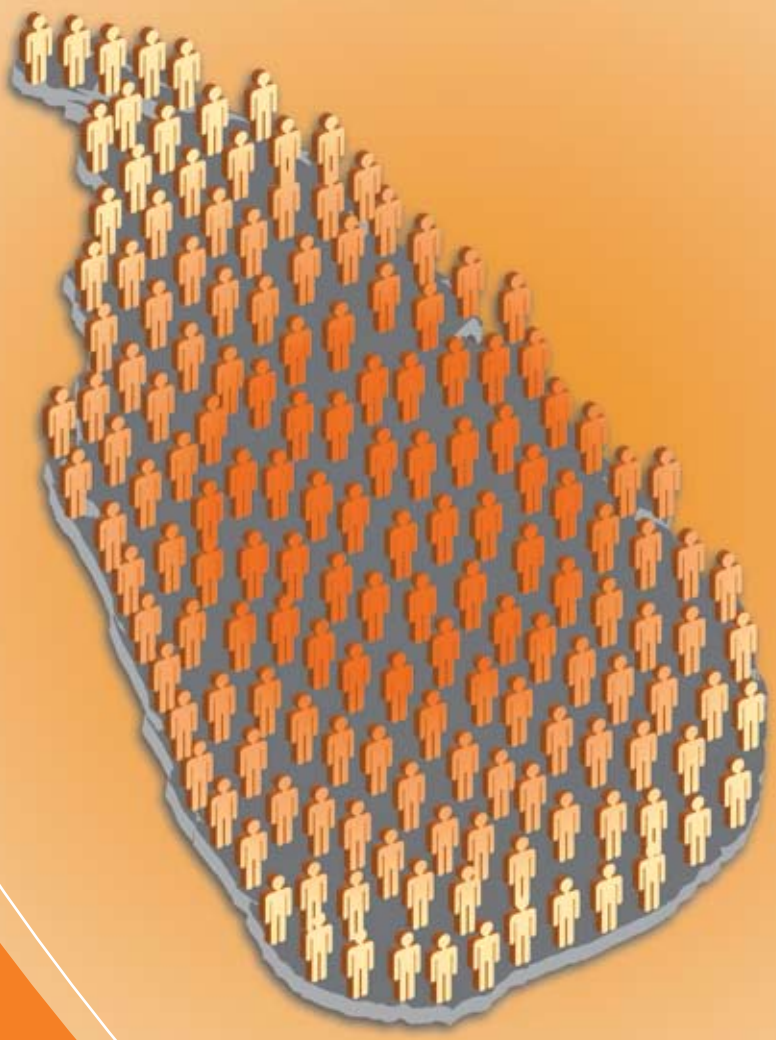
Sri Lanka: "Good Practice" in Expanding Health Care Coverage



Ravi P. Rannan-Eliya
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Research Studies Series 3

IHP
INSTITUTE FOR HEALTH POLICY

Sri Lanka: "Good Practice" in Expanding Health Care Coverage

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2009

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[ISBN-13, ISBN-10, and CIP data]

National Library of Sri Lanka – Cataloguing in Publication Data

Rannan-Eliya, Ravi P.
Sri Lanka: "Good Practice" in Expanding Health Care Coverage / Ravi P. Rannan-Eliya and Lankani Sikurajapathy.
Colombo: Institute for Health Policy, 2009. 38p: ill ; 29.7cm

ISBN 978-955-1707-06-4

i. 362.1072 DDC 21 ii. Title
iii. Sikurajapathy, Lankani - jt. au
1. Health care - research 2. Health care - Sri Lanka

Suggested Citation:
Rannan-Eliya, Ravi P., and Lankani Sikurajapathy. 2008. Sri Lanka: "Good Practice" in Expanding Health Care Coverage." Research Studies Series, Number 3, Colombo, Institute for Health Policy.

Institute for Health Policy

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About the Author

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Acknowledgements

Any opinions expressed, or recommendations made in this report are those of the authors alone, and not necessarily those of the Institute for Health Policy or the World Bank. The editing of the first draft by Neluka Silva is gratefully acknowledged.

Foreword

With health at the center of global development policy, developing countries and the international community are focused on scaling up health systems, in line with the Millennium Development Goals (MDGs). As a result, both global aid and individual country health reform plans are trained on improving health outcomes, securing financial protection against impoverishment, and ensuring long-term, sustainable financing to support these gains. However, despite the scaling up of aid, both countries and donors have begun to appreciate that money alone will not be sufficient, and that many of the most successful health performers have managed with minimal financial resources.

How these good health performers have achieved their success has remained unclear and lacking in consensus. Recognizing this, the World Bank undertook a major global study of countries that are considered to have been exceptional successes. Success in this respect was defined as demonstrated "good performance" in expanding their populations' access to healthcare coverage, and in improving health status and protecting against catastrophic medical expenses. Good performance included average or better-than-average population health outcomes relative to resources devoted to health and to national income and educational levels.

Among the low- and middle-income countries that were determined by the World Bank to be in the process of achieving high levels of population coverage and financial protection, nine were selected as examples of good performance by an expert steering committee representing all six World Bank Regions. They are Chile, Colombia, Costa Rica, Estonia, the Kyrgyz Republic, Sri Lanka, Thailand, Tunisia, and Vietnam. Each of these countries were then studied using a case-study approach, anchored in a systematic comparative framework that was designed to identify common factors and explanations.

The Sri Lanka case of the World Bank study was carried out by the Institute for Health Policy, and published together with the other country cases in "Good Practices in Health Financing: Lessons from reforms in low- and middle-income countries", published by the World Bank in 2008. With the kind permission of the World Bank, it is reproduced here in this monograph for the benefit of readers who have a specific interest in Sri Lanka.

Amongst the nine case studies, Sri Lanka stands out as the most successful example of a healthcare system where government intervention has relied largely on tax-financing and direct government delivery. The reasons for this are explored further in the pages that follow. It is hoped that readers in Sri Lanka will be better appreciate why the Sri Lankan system has been so successful, as well as what weaknesses and challenges it also faces. At the same time, readers outside Sri Lanka might also come to a better understanding of a healthcare system that has been exceptionally successful in reaching its poor despite the most difficult conditions that it has faced like all other low-income developing nations.

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Acronyms

CB	Central Bank
CFS	Consumer Finance Survey
GDP	Gross Domestic Product
GP	General Practitioner
MOH	Ministry of Health
NCD	Non-Communicable Disease
NHE	National Health Expenditure
OECD	Organization for Economic Co-operation and Development
OPD	Out-Patient Department
PDOH	Provincial Department of Health
SLHA	Sri Lanka Health Accounts
TEH	Total Expenditure on Health
TFR	Total Fertility Rate
WHO	World Health Organization

Abstract

Sri Lanka, a rainy, 66,000-square-kilometer island in the Indian Ocean near the equator, is in the South Asia Region of the World Bank. Only 15 percent of Sri Lanka's 20 million people live in cities. It is a lower-middle-income country, with GDP per capita of US$965 in 2004.

The expansion of health care coverage in Sri Lanka, with its focus on the poor, dates from the 1930s, and many of the initial motivations continue to be important influences. By far the most important one for health services has been democracy. In the 1920s, conditions in the island were much like those in most other British colonies. Government intervention in health was limited to providing health care to a small urban population that operated the colonial infrastructure and administration and an equally small workforce involved in export agriculture, and to a sanitary regime designed to control major epidemic threats such as cholera. Democracy based on universal suffrage was introduced in 1931 expressly to empower the poorer groups in society and women and to put pressure on the elites to pay closer attention to social and health conditions.

After 1931, the political economy of the island changed irrevocably as the political power base shifted from urban residents to the majority rural population. The impact of democracy on health was accentuated by the emergence of competitive politics along a left-right dimension with two-party competition well embedded by the late 1950s, a rural bias in the delimitation of electorates where each national legislator typically represented fewer than 10,000 voters in the 1930s, and a single-member constituency system that encouraged politicians to engage in parish-pump politics to maximize the government infrastructure built in their districts. The introduction of democratic politics forced successive governments to continuously expand free public health services into rural areas where voters wanted the same standards established earlier for the urban population.

Once democracy had served to establish a widely dispersed government health infrastructure, accessible by all, it then acted to ensure its survival under often difficult, fiscal conditions. Subsequently, successful market-oriented and reform-minded governments in Sri Lanka have generally understood that the cost of adequate public sector health services accessible to the poor was a small fiscal price to pay for the political support that they engender to enable other more important economic reforms.

CHAPTER 1: Background

Sri Lanka's distinctive history, economy, people, politics, and health conditions have contributed to impressive achievements in health care over the past 50 years.

1.1 Economic Environment

Sri Lanka's economy was historically based around agriculture, primarily rice cultivation, but several centuries of active trade resulted in a society that was more open to outside influences and interactions than most Asian countries. Prior to British occupation of the island in the late-18th century, large-scale irrigation agriculture and later spice exports provided a base for government taxation and dictated key aspects of government organization, and a tight, state-led social organization.

The British introduced coffee, tea, and rubber cultivation, and by the end of the 19th century a classic dualistic export economy emerged (Snodgrass 1966). Cash crop exports brought prosperity and a trade surplus, and their taxation gave the government a ready revenue source. After independence in 1948, Sri Lanka's economy was highly trade dependent, although most of its people were involved in subsistence rice cultivation. Tea, rubber, and coconut made up more than 95 percent of exports, and living standards were the highest in South Asia. Relative prosperity continued until the Korean War commodity boom in the 1950s. Then, declining commodity prices and a failure to diversify exports led to economic stagnation, ever-tighter import controls, and inward-oriented import-substitution policies (Bruton 1992). Income stagnated and unemployment was high (more than 20 percent). Mounting social tensions contributed to two Maoist insurgencies and an ethnic-based separatist conflict after 1970, which have presented major challenges for Sri Lanka's economy.

Under a new government in 1977, Sri Lanka became one of the first developing countries to embark on economic liberalization, pursued ever since. Trade was liberalized, export taxes on cash crops removed, and the economy opened up. In return, Sri Lanka benefited from substantial Western aid inflows for more than a decade. These policies led to substantial improvement in economic growth (table 1), averaging 3 to 4 percent real per capita income growth ever since, despite the series of debilitating internal conflicts that started in the early 1970s. Growth has been led by export-oriented manufacturing, initially concentrated in garments but now diversifying. By the 1990s, more than 75 percent of Sri Lanka's exports were industrial products. Continuing economic growth in recent years has pushed unemployment to less than 7 percent of the workforce, raised income in 2005 to more than US$1,000 per capita, and modestly reduced the number of Sri Lankans living in poverty (table 2). More substantial reductions in poverty have not occurred, because recent economic growth has been associated with increasing income inequality, and living standards for the lowest income quintile have hardly changed. Although official development assistance (ODA) remains significant, private foreign direct investment (FDI) is now more important for growth, but not to the same extent as in other Southeast Asian economies.

