. Without substantial improvements in management capacity, managerial autonomy at the facility cannot be enhanced, and this will be critical for substantial and sustained improvements in productivity, which rely on exercise of management discretion and initiative. Substantial improvements in this area will require substantial new investment in training existing and new staff, investment in support services

³² JICA - MoH Survey No. 4.1

such as IT facilities and administrative staff, and review of existing government financial and administrative regulations.

Four, in the long-term, increased autonomy of management at the facility level is desirable in order to support improvements in productivity and resource use. However, this will conflict with parallel moves to political decentralisation and devolution of authority to provincial council level. The Ministry needs to develop a more coherent strategy for thinking about and dealing with autonomy for front-line managers in a context of political decentralisation. To the extent that the central ministry can do so, it should seek to develop national policies, which set standards for all public sector facilities at the provincial level, in the areas of financial and management audit, human resources deployment, procurement and maintenance, and estates management.

Five, there is no new evidence to indicate that user charges, either for routine services or for selective paying-bed services, can provide significant new resources to subsidize the provision of services for the poor. All current services in this area continue to represent poor value for money, because they raise less revenues than the costs involved in delivering them, and in so doing worsen the ability of MoH to target its expenditures on the poor.

(3) PUBLIC ALLOCATIONS

In this section, the allocation of financial resources for health is analysed. Two components need to be examined: Administrative Resource Allocation and Service-based Resource Allocation.

Administrative Resource Allocation

Since 1992, provinces have received a share of these revenues to be spent on their public services according to specifications of the grants. The problems with this revenue sharing are multiple: a decreasing share goes to provinces, allocation and actual release are significantly different, mechanisms for equity in the share have been insufficient, and the poorest provinces have had to raise most of the necessary funds locally. Since 1992, the shares of the total revenue that were allocated to the provinces have been minimal and hovering between 9.9% and 10.2%.

Of total government health expenditures in 1999, 41% were allocated to central government (teaching) hospitals and 27% to provincial and district hospitals. Expenditures in provincial hospitals as a percentage of total government hospital spending have shown a downturn throughout the nineties, decreasing from 40% to 31% at the end of the decade.

Table 4.5.4 shows that there is a significant difference between the amounts requested, recommended and actually released by the Treasury. In the late 1990s, Treasury disbursements were about 75% of the provincial councils' requests, which indicates that the central Treasury has also a cash flow problem that disturbs both central spending and provincial spending of public funds. For example, only a trickle of funds has been released for capital expenditures in recent years and since 2002, the government has imposed a freeze on capital expenditures.

Table 4.5.4 Amount of Grants Requested, Recommended and Released, 1996-1998 (Rs.Million)

	1996	1997	1998
Amounts requested by Provincial Council	23,207	25,108	27,481
Amounts recommended by Finance Commission	21,493	23,602	25,397
Amounts released by Treasury	17,193	18,347	20,594

Source: Finance Commission

Table 4.5.5 Criteria-Based Grants Per Head/Provincial Population 1997 and Per Capita/Provincial GDP 1998

Province	1997 Criteria based grants Rs.Million	Per Head/Provincial Population Rs.	1998 Criteria based grants Rs.Million	Per Capita/Provincial GDP Rs.'000
Western	254	53	254	91.6
Central	166	71	166	47.8
Southern	177	73	177	41.1
North Eastern	165	60	139	23.8
North Western	138	63	142	48.3
North Central	75	66	75	57.4
Uva	61	53	79	45.9
Sabaragamuwa	131	73	131	42.6
Total	1,167	63	1,163	54.6

Source: Compiled from Ministry of Provincial Councils & local government data

The provinces' block grants represent more than 90% of the transfers. These block grants are "needs oriented" being the difference between the estimated recurrent expenditure and the estimated revenue collection of the Province. Provinces receive quite unequal grants whether looked at in total or per capita; they also have very unequal per capita income (Table 4.5.5). In 1998, Western and North-Eastern Provinces received the most and least block grants, respectively. When it comes to health expenditure, though, the reverse is true. The central government, provincial council and local government spent the least on a per capita basis in Western Province and the most in North-Eastern Province (Table 4.5.4 and Table 4.5.5).