A key element in the post-1977 economic liberalization was the removal of export taxes, followed by further tax reductions. This led to a collapse in government revenues, and caused a structural fiscal deficit that has averaged between 7 percent and 9 percent of GDP in the past decade (table 1). Cuts in government spending have not led to fiscal improvements, because tax revenues have fallen apace. Much of the pressure to cut taxes in recent years appears to have been ideologically driven by key donors, despite fiscal realities that point to the need to increase taxation to achieve fiscal balance. Currently, taxation is predominantly from a mix of indirect taxes, including value-added taxes and excise taxes, with smaller contributions from import taxes. Direct income taxes on individuals contribute to a small fraction of revenues. The fiscal deficit has resulted in mounting public debt, constant pressure on the exchange rate, and the inability of the government to increase social expenditures or to invest in needed physical infrastructure. As a consequence, government policy is now focused on raising taxes, recognizing that there is no room for more substantial spending reductions.

Table 1 Sri Lanka: Economic indicators, 1930-2005

Year	GDP per capita (1990 US$)	GDP per capita (1990 PPP$)	Revenue (% GDP)	Expenditure (% GDP)	External Debt (% GDP)	ODA (% GDP)
1930	180	945	~ 10	~ 10	~ 0	~ 0
1950	273	935	16	20	3	0
1970	316	1,130	20	27	18	1.7
1990	577	1,935	22	31	72	5.7
1995	704	2,636	20	31	67	4.5
2000	844	3,626	17	27	55	0.4
2005	962	4,390	16	24	48	3.4

Source: Central Bank of Sri Lanka (2006); Institute for Health Policy databases; estimates of pre-1950 GDP originally prepared by author for Rannan-Eliya and de Mel (1997).
Note: ~ = approximate

Table 2 Sri Lanka: Social indicators, 1930-2005

Year	Population (millions)	Poverty head count (<PPP$1 per day)	Poverty head count (<PPP$2 per day)	Literacy (%)	Infant mortality rate	Life expectancy
1930	5.3	-	-	-	175	40
1950	7.7	-	-	69	82	55
1970	12.5	-	-	82	47	65
1990	16.3	-	-	88	19	71
1995	17.3	2.5	31.3	90	16	72
2000	18.5	2.3	31.5	91	13	73
2005	19.6	2.3	22.7	92	11	73

Sources: Central Bank of Sri Lanka (2006); IHP databases; Medical Statistician of MOH; de Silva (2007).
Note: - = not available.

1.2 Demography and Health

Until recently, Sri Lanka had no significant rural-urban migration, largely because social services in rural areas were good. However, with increasing industrialization in the past decade, more people are migrating into urban areas.

Sri Lanka is a multiethnic, multilinguistic, and multireligious society. Three-quarters of the population are Sinhala-speaking; most are Buddhist, and the rest are Catholic and Protestant Christians. The rest comprise three distinct ethnic groups: the Tamil-speaking Sri Lankan Tamils (13 percent), Muslims (7 percent), and Tamil-speaking Indian (or Estate) Tamils (5 percent). The first is mostly Hindu, with a significant Christian minority, and the latter is predominantly Hindu also. There are also small Eurasian Burgher, Malay, and Indian communities (less than 1 percent).

Sri Lanka's health indicators were worse than much of South Asia's in the 1920s (Langford and Storey 1993), but its health reforms in the 1930s quickly reduced mortality rates (Langford 1996). After World War II, mortality rates rapidly fell for a decade, before entering a slower but still rapid and continuing phase of decline. Prior to the 1990s, substantial reductions in infant, child, and maternal mortality were responsible for most of the decline. Life expectancy has continuously risen, but gains, since the 1970s, have been confined largely to women and male life expectancy has stagnated (table 3). Life expectancy is 71 years, and the infant mortality rate is less than 13 per thousand live births. The main drivers of these remarkable health gains have been policies that have ensured widespread easy access to medical services for the whole population, the emphasis on universalism, mass female education that has enabled women and mothers to make use of these services, and a continuous policy-driven pro-

Table 3 Sri Lanka: Demographic and health indicators, 1930-2003

Year	Infant mortality rate	Life expectancy at birth (female)	Life expectancy at birth (male)	Maternal mortality rate	Total fertility rate	Population growth rate (%)
1930	175	39	41	21	-	1.4
1950	82	55	56	6	5.3	2.8
1970	47	67	64	2	4.2	2.2
1990	19.5	73	67	1	2.2	1.0
1995	16.5	75	68	<1	1.9	1.1
2000	13.3	76	70	<1	1.9	1.4
2003	11.2	77	71	<1	1.8	1.3

Source: Data kindly provided by Medical Statistician of MoH, Department of Census and Statistics; De Silva 2007.
Note:-=not available.

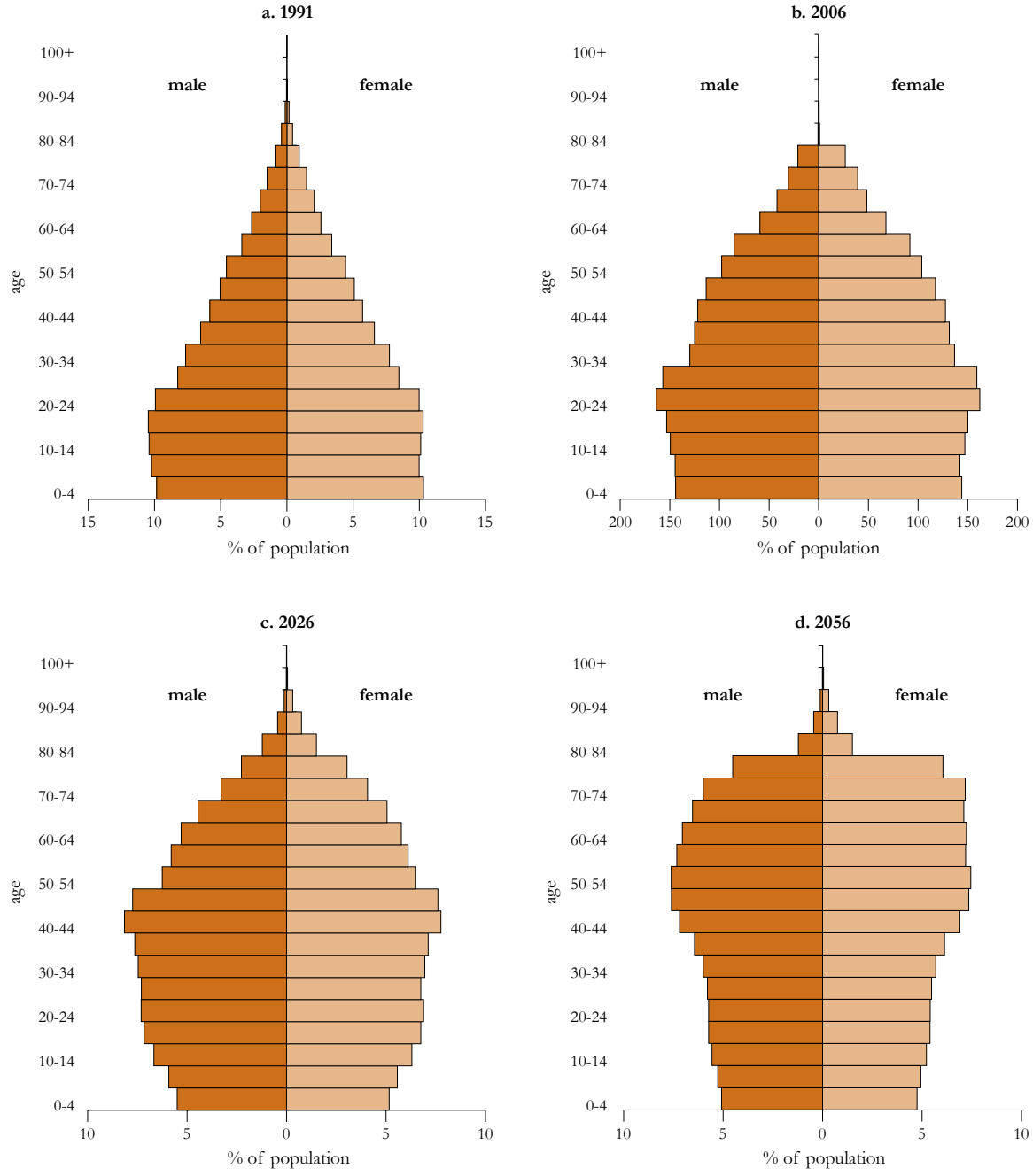
cess of behavioral change that has made Sri Lankans highly sensitive to illness and predisposed to make ready use of modern medical treatment when ill (Caldwell 1986; Caldwell et al. 1989; De Silva et al. 2001; Rannan-Eliya 2001; Rannan-Eliya 2004).

From 1950 through the 1970s, mortality fell and the population grew rapidly. Eventually, fertility rates began to drop, and the total fertility rate (TFR) fell below replacement level by 1993. The TFR is now less than 1.9, and may drop as low as 1.5, according to some projections (De Silva 2007). The population size may stabilize at 22 million by 2030 and decline thereafter, without substantial immigration. With low fertility rates and high life expectancy, population growth, a major concern in the 1960s and 1970s, is giving way to concern about population aging. The number of elderly is rapidly increasing; the number of children, falling. Sri Lanka will be one of the most rapidly aging societies in Asia in coming decades. This demographic shift is already reflected in the age structure of the population, which is no longer pyramidal as in most developing countries (figure 1).

Sri Lanka's mortality transition is largely complete, and its mortality patterns resemble those of a developed country. Few die of infectious diseases such as cholera, measles, malaria, and TB, and mortality from communicable disease is declining. Noncommunicable diseases (NCDs) and accidents dominate mortality, and ischemic heart disease is the largest single cause of death (table 4). Sri Lanka faces growing epidemics of diabetes, ischemic heart disease and cerebrovascular disease, which affect particularly adult males.

The mortality trends are indicative of the underlying morbidity in the country, with a high prevalence of noncommunicable disease in the adult population. However, reliable morbidity data are not available or routinely collected. Table 5 presents the morbidity profile of inpatients at government hospitals and of outpatients in a recent study of private clinic doctors. This profile can be considered representative of the morbidity pattern seen by health care providers, but not necessarily of the overall disease burden.

Figure 1 Sri Lanka: Population Pyramids 1991, 2006, 2026, and 2051



Source: Authors' computations using data from De Silva 2007.

1.3 Government and Politics

Sri Lanka consists administratively of nine provinces[1] and 24 districts. The central government is responsible for national policy, and for tertiary and specialized services. In health and education, the provincial governments are responsible for operation of primary and secondary services. The provincial governments are elected and report to provincial legislatures, although in practice politics remains centralized.