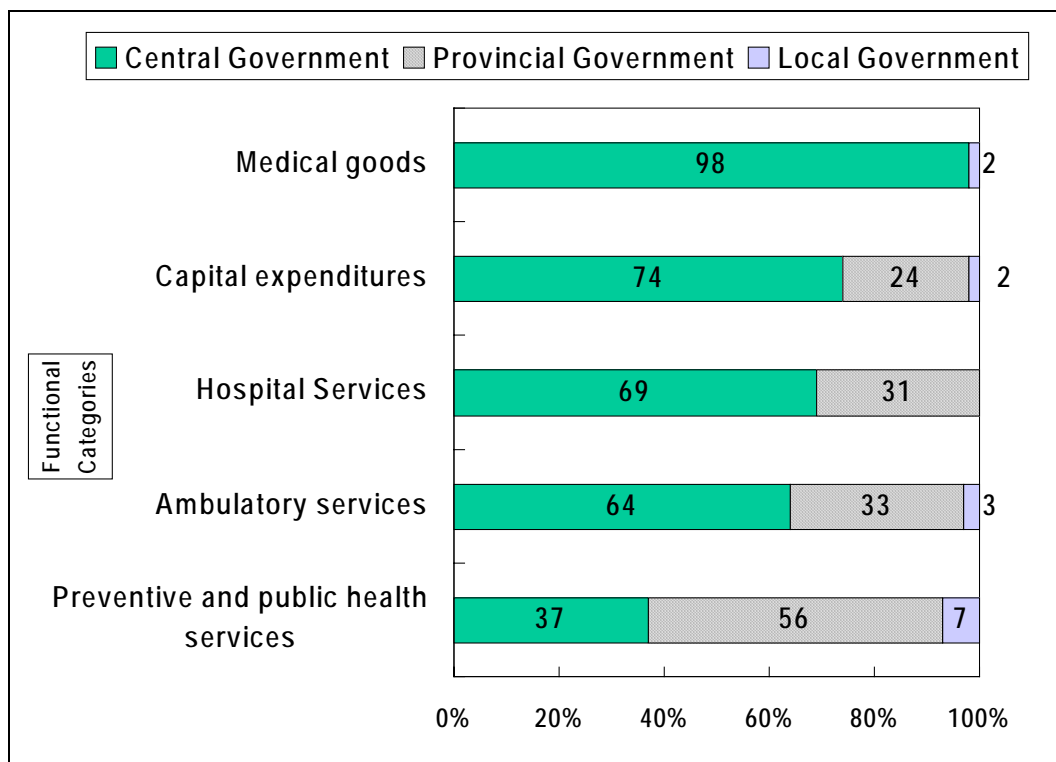


Figure 4.5.9 Relative Share of Funding by Central, Provincial and Local Governments of Selected Functional Categories in 1997

Source: Compiled from Ministry of Provincial Councils & local government data

By functional categories, how have the money for health been used (Figure 4.5.9)? By virtue of the 13th Constitutional Amendment, the central MoH retains the major responsibility of drug management. As such, it accounts for 98% of the 1997 expenditure for drugs. The remaining 2% was on emergency purchases by provincial or institutional authorities. In 2002, the amount requested by the MoH for drugs and medical consumables had risen to 17% (Rs.4.8 billion) of total government health allocations.

While capital expenditure, hospital services and ambulatory services were mainly financed by central government, preventive and other public health services were shouldered by provincial government. The local government’s share was highest for preventive services. Expenses for hospitals were shared only between the central and provincial governments because there is no hospital under the responsibility of local government.

Service-Based Resource Allocation

To assess the potential for new breakthroughs in health status indices, it is also useful to review the trend in allocating public resources to identifiable public health prevention and promotion programs. While the data do not reveal the entire expenditure on prevention and promotion, the fact that the available information shows a significant decline in the share of prevention and promotion expenditures relative to total MoH expenditures is unmistakable (see Figure 4.5.10).

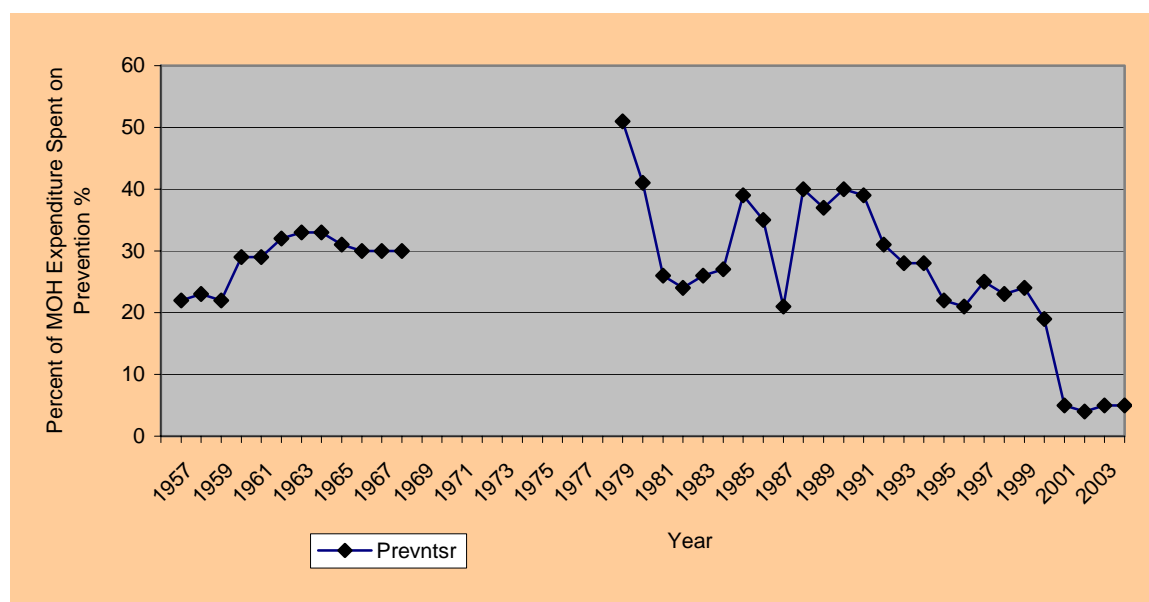


Figure 4.5.10 Share of MoH Expenditure Spent on Identifiable Preventive Health Programs 1956-2003, Excluding 1968-1977

Source: MOH, Data compiled by MoH-JICA Study Team

Where available, these data show a significant decline in public expenditures for prevention or promotion, from between 20% to 30% over many years during the period since 1957. During the 1990s, about 10% to 12% of total health expenditures (private and public) were spent on prevention. Given that the public share of total health expenditures was around 50% of the total in that period, the prevention share of MoH expenditures was about 20%. This share has now plummeted to around 5%, implying a virtual lack of any preventive programs operating at all. Health status gains are not occurring as well. This is especially alarming as the epidemic of non-communicable diseases is gaining momentum in the population (Section 8.2).

(4) PRIVATE ALLOCATION

The total spent on health in the private sector was estimated to be equal to that of the Government service, at Rs.14.3 billion in 1997 rising to around Rs.30 billion in 2002. This fast rate of increase is attributed to several factors: 1) the trend towards private health care by people who can afford it; 2) the growth in private health insurance coverage, particularly low-cost/low benefits types; 3) the rise of new private hospitals; 4) branded drugs prescriptions; and 5) lack of restrictions or price controls on imports of drugs and consumables mostly for the private market.