Democracy has been the primary explanation for Sri Lanka's health achievements. Since 1931, Sri Lanka has always had a democratic government, elected through the ballot box, despite many challenges, including an attempted military coup in the 1960s, two Maoist insurgencies in 1971 and

Table 4 Sri Lanka: Leading causes of mortality, 2001

Rank order	Cause	Percent of all deaths
1	Ischemic heart diseases	8.5
2	Other nervous system diseases	6.9
3	Other heart diseases	6.1
4	Intentional self-harm	4.2
5	Liver diseases	4.2
6	All other external causes	4.1
7	Chronic lower respiratory diseases	3.8
8	Hypertensive diseases	3.7
9	Remainder of malignant neoplasm	3.2
10	Cerebrovascular diseases	3.1

Source: Computed by authors from data kindly provided by Registrar Generals Department.
Note: Deaths classified with no clear diagnosis are excluded, but accounted for 24.9 percent of all recorded deaths.

Table 5 Sri Lanka: Patient morbidity, inpatients and outpatients

Inpatient morbidity Cause	%	Outpatient morbidity Problem	%
Traumatic injuries	16.7	Viral fever	15.6
Respiratory disease	10.8	Asthma	6.3
Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified	7.6	Upper respiratory tract infection	5.2
Viral diseases	6.3	Hypertension	4.8
Gastrointestinal tract disease	6.3	Respiratory infection	4.2
Direct and indirect obstetric causes	4.7	Gastritis	3.2
Urinary system disease	4.1	Gastroenteritis	2.8
Intestinal infectious diseases	3.8	Lower respiratory tract infection	2.2
Diseases of musculoskeletal system and connective tissue	3.6	Urinary tract infection	2.0
Skin and subcutaneous tissue diseases	3.5	Muscle pains	2.0

Source: Inpatient morbidity statistics from unpublished data for 2003 kindly provided by Medical Statistician, Ministry of Health. Outpatient morbidity statistics from Rannan-Eliya et al. 2003

1987-89, and a separatist conflict since 1972, when the precursors of the Liberation Tigers of Tamil Eelam (LTTE) terrorist organization first took up arms against the government. During this time, several developments have shaped the political system. First, initial electoral competition between a dominant conservative political establishment and Marxist-Trotskyite challengers gave way in the 1950s to a two-party model. Since the 1950s, two dominant political parties-the right-of-center United National Party (UNP) and the left-of-center Sri Lanka Freedom Party (SLFP)-have competed for power. Since 1956, most incumbent governments have lost elections, and political leaders have become extremely sensitive to voter concerns. In health care, this has encouraged bipartisan consensus on major policy features such as an emphasis on universal access, no user fees, and continuing public sector predominance in delivery. Second, the British-inherited constitution was replaced in the 1970s by a presidential system, with an executive president directly elected by a single-transferable vote and a legislature elected through proportional representation. These changes make it harder for governments to introduce radical changes in policy where there is a strong preexisting consensus, and have made coalition politics the norm. Third, as a result of international exhortations to solve the separatist conflict, extensive devolution of government to the provincial level was introduced in 1988, although it has failed to stop the conflict.

CHAPTER 2: Health Financing and Coverage

This section presents an overview of the financing of Sri Lanka's health system, key historical trends, and its performance in terms of equity and efficiency.

2.1 Health Expenditures

Total expenditure on health in Sri Lanka was close to Rs. 100 billion (US$1 billion) during 2005 (annex table 1), equivalent to 4.2 percent of GDP (Institute for Health Policy, forthcoming). Total health expenditure, driven mostly by private spending, has increased since the early 1990s. Government spending accounts for 46 percent, and private financing for the rest (annex table 2). In per capita terms, expenditure in 2005 represented US$50 per capita at official exchange rates, and government spending was equivalent to US$23 per capita. Health services account for 8 percent of government budgetary spending. Private financing is mostly out-of-pocket spending by households, with smaller contributions from employers and insurance. Spending by non-governmental organizations (NGOs) is small.

Use of expenditures

Health spending reflects the structure of what is a public hospital-dominated health care system. Government expenditures have concentrated on hospitals since the health reforms of the 1930s, directed primarily at increasing equity in access and improving risk protection, both of which required substantial increases in hospital coverage. Hospital spending accounted for about 70 percent of government recurrent spending in the 1950s, and the share has changed little since then (table 6). Government hospitals have been the primary mode by which modern medical treatment has been made available to people in rural areas, and the prioritization of these facilities in budgetary spending has ensured that the health ministry was able to cover all Sri Lankans for most services. In contrast, most private spending is for outpatient care and for purchasing medicines, but the share of hospital spending in private outlays has increased. This is partly because of expanded delivery of outpatient services by private hospitals and partly because of the increased availability of private insurance. As a

Table 6 Sri Lanka: Trends in health care spending, 1953-2005

Spending/source	1953	1980	1990	2000	2005
Health expenditures (GDP)					
Total	3.3	3.1	3.3	3.5	4.2
Government	2.1	1.7	1.7	1.7	1.9
Government as of budget	8.4	4.1	5.6	6.5	7.8
National expenditure (%)					
Public	62	57	46	50	46
Private	38	43	54	50	54
Out-of-pocket	33	41	42	43	48
Hospital composition, by source of expenditures (%)					
Total	47	45	41	43	43
Public spending	72	70	78	69	71
Private spending	4	12	11	17	19
Hospital expenditure, by source of financing (%)					
Public	96	87	93	80	76
Private	4	13	7	20	24
Non-hospital expenditure, by source of financing (%)					
Public	33	31	17	19	23
Private	66	69	83	81	77

Sources: Rannan-Eliya and de Mel 1997; IHP Sri Lanka Health Accounts database (January 2007 revision).

consequence, until recently more than 85 percent of hospital spending was by government, while more than 80 percent of nonhospital and outpatient care spending was financed privately.

Benefit-incidence of government health expenditures

Government health expenditures have reached the poor effectively since at least the 1950s, after the health reforms expanded government health services into rural areas. Estimates of the actual incidence of government health spending are available for only the late 1970s and beyond. Although these estimates are not strictly comparable, because they were computed by different authors using different methods, they suggest that the targeting of government health spending was quite pro-poor in the late 1970s, then became less so during the 1980s to 1990s (table 7). In 2003/04 the poorest quintile received 20 percent of government health spending; the richest quintile, 15 percent.

Table 7 Sri Lanka: Incidence of public health expenditures, 1979-2004

Year	Share of government health expenditure received by poorest household quintile (%)	Share of government health expenditure received by poorest household quintile (%)
1979	30	9
1992	24	15
1996/97	22	18
2003/04	20	15

Source: Alailima and Mohideen 1983; estimations by authors and Aparnaa Somanathan of IHP.

Government outpatient spending is the most pro-poor (27 percent went to the poorest quintile in 2003/04 versus 11 percent to the richest quintile), and inpatient spending is more evenly distributed (18 percent versus 16 percent). Because Sri Lanka does not means test access to public services, the main reasons for the pro-poor targeting of government health subsidies are: a dense network of health facilities that makes government health services physically accessible to the poor, lack of user charges, and the voluntary opting-out of the rich into the private sector (Rannan-Eliya 2001).

In effect, what Sri Lanka does is guarantee its poor effective access to free health services, especially hospital care, and then relies on differentials in consumer quality in services to persuade the richer patients to voluntarily opt to use and pay for private delivery. The role of these consumer differentials is discussed later. This approach resembles closely those of two other Asian health systems, Malaysia and Hong Kong (China), where government-operated hospital services also effectively reach the poor. Together with these cases, Sri Lanka differs as a result in the income gradients in use of public and private hospital services. Throughout Asia, the rich use private hospital services more than the poor, and this is generally true for public services, but in Sri Lanka and the other two cases, the gradient is reversed for public hospitals. Why Sri Lanka, and other countries like it, are able to achieve this, when most countries do not, has not yet been fully explained.[2]

Incidence of financing

The health financing system is close to progressive and, incomparative terms, does better than developed countries in Asia, but not as well as some countries such as Thailand and Philippines (table 8). The burden of paying for the half of total health expenditures that come from general revenues falls mostly on the richer households. Indirect taxation is neither progressive nor regressive, but direct taxes are very progressive. Spending from private sources is mostly out of pocket, and these payments are very progressive, because the rich are more likely than the poor to seek private care. To improve the progressivity of its health care financing, Sri Lanka would need to increase the share of direct taxation in overall government revenues, as well as modify its system of indirect taxes to place

a heavier burden on goods and services used more by the rich than the poor.

Protection against catastrophic risk

Sri Lanka's health system performs very well in protecting the poor against catastrophic financial risks associated with illness. The Equitap study of equity in Asian health systems found that Sri Lanka is one of a small group of Asian countries where few people are pushed into poverty as a result of medical spending (van Doorslaer et al. 2006). Only 0.3 percent of Sri Lankan households are pushed below the PPP$1.08 international poverty line as a result of health expenditure (table 9).

able to do this because of a high level of technical efficiency in its delivery system, which keeps costs low, and the implicit strategy of encouraging the richer patients not to burden the government health system by voluntarily opting to use private providers.

The first exception to free care consists of family planning commodities. Condoms and oral contraceptive pills are made available through government primary care facilities at cost, but at much lower prices than private sector alternatives. The second exception consists of private paying-wards in less than a dozen government hospitals. These offer the same treatment as in the main hospital

Table 8 Sri Lanka: Progressivity of health financing compared with selected asian countries

Country (year)	Direct taxes	Indirect taxes	Social insurance	Private insurance	Direct payments	Total
Bangladesh (1999/2000)	0.552	0.111	n.a.	n.a.	0.219	0.214
China (2000)	0.152	0.040	0.235	n.a.	-0.017	0.040
Hong Kong (China) (1999/2000)	0.386	0.119	n.a.	0.040	0.011	0.166
Japan (1998)	0.095	-0.223	-0.041	n.a.	-0.269	-0.069
South Korea (2000)	0.268	0.038	-0.163	n.a.	0.012	-0.024
Kyrgyz Republic (2000)	0.074	-0.096	-0.034	n.a.	0.264	0.125
Nepal (1995/96)	0.144	0.114	n.a.	n.a.	0.053	0.063
Philippines (1999)	0.381	0.002	0.205	0.120	0.139	0.163
Sri Lanka (1996/97)	0.569	-0.010	n.a.	n.a.	0.069	0.085
Thailand (2000)	0.510	0.182	0.18	0.004	0.091	0.197

Source: Excerpted results of the Equitap study as published in Rannan-Eliya and Somanathan 2006.
Note: The Kakwani Index is a numerical index of the distribution of payments in relation to ability to pay. It is calculated graphically by looking at the distribution curve of overall tax payments made by poor to rich households, and comparing this distribution with the distribution of overall consumption across the same households, with the index computed as twice the size of the area between the two curves. A positive number implies that the share of payments by richer households is greater than their share of overall consumption. A negative number implies the reverse. For further details of these methods, see the World Bank's technical notes for quantitative techniques for health equity analysis at http://web.worldbank.org/ WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTPAH/0,,contentMDK:20216933~menuPK: 400482~pagePK:148956~piPK:216618~theSitePK:400476,00.html.
n.a. = not applicable.