While the public sector accounted for more than 80% of the expenditure for hospital services, preventive and other public health services, and capital expenditure, the private sector was responsible for 95% of the expenses for medicines and 61% for ambulatory services (Table 4.5.6). Considering that the overall patient load of the private sector is smaller than that of the public sector for both OPD (Table 3.6.1) and IPD, the substantial difference in expenses for drugs could be explained by the higher cost of prescriptions because of the use of branded products in the private sector (Section 5.2). It could also be due to more medicines, including vitamins, being prescribed to private patients; although, this has not been scientifically documented.

Table 4.5.6 Relative Share of Funding by Public and Private Expenditure to Selected Functional Categories in 1997

Functional Category	Public	Private
Hospital services	81%	19%
Preventive and public health services	87%	13%
Capital expenditure	99%	1%
Medical goods dispensed	5%	95%
Ambulatory services	39%	61%

Source: IPS

(5) BUDGET, ACCOUNTING AND AUDITING SYSTEMS

All hospitals have to abide by the Government Tender Procedures. Heads of decentralised units have the authority to incur expenditure between Rs.20,000/- to Rs.2,000,000/- through the local Tender Board, which consists of the Director of the hospital, and the Administrative Officer or Accountant. For specific major expenses, such as major improvement to buildings and purchasing of equipment, the limit is Rs.2,000,000, if the approval of the Technical Evaluation Committee is obtained.

In practice, almost all equipment and specific items are purchased according to the specifications prepared by Biomedical Engineering Services and other technical experts. All teaching hospitals and some general hospitals, all of which fall under the authority of the central government, function as decentralised units, with clearly defined budgets. Other hospitals come under the financial control and authority of the Provincial Councils. This second category of provincial institutions generally has less administrative and managerial autonomy and responsibility than the institutions run by the central government; and none have separately assigned budgets. The Government provides all decentralised institutions with funds for capital and recurrent expenditure through the health ministry vote. There is an Accountant and a Finance Division to manage the funds in decentralised units.

Most of the hospitals do not have a formal corporate plan. However, by April of each year, these organisations should prepare their annual financial estimates for the following year. Financial estimates are for expenditure only; sources of revenue are not indicated. Funds are allocated by the health ministry based on these estimates, and in practice, allocations to individual institutes are mostly based on historical budgets. The central administration does not make use of this budgetary information for effective decision-making; rather, financial estimates are used as rough guidance for expenditure control only. Expenditure control is exercised through the Financial Regulations and circulars issued by the Ministry of Health.

Shifting to Zero-Base Budgeting

Parliamentary control of public expenditure is an essential attribute of parliamentary democracy, under Chapter XVII of the present constitution. The parliament has full control of public finance. All revenues and receipts should be charged to the consolidated fund.

The budget of the Ministry of Health is prepared by two sections. The recurrent budget is prepared by the finance division. The capital budget is prepared by the Management Development & Planning Unit (MDPU). A consolidated budget is submitted to the treasury. The MDPU submits the capital budget to the National Planning Department of the General Treasury with a copy to the finance division. After reviewing the budget, the National Planning Department submits the budget with their recommendations to the Budget Department of the General Treasury.

According to the National Budget Circular No. 97, dated 11th of March 2002, the government has decided to introduce certain elements of the zero-base approach in the preparation of budgets for Ministries, Provincial Councils and Departments. The approach of zero-base budgeting requires that all the functions of an organisation should be re-evaluated at periodic intervals. The main advantage of the approach of zero-base budgeting is that unlike input-based incremental budgeting, it does not assume that the current allocation of resources is still necessarily appropriate.

The approach of zero-base budgeting will be adopted immediately through a comprehensive review of public expenditure. The review will include the following activities:

- 1) Review of missions, objectives and functions of Ministries/Provincial Councils and Departments and statutory boards to assess their relevance in the current context and to identify to relevant activities, duplications and gaps;
- 2) Review of the expenditure programmes of Ministries provincial Councils and Departments and statutory Boards in relation to objectives;
- 3) Prioritisation of the expenditure programmes according to the government objectives and identification of irrelevant or low priority activities that can be eliminated; and
- 4) Preparation of restructuring plans where necessary.