2.2 Benefits Package

All government health services, with few exceptions, are available free to all citizens, including all inpatient, outpatient, and community health services. Free services range from antiretrovirals for HIV/AIDS patients to coronary bypass surgery. Access to all services is reinforced by a policy of permitting patients to visit any hospital in the country without restriction, and with no enforcement of a referral system. The government is

wards, but greater privacy. However, in practice these beds are underused and account for less than 1 percent of all Ministry of Health(MOH) inpatients. The third exception is the Sri Jayewardenapura General Hospital, an autonomous, tertiary care, 1,000-bed hospital constructed with Japanese development assistance. Probably for ideological reasons and poor economic analysis, the Japanese stipulated that user fees be charged at this facility. The hospital maintains three classes of wards, with different fee schedules based on a means test, although in no case are the fees suf-

Table 9 Sri Lanka: Proportion of population pushed below the PPP$ 1.08 poverty line by household health spending, compared with selected asian countries

Country	Prepayment headcount (%)	Postpayment headcount (%)	Change in poverty headcount (%)
Bangladesh (1999/2000)	22.5	26.3	3.8
India (1999/2000)	31.1	34.8	3.7
China (2000)	13.7	16.2	2.6
Nepal (1995/6)	39.3	41.6	2.2
Vietnam (1998)	3.6	4.7	1.1
Indonesia (2001)	7.9	8.6	0.7
Philippines (1999)	15.8	16.4	0.6
Kyrgyz Republic (2000/01)	2.2	2.7	0.5
Sri Lanka (1996/97)	3.8	4.1	0.3
Thailand (2002)	2.1	2.3	0.2
Malaysia (1998/99)	1.0	1.1	0.1

Source: van Doorslaer et al. 2006.

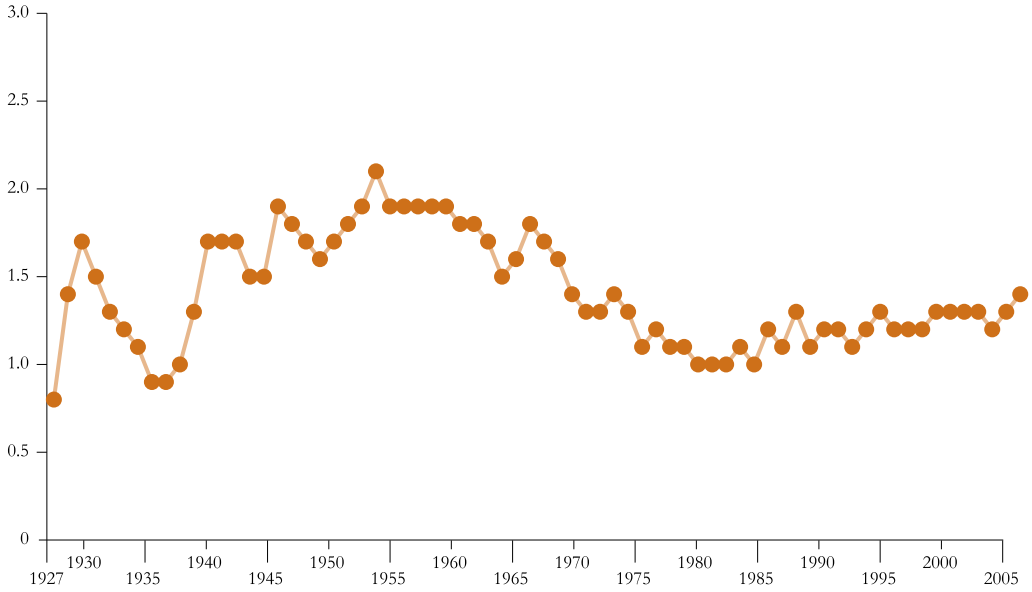
ficient to cover full costs. In practice, even though the general hospital's subsidy per bed is greater than in any other government hospital, it cannot generate sufficient fees and operates at a loss.

Nevertheless, there is implicit rationing of care. This occurs in a number of ways. First, through internal purchasing controls and investment decisions, the MOH can and does restrict the availability of services it considers too expensive. For example, government hospitals are prohibited from, or limited in, buying individual drugs or certain high-technology equipment. Second, using administrative controls, the central ministry can restrict the supply of specific services to only certain government hospitals. This can be done by controls such as the placement of specialists or through the lists of drugs approved for different levels of hospital. Even basic equipment is rationed; for example, most lower-level MOH facilities lack X-ray machines. However, although services may be restricted to certain facilities, all patients still have the right to travel to those facilities, and many do. Although these decisions often have some rational basis, most are taken implicitly and without public debate. While this process lacks transparency, it does prevent much public opposition. Third, it has been official policy that, if medicines are not available in hospital stocks, patients may be asked to buy drugs themselves from private pharmacies. This results in extensive self-purchasing by patients, because the medicines budget is inadequate. However, there is evidence that MOH personnel protect the poor to some extent by using discretion to reserve limited drug stocks for the poor and by being more likely to encourage richer patients to self-purchase.

2.3 Financing and Payment

Public sector health spending is financed exclusively from general tax revenue, with a small contribution from international development assistance (less than 5 percent). There is no social insurance. Government health spending is mostly by the central government (62 percent of public) and provincial governments (36 percent), with small contributions from local governments at municipality and village levels. However, financing for provincial and local government health budgets comes principally from the central government. Provincial governments have the authority to raise their own tax revenues, but owing to inherent economic limitations, they raise less than 5 percent of overall government tax revenues, and most of these are raised in Western Province. This is because most provinces are essentially rural and direct income taxation is limited. The most buoyant domestic tax mechanism is the value-added tax, which can practically be levied only at the national level, given the small size of the island. In addition, 50 percent of the country's economic output, and an even greater share of its formal sector, is located in Western

Figure 2 Sri Lanka: Government recurrent health spending, 1927-2005



Source: Adapted from Rannan-Eliya and de Mel 1997. Estimates for 1990 to 2005 were derived by modifying estimates for central MOH and provincial council health department expenditures as compiled in the IHP Sri Lanka Health Accounts database to fit earlier definitions of recurrent departmental spending.

Province. There is a modest contribution from international donor assistance (4 to 6 percent of public financing). User charges and miscellaneous income account for the rest (less than 2 percent).

Private health services are funded principally from out-of-pocket spending by households. Private doctors either dispense and charge only for their medicines, or charge separately for consultation and for drugs (Rannan-Eliya, Jayawardhane, and Karunaratne 2003). Most private doctors are actually government medical officers who are allowed to undertake private practice in their off-duty hours. Private hospitals typically charge by item for cost of services, except for the fees of attending physicians, who may bill the patient separately.

A fifth of private financing is from employer spending on medical benefit schemes for their employees and on group medical insurance schemes, plus a smaller amount from individually purchased medical insurance (Institute for Health Policy, forthcoming). Most of this spending pays for private hospital services and benefits mostly the top income quintile. Typically, all these schemes reimburse the patient for their expenses, so patients must first pay out of pocket, and then claim reimbursement. The amounts reimbursed vary with the specific rules of their insurance or employer policy, but most medical insurance in Sri Lanka is indemnity insurance, reimbursing up to a fixed maximum. The contribution of nonprofit institutions to health care financing is about 1 percent (Annex table).

2.4 Development of Health Financing

Before the health reforms of the 1930s, the government took a noninterventionist role in health, and health services and financing were treated as a private responsibility. The government's involvements were limited to funding urban hospitals to look after European residents and its own civil and military personnel, and to making regulations to ensure medical services for the important plantation workforce. However, during the reforms in the 1930s to 1940s, government expenditure on health increased substantially. By the mid-1950s, national health spending was between 3.2 and 3.5 percent of GDP, of which the public share was about 60 percent (Rannan-Eliya and de Mel 1997). From the early 1960s, spending fell, as the government faced stringent fiscal constraints, and has remained in the range of 1.3 to 1.8 percent of GDP until 2005 (figure 2). During these years, private

spending has gradually increased its share of total financing to more than half.

2.5 Equity-Health Indicators, Outcomes, and Their Distribution

Prior to the 19th century, there is no evidence of significant differentials in health outcomes. However, as in Britain, urbanization and growth of the formal economy in the 19th century brought deterioration in health conditions and health inequalities. In Colombo, an urban proletariat emerged, crowded into a large poor quarter. Living there under unhygienic conditions, with no basic sanitation, they were prey to epidemics. Dense population settlement in poor and unsanitary housing conditions was also found in the plantation sector, where indentured labor was imported from India. Two significant differentials in health status arose. First, health conditions in urban areas were worse than in rural areas. The urban middle classes enjoyed better health than their poor neighbors, but their mortality rates were no lower than those in rural areas and, for infants were worse. Second, the worst health was among poor urban and plantation sector workers (Meegama 1986). Evidence for this comes from analysis of death registration data by ethnic group and district, which are reasonable proxies for socioeconomic status (table 10).

Table 10 Sri Lanka: Infant mortality rates in different social groups, 1920-22

Ethnic group and district	Proxy for social group	Males	Females
Sinhalese in Kalutara	Rural villagers	114	101
Tamils in Nuwara Eliya	Plantation workers	248	210
Tamils, Moor and Malays in Colombo	Urban poor	341	320
Burghers and Eurasians in Colombo	Middle class	144	158

Source: Computed from data of Registrar General of Ceylon as given in Meegama 1986.

It was in the context of these large health disparities that the introduction of democracy made a difference. Full democracy did not exist until 1931, but municipal governments, elected by residents under limited franchise, were introduced into most Sri Lankan towns during the 19th century. These local governments intervened over several decades to enforce basic standards for sanitation, to provide maternal and child health services, and to construct public sewerage and water systems. These interventions succeeded in reducing urban mortality rates and by the early 1930s had eliminated the urban-rural differentials in mortality rates. By then, the major mortality differentials were between the malarial and nonmalarial areas of the country.

With the advent of democracy in 1931, the government, under electoral pressures, expanded the rural network of medical facilities throughout Sri Lanka, and most substantially in the previously underserved malarial districts (Rannan-Eliya and de Mel 1997; Langford 1996). Sri Lanka is an example of how democratic politics can provide a means of government accountability for services to the poor (World Bank 2003). The small size of electorates encouraged a form of "parish pump politics," in which national politicians, some elected by as few as 5,000 voters (Wriggins 1960), competed to ensure that the government built dispensaries and later hospitals in their home constituencies.

The health impact of this expansion did not, however, show up until after World War II. Between 1945 and 1952, mortality rates in Sri Lanka across all demographic groups were halved, and life expectancy increased 12 years. For many decades this progress was attributed to the introduction of DDT-spraying against the malaria vector, but the most recent assessments demonstrate that malaria control played only a minor role: mortality reductions occurred in both malarial and nonmalarial areas. The critical intervention was expanded access to curative facilities in rural areas, plus the improved supply of antibiotics, other drugs, and staff that became possible after 1945 (Langford

Table 11 Sri Lanka: Infant mortality rate, selected districts, 1921-2000

Year	Colombo	Anuradhapura	Kandy	Hambantota
1921	161	366	196	293
1931	139	266	167	189
1951	94	69	89	62
1971	41	34	61	37
1991	26	21	23	6
2000	18	16	20	4

Source: Data from Registrar General's Department and Annual Health Bulletin of MoH.

1996). Table 11 shows this has substantially reduced and even reversed interdistrict inequalities in health outcomes.

With consolidation of the health system in the 1960s, physical access to basic health services within close proximity became the reality for almost the entire population. High coverage has been the key to reducing mortality rates (Caldwell et al. 1989; De Silva et al. 2001; Langford 1996; Rannan-Eliya 2001) and has led to continuous improvement in health indicators for rich and poor. Continuing expansions in access at the margin benefit primarily the poor, once the richer households are served. This is illustrated by using asset indices to disaggregate data collected in the Sri Lanka Demographic and Health Survey (DHS). Infant mortality rates declined in all income groups, and the absolute difference between the richest and poorest quintiles substantially narrowed during the 1990s (figure 3). The role of universal access in this performance is demonstrated by trends in access to qualified medical care at childbirth. People in the poorest quintile were the major beneficiaries of marginal improvements in access to such care in the 1990s (figure 4). Moreover, access of the poor to services is such that when demand is greater among the poor, actual uptake of services can be more than in rich, as shown by trends in use of modern contraception where the poorest quintile has higher use (figure 5).

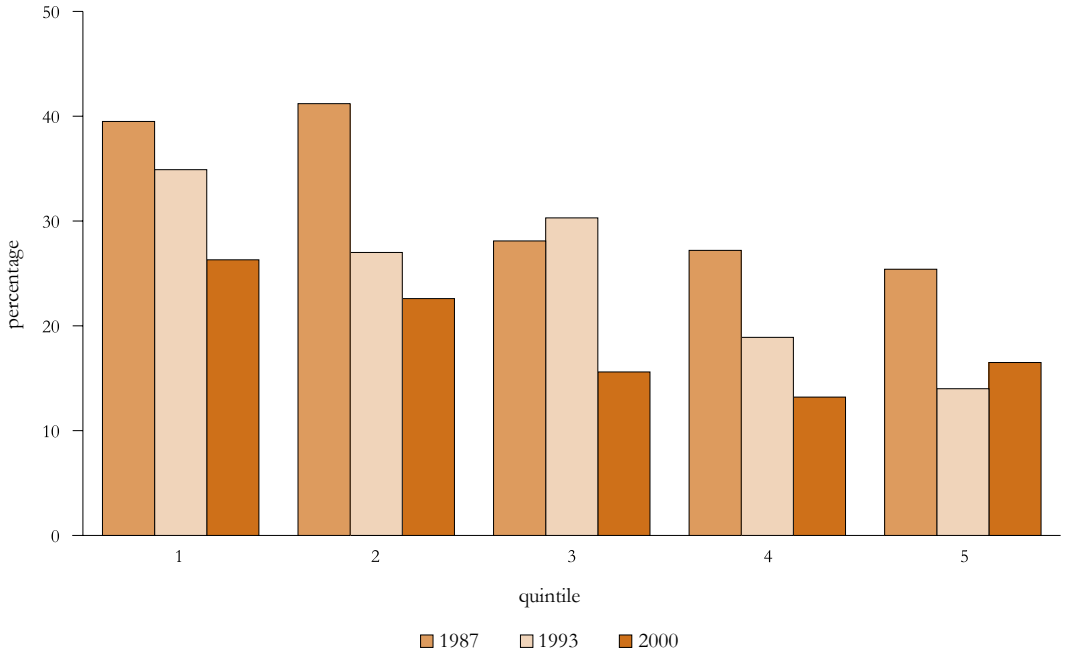
Targeting and equity implications of reforms

Central to Sri Lanka's health reforms has been the concept of universalism and its link to citizenship. From their inception, Sri Lanka's health reforms were driven by the close connection between citizenship and political rights and government obligations to the people. The government does not explicitly target services to specific groups and does not accommodate different systems of care to different groups-so much so that pilot projects to test different approaches to health care delivery in small areas have not flourished. Access to health care is treated as a fundamental social right and thus not subject to arbitration. The symbolic commitment to the principle of free universal care to all citizens is taken so seriously that, despite more than a quarter of a century of war against the terrorist group LTTE, successive governments have consistently refused to restrict the right to free care that LTTE members have by virtue of their citizenship. Hospitals in LTTE-controlled areas continue to be funded, supplied, and staffed at government expense, and injured LTTE rebels continue to be treated in these facilities.

This attitude, which may seem impractical given resource limitations, has been a critical success factor. First, government services continue to be used by and accountable to all in society, including the influential middle classes and urban elite who have remained political supporters of good quality government services. Furthermore, expansion has not been at the cost of reductions in clinical quality of services, although it has been at the cost of accepting lower consumer quality in amenities. Moreover, with a universalist approach, once the rich and middle-income classes are provided for, marginal increases in provision inevitably favor the poor.

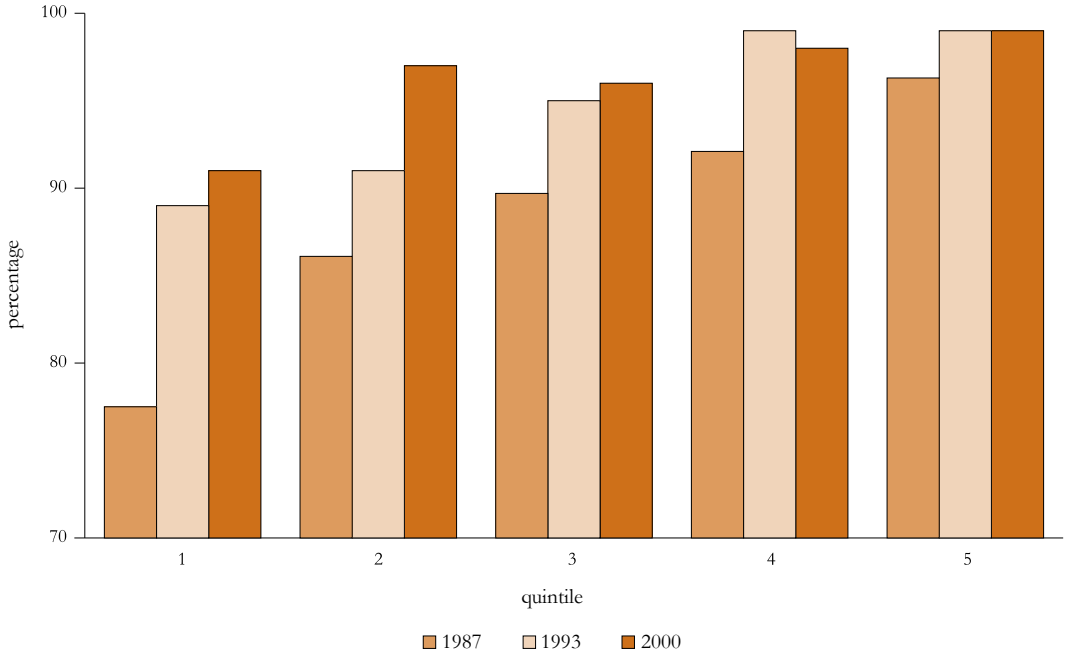
There has been one defect in this approach. If individuals do not have citizenship, they often fail to benefit. This link was most obvious in the case of the Tamil speaking plantation workers of Indian origin. As noted elsewhere, they were the first beneficiaries of state action to expand access to

Figure 3 Sri Lanka: Differentials in infant mortality rate, by Asset Quintile, 1987-2000



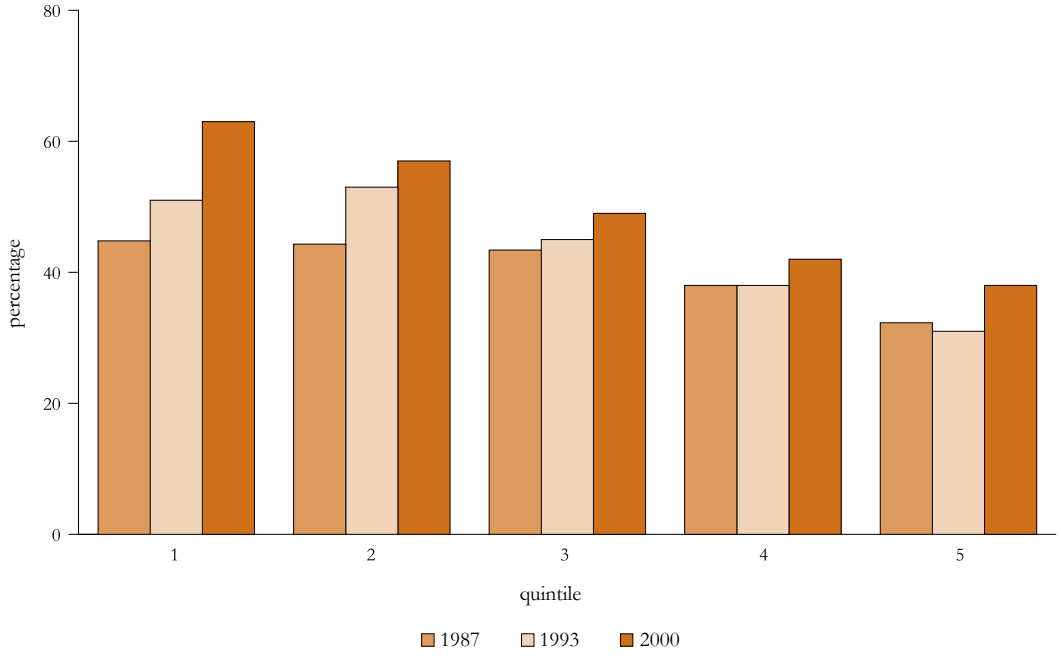
Source: IHP estimates from the Sri Lanka Demographic and Health Surveys for relevant years.