Being a new approach, the zero-base budgeting system has yet to build the capacities of its implementers and develop the system to generate the information for evaluating the appropriateness of the budget.

Accounting System

The accounting system encompasses stages from a voucher to the preparation of the Annual finance accounts and appropriation accounts, which are audited and certified by the Auditor General and laid in parliament. This is a constitutional requirement and an instrument to ensure parliamentary fiscal control. All accounting units of teaching hospitals and main decentralised units coming under line ministry, such as family health bureau, blood bank, malaria control programme, are headed by accountants. Monthly account is submitted to the Ministry of Health by the decentralised financial units (teaching hospitals, family health bureau, malaria campaign, etc). The Ministry of Health compiles monthly accounts and submits a report to the Treasury.

During the past few years, significant improvement in the accounting system has been achieved through the introduction of the Computerised Integrated Government Accounting System (CIGAS) and Payroll System. The treasury introduced two computer packages for payment activities and payment of salaries. The CIGAS facilitates activities related to bank reconciliation, writing of cheques and payroll activities. It enables the accounting units to provide accurate monthly accounts without any delay. Being in the pilot-testing stage, its weaknesses are being monitored through regular dialogue with end-users – the accountants.

Auditing System

The Auditor General is empowered by the constitution to audit the account of the Ministry Department covering all decentralised units. Accordingly, branches of the Audit General Department have been established in the Ministry and the National Hospital. The auditors submit their report to the Auditor General and then to the Parliament. The Parliament also appoints a committee on public accounts with a chairman and members from both the government party as well as the opposition. This committee is empowered to summon the Chief Accounting Officer (Secretary to the Ministry of Health) and Accounting Officer (Director-General of Health Services) should their presence be required owing to some questions raised by the Auditor General in his reports. This implies that the Parliament, through its representative body, the OPA, examines critically all cases of financial irregularity or unauthorised excess on the financial provision allowed by Parliament in the Budget Estimates.

The Internal Audit Unit is set up to assist the chief accounting officer in accordance with financial regulations 133 and 134. A typical internal audit party is headed by a senior accountant; it includes a senior staff. The scope of activities of internal audit covers all categories of pay and accounts offices, and further examinations referred by the secretary. The internal audit checks initial records in pay and accounts offices and the drawing and disbursement officers to verify that rules, regulations, systems and procedures as laid down in various codes and manuals are being followed. All accounts records relating to fund accounts loans advances and records of physical verification of stores equipment tools and plants are checked. Internal Audit seeks to ensure correctness in accounts keeping and efficiency in the operation of the accounting organisation.

One of the auditing activities that need to be given more attention is the value for money audit (VMA). The VMA look at the output and input of the MoH in monetary terms.

(6) SUMMARY AND CONCLUSIONS

The publicly owned and operated health care delivery system is suffering from a long-standing chronic under-financing problem, which has become more acute during the last four years. The delivery system is stressed out to deliver high technology inpatient care for an increasing share of the population over 55 years of age, as well as providing a widely accessible primary health care package of care, which contributed to the high health status experienced throughout the country in 2002.

As the share of GDP has declined, service delivery has increasingly focused on preserving the inpatient services located in the large provincial and national teaching hospitals throughout the country. It has been found by conducting various statistical analyses that, as the MoH expenditure share of GDP has declined, the ratio of the number of OPD visits per inpatient stays declined. This finding suggests that the core priority of the health care system is to preserve its clinical inpatient care focus when times are financially rough. A more outward looking health care system exists only when its core mission is not financially threatened.

Greater resource mobilisation, better allocation and more effective financial management systems need to be a priority of the government to ensure the financial sustainability of programs, which can yield health status gains through prevention and promotion. The NCD epidemic will require a new strategy for prevention that will be realised in the decade ahead, and without public resource mobilisation and allocation to financially support these programs. Sri Lanka is at a crossroad.