Figure 4 Sri Lanka: Differentials in medical attendance at childbirth, by Asset Quintile, 1987-2000



Source: IHP estimates from the Sri Lanka Demographic and Health Surveys for relevant years.

Figure 5 Sri Lanka: Differentials in use of modern methods of contraception by currently married women, 1987-2000



Source: IHP estimates from the Sri Lanka Demographic and Health Surveys for relevant years.

medical services, and by the 1940s, their health indicators were better than those for the rest of the rural population. However, just before independence, legislative changes deprived most of them of Sri Lankan citizenship and, thus voting rights. After 1948, they had no electoral representation, and the government left responsibility for their social service provision to the British and U.S. private plantation companies. The results of this natural experiment to compare private and public provision are evident. The private sector failed to match the improvements in public service provision that came about through government intervention in rural areas from the 1950s through the 1970s, even though such efforts would have improved labor productivity. Health improvements in the estate population began to lag those of the rest of the population. By 1970, their mortality rates were much higher than the rest of the population's. Then two important changes occurred. First, the government nationalized the plantations in the early 1970s and thus indirectly became responsible for providing the estate workers with health care. Second, the CWC (Ceylon Workers Congress), the trade union cum political party representing the estate workers, joined the government in 1978. Once in government, this party lobbied for enhanced state social service provision to its community and, in the 1980s, persuaded the government to restore first voting rights and then citizenship. The impact of the restoration of voting rights was immediate and led to concerted government efforts to improve health services in the estates. In the 1990s, the plantations were effectively privatized, but, at the urging of the CWC, the government agreed to nationalize the plantation health care facilities and to integrate them into the MOH network.

The impact of these changes in citizenship and voting rights on health indicators in the estate population has been dramatic (figure 6). Prior to the 1940s, government-legislated employer mandates were successful in eliminating and, eventually, reversing the mortality disadvantage of the estate population. In the four decades that followed disenfranchisement, the community missed out on the national health reforms. The health services provided to them by the private plantation companies could not match those in the public sector, and a significant disparity again appeared, with the infant mortality rate (IMR) reaching almost double the national average. Within two years after the CWC joined government, rapid improvements in mortality began to take place. Now, 30 years later,

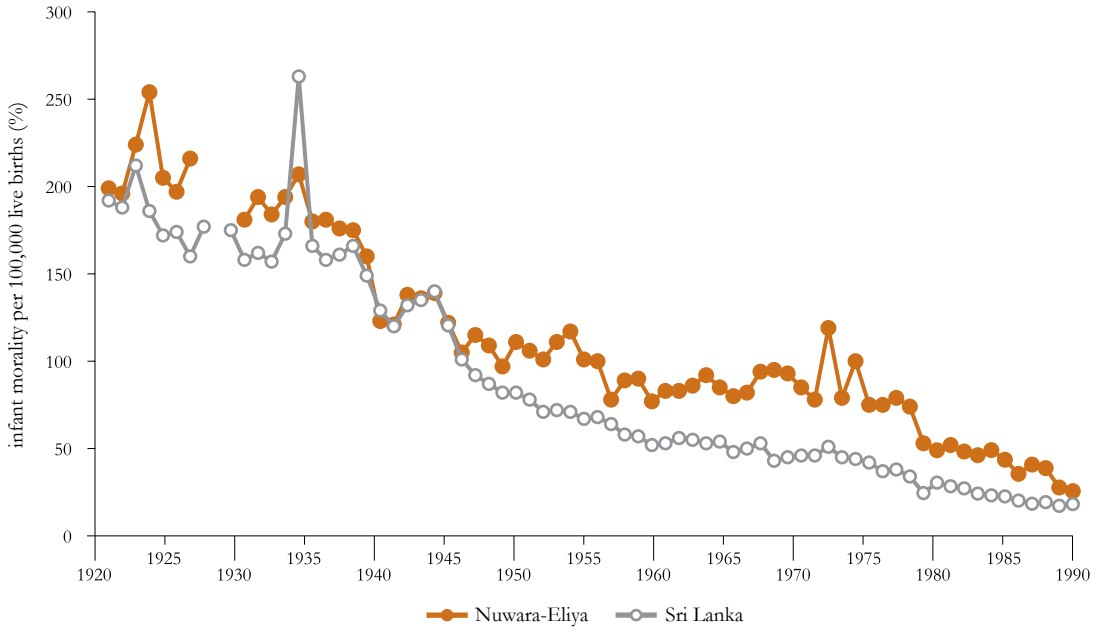
there are good signs that the disparity in health outcomes will be eliminated in the future. This performance in reducing these ethnic differentials compares favorably with that of countries such as the United States, which have conspicuously failed to narrow historical ethnic disparities in mortality.

2.6 Efficiency

There are two different types of efficiency-technical efficiency and allocational efficiency, and these can be considered either from a system or "macro" perspective or from a provider or "micro" perspective. Although Sri Lanka's health system does not meet conventional expectations, it can be considered highly efficient.

Efficiency has been an important and critical element in Sri Lanka's success in extending coverage. It enabled it to use a limited health budget to reach the poor. In other countries, increasing access to services often leads to such increases in patient demand that the public sector must ration access to care to match available resources to apparent patient needs. However, Sri Lankan health care managers were denied this response, and were, instead, forced to pursue continuous gains in efficiency. This approach made it possible to financially sustain Sri Lanka's policies of universal access to health services (Rannan-Eliya 2001; Rannan-Eliya and de Mel 1997). In fact, Sri Lanka managed to expand access to health services while reducing government health spending as a share of GDP after 1960.

Figure 6 Sri Lanka: Trends in infant mortality rates, Country and Nuwara Eliya District, 1920-2003



Source: Based on data from Registrar General's Department.
Note: The population of Nuwara Eliya district is predominantly Indian-origin estate Tamil, and so its IMR rate provides a good proxy for health conditions in the plantation community.

Technical efficiency at the macrolevel

From a macrolevel perspective, the Sri Lankan health system is a global outlier. It spends less in absolute and relative terms than comparable low-income developing countries but achieves better health indicators than some European countries and does so by providing levels of access to medical services comparable to a developed country (table 12). For five decades after 1950, Sri Lanka was a low-income developing country, with a per

capita GDP less than US$350. Overall national health spending was only 3.0 to 3.6 percent of GDP throughout, equivalent to less than US$10 per capita, well below the US$13 per capita cost of the minimum cost-effective package of services proposed by the World Bank (1993).[3] Of this, only half was public spending, which averaged between US$4 and US$6 per capita between 1950 and 1990. Most of Sri Lanka's health transition was achieved with less national and government health spending in per capita terms than in the majority of Sub-Saharan African countries in 1990: according to the World Development Report, 24 out of 30 spent more than US$5 per capita (World Bank 1993).

How these high levels of technical efficiency came about is not well understood. Yet it does appear that they are the result of incremental productivity improvements since the early 1950s or earlier. Research on productivity trends in public sector health services in developing countries has been almost nonexistent (Hensher 2001). Recent research by Sri Lankan researchers suggests that such trends can be positive over long periods of time in many countries and that the rates of improvement in Sri Lanka historically have been greater than in the average developing country (Rannan-Eliya 2006). Specific empirical analysis of why Sri Lanka has performed so well in this area is lacking, but possible explanations include: a strong public service ethos established in the MOH by the 1950s; strong centralized control of budgets, inputs, and operating procedures, which minimized input prices and constantly forced health workers to meet increasing demand through efficiency savings instead of relying on more resources; and low administrative overheads associated with a civil service-run, command-and-control management system (Hsiao and Associates 2001).

Table 12 Sri Lanka: Health services use and spending, compared with selected comparable countries

Country	Year	Physician visits (per capita per year)	Inpatient admissions (per 100 people per year)	Total health expenditure (GDP)
Bangladesh	2001	1	2	3.2
Egypt, Arab Rep. of	1996	4	3	3.7
Indonesia	2001	1	1	4.2
Sri Lanka	2003	5	22	3.6
Thailand	1993	2	8	3.6

Source: Estimated by authors from various sources.

Technical efficiency at the microlevel

The OECD suggests three low-level indicators for assessing technical efficiency at the microlevel (Hurst and Jee-Hughes 2001): unit costs, length of stay, and ratios of day cases to all surgery. Sri Lankan data available for the first two indicators show that its public sector services are highly efficient in their use of available human and financial resources. Sri Lankan public hospitals deliver inpatient admissions and outpatient visits at a far lower ratio of cost to per capita GDP than the average developing country and, in many instances, at lower costs than any other country for which data are available (table 13). This is achieved by high patient throughput, reflected in bed-turnover rates and short average length of stay (ALOS), and high labor productivity with government doctors and nurses seeing, on average, more patients in both inpatient and outpatient settings than is the norm in other developing countries (Rannan-Eliya 2001).

Allocational efficiency

Allocational efficiency refers to the correct allocation of available resources to different treatment or service interventions. This may refer to the allocation of expenditures by disease according to cost-effectiveness criteria or to the allocation of resources by service type, or both. With respect to the former, the question is moot, because Sri Lankan health service managers have never allocated budgets by disease using cost-effectiveness

Table 13 Sri Lanka: Technical efficiency in public hospitals, compared with selected countries

Country	Year	Cost per admission (ratio of per capita daily GDP)	Cost per outpatient visit (ratio of per capita daily GDP)	Bed turnover rate	Average length of stay (days)
Complex hospitals					
Sri Lanka	1997	7	1.0	65	5
Bangladesh	1997	26	0.8	47	11
Colombia	1978	25	0.8	38	7
Indonesia	1985	26	0.7	29	9
Jamaica	1985-86	40	1.5	35	8
China	1989	76	0.8	14	25
Basic and intermediate hospitals					
Sri Lanka	1997	5	0.1	57	3
Bangladesh	1997	14	0.5	77	4
Indonesia	1987	6	0.6	33	6
Jamaica	1985-86	18	1.1	32	8
Malawi	1987-88	17	0.4	47	9
China	1986	30	0.5	21	16

Source: Excerpted from Rannan-Eliya 2001; Rannan-Eliya and Somanathan 2003.

Table 14 Sri Lanka: Proportion of MOH expenditures devoted to hospitals (percent)

Year	Recurrent expenditures	Capital expenditures	Total expenditures
1958	75	-	-
1973	-	-	65
1986	77	59	75
1991	78	86	80
1996	74	-	-
2005	-	-	71

Source: Derived by authors from various sources cited in Rannan-Eliya and de Mel 1997, and Sri Lanka Health Accounts database maintained at Institute for Health Policy.

criteria. Nor have they had the capacity to do so because budgets are not managed this way.

With respect to allocation by service type, Sri Lanka has consistently followed a strategy of allocating the largest share of its budget to hospitals (between 75 and 85 percent), and within that to inpatient care (table 14). Preventive and public health spending has averaged 25 percent or less of the budget and less than 12 percent during the past decade. The hospital emphasis has been a feature of the system since the 1950s, and from a regional perspective is surpassed only by Hong Kong (China) (Rannan-Eliya and de Mel 1997). It is much higher than the share of between 30 and 60 percent in other Asian developing countries. Although this strategy runs counter to standard prescriptions, in the Sri Lankan situation it made sense for two reasons. First, a key goal of health policy, and one benefiting the poor the most, has been protection against catastrophic risk. For this, a high hospital subsidy makes sense, considering that many patients are more able to pay for private outpatient services. Second, Sri Lanka has found that well-run government hospitals are an efficient way of delivering primary care, owing to economies of scale. Most government hospitals have only minimal capital investment and treat only simple illnesses but are more cost-efficient than smaller outpatient facilities (Somanathan et al. 2000).

CHAPTER 3: Health Delivery System

Sri Lankans benefit from extensive and organized health services, consisting of parallel public and private sectors.

3.1 Health Services Organization

Public services, financed and provided in an integrated fashion by the Ministry of Health and eight provincial Departments of Health, span the full range from preventive and basic primary care activities to complex hospital-provided tertiary care. The public sector network ranges from teaching hospitals with specialized services to small dispensaries that provide only outpatient services. Medical Officers of Health units (MOOHs) provide most preventive and public health services through teams of doctors, community midwives, and others. Their organizational model was developed in the 1920s and expanded in the 1930s and 1940s.

MOH facilities form a dense, integrated network with more than a thousand institutions. Most Sri Lankans live within 3 kilometers of a public facility. Although there is a formal referral system with patients expected to use primary-level services as the first point of contact, this is not enforced for reasons of equity. Patients can seek care in the medical institution of their choice, recognizing the reality of service quality variations and the lack of organized general practitioner services to act as gatekeeper for accessing hospital services.

The largest part of private provision is ambulatory, with most outpatient services provided by government medical officers working in their off-duty hours. A smaller number (estimated to be a thousand) full-time private doctors are concentrated in urban areas. This is supplemented by a private hospital sector, concentrated in the Colombo district and providing inpatient and tertiary services. The overall use of health services in Sri Lanka is high relative to comparable countries, and the overall cost of the health system is low (table 15). The public sector predominates inpatient provision (more than 95 percent), but shares the outpatient load with the increasingly important private sector (table 16).

Table 15 Sri Lanka: Provision of health service inputs and activities, 2003

Resource	Public sector	Private sector	Total	Population ratio
Physicians	~7,000	~1,000	~8,000	0.4 per 1,000
Nurses	~6,000	~5,000	~11,000	0.6 per 1,000
Hospital beds	59.262	~3,000	62,000	3.2 per 1,000
Inpatient admissions	4.1 million	0.3 million	4.4 million	22 per 100
Outpatient visits	45 million	~50 million	95 million	4.8 per capita

Source: Computed by authors from data provided by Medical Statistician, Ministry of Health and IHP databases.
Note: ~ denotes approximation.

Table 16 Sri Lanka: Trends in treatment sources used by sick persons, 1978-2004 (percent)

Source of treatment	1978/79	1981/82	1986/87	1996/97	2003/04
Western government sector	42.6	45.6	44.1	50.7	43.5
Ayurvedic government sector	1.9	2.2	1.9	2.0	1.2
Western private sector	34.3	34.2	37.2	38.1	45.1
Ayurvedic private sector	16.1	12.1	12.9	7.6	5.0
Others	5.1	6.0	3.8	1.7	1.6

Source: Central Bank Consumer Finance Surveys based on published reports and analysis by authors.
Note: The percentages are for those who reported falling ill during a 14-day reference period, and used any source of treatment. Western private includes private clinics, private hospitals and pharmacies.

3.2 Growth of Health Service Provision

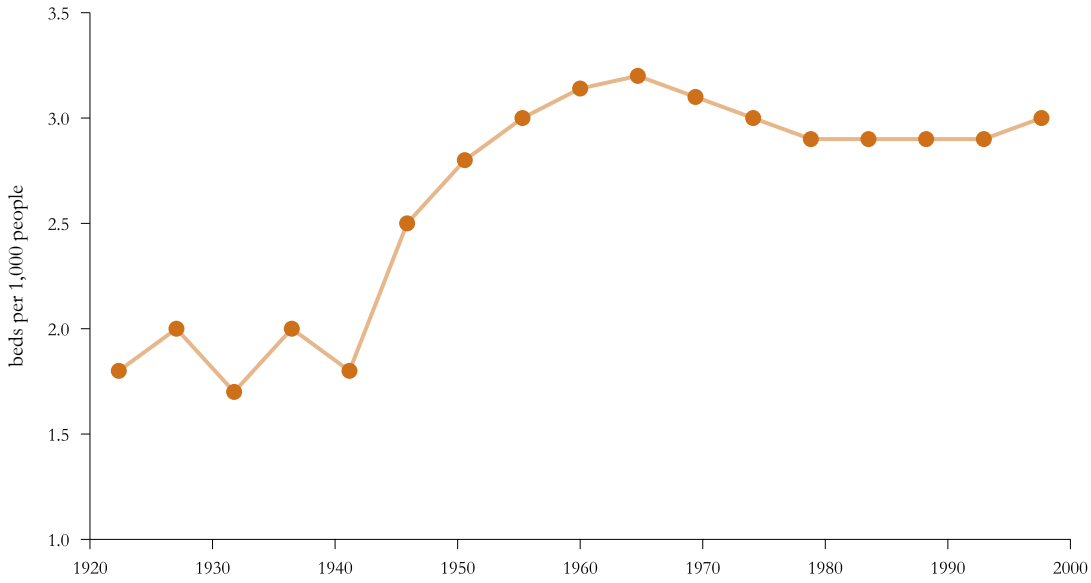
Before the 1930s, modern medical care was limited to government, missionary, and private hospitals in urban areas and estate-company provision for the plantation workforce. In rural areas, demand and purchasing power were insufficient to make private sector investment feasible. The reforms starting in the 1930s changed this. Although there was significant construction of rural facilities in the 1930s, difficult economic conditions then and during World War II constrained expansion, which just kept up with population growth. After the end of the war and the economic recovery, the hospital-building program took off, and provision grew much faster than the population. The number of government hospital beds increased from 1.9 per 100 before 1945 to just over 3.1 by 1960 (figure 7). Since then hospital expansion has continued, but only enough as to keep up with population growth.

Without the reforms, rural people would not have had equitable access to basic medical services. Today, although higher-level facilities and services are located only in urban areas, they are still accessible to the rural population, owing to the short distances in Sri Lanka between town and countryside and cheap public transport. Consequently, urban-rural differentials in service accessibility are minimal. The differences that do remain relate more to quality differentials and the increased travel costs that rural people encounter in accessing tertiary care.

3.3 Medical Education and Regulation

The public universities operate the medical schools and have been graduating a thousand new physicians a year for the past decade. Admission is based strictly on grades in the school-leaving examinations, and tuition is free (as are all public university courses). The medical school curriculum, a five-year course, is based on the British system. All medical graduates must complete a two-year internship in a public hospital before they can receive a full license to practice. Placement in an internship is by merit, and the lower ranked are placed in rural areas. Refusing the assigned internship debars a medical graduate from ever obtaining a license, so compliance is good. Sri Lankans

Figure 7 Sri Lanka: Government hospital provision, 1920-2000



Source: Estimated by authors from health ministry statistics.

who have obtained medical degrees abroad are given last preference. Further training to become a specialist requires both formal postgraduate examinations and clinical work to obtain expertise. This postgraduate training, including government-funded placements overseas, is available only in the public sector and is a major incentive for doctors to stay in the public sector.

Once fully licensed, a doctor may practice indefinitely. The Sri Lanka Medical Council, a statutory body, regulates physicians and has the ultimate power to remove the license. However, this power is almost never exercised. Although the law does allow for cases to be brought against physicians on the grounds of professional negligence, they are rare owing to the difficulty of proving these cases in court and lack of patient awareness of their legal rights.

In the private sector, Sri Lanka follows a laissez-faire policy of light regulation. Private doctors can practice as they wish, as long as they have the basic license. Private hospitals are barely regulated, and government did not even require these institutions to register centrally until 2008. Nor does government attempt to control prices in any way. For more than a decade, the MOH has been proposing a price-control statute, but no draft has made it out of the parliament. The small private medical insurance market is not subject to specific regulation, although it is regulated as part of the overall insurance and financial services sector.

3.4 Pharmaceuticals and Medical Technology

Sri Lanka's public sector-initiated policies for the control and management of medicines in government hospitals as early as the 1950s, several decades before WHO adopted the concept of the rational use of drugs. To control medical technology, there is no policy other than a basic registration requirement.

Pharmaceutical supply and regulation

Pharmaceutical supply and regulation policies include a national formulary of drugs approved for use in government hospitals, a policy of purchasing public sector drugs only through international tender and bulk purchasing, the use of only generic medicines in the public sector, and the adoption of a national essential drugs list. Most government drugs are bought centrally for distribution to medical facilities and the provinces. The existence of these policies does not limit the range of medicines available in the public sector. The health ministry's essential drug list contains several thousand products, and the MOH purchased almost 3,000 different drugs and medical items in 2005. Nevertheless, not every medicine is available in every hospital. For cost control reasons, the number of drugs lower-level hospitals can stock is controlled through administrative procedures, based on an assessment of how essential a drug is, and the more expensive drugs are restricted to tertiary facilities.

The private sector may import any drug that is registered with national authorities. In practice, any drug that registered in the United States or Europe will be registered in Sri Lanka upon application. Until 2002, prices of imported drugs were controlled by setting the retail price at a maximum of 165 percent of the import price.

Medical technology

Despite the lack of a formal policy, adoption and purchase of expensive high technologies are tightly controlled in the health ministry using managerial procedures. For example, the purchase of CAT scanners and MRI scanners was long delayed in the public sector, despite pressure from medical specialists, and only small numbers have been purchased. The private sector may import any registered medical technology, but until recently the implications of this were limited, since tertiary medical care was effectively a public sector monopoly. However, in the past decade, with growth in investor-financed private tertiary private hospitals in Colombo, the private sector has begun to import the more expensive high-technology devices, such as MRI scanners.

3.5 Strengths and Weaknesses

The main strengths of Sri Lanka's system are its equity, high system efficiency, good health outcomes, and relatively low costs for government and households (Hsiao and Associates 2001). The system affords the poor effective protection against financial risk of illness and ensures their access to basic medical services. The incidence of government spending is not pro-rich, as it is in many developing countries. In addition, the general revenue-based system of financing is progressive, and most out-of-pocket spending falls, by choice, on the richer households.

The main weaknesses of the system result primarily from underfunding; the government cannot increase the budget because it has not raised taxes sufficiently (Hsiao and Associates 2001). Underfunding means that hospital services do not meet the demands for services and amenities of richer households, which have been turning increasingly to the private sector. The risk is recognized that the continued shift of patients out of the public system may destabilize the health system as a whole and undermine political support for government health services. The system has also failed to adopt modern methods for management and treatment of chronic, noncommunicable diseases such as ischemic heart disease. This is a growing challenge owing to the stagnation in male adult life expectancy. But, lack of funding precludes a reorientation.

A related problem is the increase in consumer non-health expectations for better amenities in government hospitals and a more consumer-oriented approach by staff. Again, the organizational changes and flexibility that the system needs to respond to cannot currently be implemented until the financing gap is resolved.

Table 17 Sri Lanka: The chronology of scaling-up health reforms

Year	Event or Reform	Government expenditure (GDP)	Inpatient admissions/ 100 capita	IMR
1858	Establishment of first government medical department	<0.5	<1.0	n.a.
1931	Democracy: First national elections by universal franchise and transfer of power to elected Sri Lankan leaders	1.4	3.3	158
1934-35	Rural economies ravaged by Ceylon malaria epidemic	1.5	4.3	263
1936-47	Expansion of government medical services into rural areas	0.9-1.7	5.5-7.9	120
1948	Commission on Social Services rejects introduction of social health insurance, recognizing that direct government hospital provision is a form of insurance	1.7	9.3	101
1951	User fees ended at government hospitals	1.5	11.0	82
1959	End of increases in health budget	2.1	14.0	58

Source: Statistics for government expenditure, admissions and IMR from official data.

CHAPTER 4: Health Coverage Reforms

The good and equitable health outcomes in Sri Lanka result from health care reforms (table 11.17). They are not an inevitable outcome of culture and history. Prior to reform, health conditions in the island were no better and mortality rates were higher than the South Asian average (Langford and Storey 1993). The subsequent health achievements of Sri Lanka are chiefly due to the role of its health services in reducing mortality and morbidity and the success in expanding coverage of its health system. The main scaling-up phase of reforms (1931-59) put in place all the key features of the current system, including high coverage of the poor. The core elements have not been disturbed by subsequent, incremental developments. A look at the formative 1930s through 1950s reveals how Sri Lanka reformed its health system; the years before that tell why.

4.1 The Precursors to Sri Lanka's Health Reforms

History facilitated Sri Lanka's health reforms. An ancient history of public provision of health care meant that public services were not necessarily alien. Exposure to western medicine during the colonial era and the development of an extensive physical and social infrastructure funded from exports provided a conducive environment. Ultimately, precipitating and critical events played their role, principally the advent of democracy in 1931 with the transfer of power by the British to a representative government elected through universal suffrage and lessons about health market failure, driven home by the Ceylon Malaria Epidemic.

A history of state intervention.

Public financing of health services in Sri Lanka dates back at least 2,300 years. In the premodern era, Sri Lankan kings opened public hospitals and funded them from government revenues. The rulers were motivated by the prospect of merit, which Buddhism taught would accrue to the builder, and by the high value placed by Buddhism on the alleviation of human suffering (Rannan-Eliya and de Mel 1997). This was in a context, where the Theravada strand of Buddhism, which is dominant in Sri Lanka, encouraged a close nexus between religion and state action. Unlike in premodern Europe, most hospitals were built in Sri Lanka not through private charitable action, but as state initiatives. Records date the earliest such facilities to the fourth century BC (Uragoda 1987).

State financing of health services collapsed in the 13th century, with internal conflict and foreign invasion, and the resulting collapse of the public revenue collection system. Although the period from then until the end of the colonial period represents a clear discontinuity in social policy development, contemporary public attitudes in Sri Lanka, which assign to the state primary responsibility for providing health care, echo these earlier traditions and find support in contemporary religious thought.

Exposure to western medicine

During the colonial era, the Dutch and British occupiers opened a few urban hospitals for the benefit of colonial officials and European residents. They were financed by a mix of user fees and general revenues and were beyond the reach of rural Sri Lankans. For them, the only option was treatment by traditional doctors who, in accordance with Buddhist tradition, charged fees only for dispensing medicines, and not directly for diagnosis. Nevertheless, the colonial medical services were important in introducing the concepts of modern scientific medicine. Sri Lankan culture, much as in Japan and Kerala, proved receptive to the western biomedical model, as it blended easily into a context where individuals would look for signs of illness and doctors would treat with medicines (Caldwell et al. 1989). This ready cultural acceptance of scientific medicine partly explains the alacrity with which Sri Lanka's rural people later welcomed expansion of health services.

In the 19th century, the British occupation authorities tried to extend health services by introducing, in 1880, a scheme for the plantation companies to provide basic medical services to their workers, to be financed by reimbursements of a cess on exports. This was motivated not by humanitarian reasons, but because of the importance of these workers to the plantation economy and pressure

from the Indian government. By the 1930s, the estate workers enjoyed better health services than the rural population, and better health indicators. After 1931, these plantation services became a model for the rural population to aspire to.

The colonial state and introduction of democracy

The British occupation was marked by the development of the plantation economy. Plantation exports, easily taxed, provided the authorities with a ready source of revenues. In 1848, the British defeated the last armed rebellion against occupation. This event was an important milestone. First, the rebellion was essentially a peasant revolt and marked the start of a transition in Sri Lankan society between leadership by feudal elites to one based on the support of ordinary people. Second, the occupation authorities no longer faced internal threats requiring maintenance of a large military, and tax revenues were invested in building physical and social infrastructure servicing the plantation sector and an administrative structure that was more sophisticated and substantial than in the rest of South Asia. One indicator is that by the 1930s, Sri Lanka had a functioning vital registration system recording most births and deaths.

The relatively advanced state of institutions in the island led the British in 1928 to embark on a major experiment in social engineering, by granting Sri Lankans self-rule under a representative government elected through universal suffrage. This transfer of power, not to the local elites but directly to the majority of the population, was opposed by the leading Sri Lankan politicians. Its radical nature is evident, considering that only in 1929 were the first elections by universal suffrage held in the United Kingdom.

In introducing democratic government, there was an explicit recognition that democratic accountability to voters would promote health conditions and reduce mortality:

> We have given serious consideration to the question of women's franchise. Apart from the familiar arguments in its favour, and the general principle of sex equality, we have been impressed by the high infantile mortality in the Island, and the need for better housing, and for the development of child welfare, midwifery and ante-natal services, all providing problems in the solution of which women's interest and help would be of special value, It is true that though the position of women in the East has not, till recent years, been suitable for the exercise of political power, that position is rapidly changing and the demand for the vote was put to us by a large and representative deputation of Ceylonese ladies' (Government of Ceylon 1928).

The first legislature selected through universal franchise was elected in 1931. British civil servants ceded all responsibility for domestic policy to Sri Lankan politicians until independence in 1948, when the new Sri Lankan government took over responsibility for foreign and security affairs. Competitive electoral politics during the following two decades would drive all major changes in social policy, including the introduction of the personal income tax (1932), the expansion of government health services to rural areas (1931-40), the introduction of free education (1930s and 1940s), and the abolition of user fees for health services (1951).

The lessons of market failure in the health sector

The period leading up to 1931 created the preconditions for Sri Lanka's health reforms: a population receptive to modern medical services, a model of health care provision in the plantations that the rural population could aspire to, a fiscal base adequate to support significant public expenditures, and a political mechanism to translate social preferences into actual policy. The missing element was the understanding by policy makers of the need for reform of the existing health system. This came about as a result of an unprecedented health crisis, the Ceylon Malaria Epidemic (Rannan-Eliya and de Mel 1997).

In 1934-35, owing to unusual climatic conditions, a major epidemic of malaria spread to every part of the island, hitting most severely normally nonmalarial areas, where people had no natural immunity. Most of the population was infected, and a significant fraction died. When this hit, the politically conservative, newly elected Sri Lankan government left the response to market forces, primarily

charitable action. This proved totally inadequate in face of the disaster, which followed a deep rural crisis induced by the impact of the global recession of the early 1930s. Other than direct morbidity, the epidemic economically devastated rural areas, because farmers were too ill to cultivate their crops, and their family members, burdened by the responsibility of caring for the sick, could not attend to their normal work. In the absence of state intervention, the Marxist opposition parties made much political capital by organizing missions to assist the afflicted rural poor. Although these missions were not that effective, they created political alarm among the elite.

After the epidemic, an official government inquiry observed that the health crisis had forced rural households into poverty and that relying on charitable and market actions was totally inadequate to deal with the challenge. It concluded that direct state intervention was needed through provision of hospitals that could treat and feed the sick, so as to help the affected families survive such events. This series of events, through official reports recognizing the financial impoverishment created by ill-health in rural areas, increased political pressure to expand health services. It is almost identical to the sequence of events in Japan in the early 1930s that led the Japanese government to embark on the eventually successful effort to extend health insurance coverage to all its people (Hasegawa 2005).

In effect, Sri Lankan state and other policy makers realized early that health was not just an individual matter and that health policy was more than just curing disease. Although there was little effective treatment for malaria at the time, they understood that ill health had economic implications and was linked to poverty, that the market would not provide effective health insurance against catastrophic risks, and that the public sector had a crucial role to play in providing it. They also realized that failure to address the market failure would carry significant political risks in the new political environment where the poor had a vote. The recognition that direct public provision of hospital services was a form of social insurance would be later explicitly stated by the influential Commission on Social Services (1947).

4.2 Health System Reforms

From the early 1930s, the government launched an expansion of free health services in rural areas, primarily through building and staffing hospitals and dispensaries. The immediate impact of this expansion was obscured by financial constraints during World War II. When the economy returned to normal after 1945, there was an immediate increase in the quality of services at the new facilities as staffing and the supply of the new antibiotics improved. This fed directly into the jump in life expectancy in postwar years (Langford 1996).

The initial expansion of the service network chiefly involved the building of new health ministry facilities in places where there had been none. At first they were simple dispensaries and unsophisticated rural hospitals, but they brought most Sri Lankans within a short distance of some treatment point and encouraged them to try modern medicine instead of traditional care. The construction program was promoted by the lobbying of the health ministry by individual members of parliament, which, in effect, ensured that all electorates ended up with at least some health services. This lobbying was biased in favor of rural areas, because rural electorates had fewer voters on average than urban electorates, and thus were overrepresented in parliament. In addition, until the late 1940s, party political organization was weak, and most legislators competed for election not on the basis of a party platform, but on their ability to bring their constituents benefits such as hospitals, schools, and roads (Wriggins 1960). By 1945, the health ministry was operating more than a thousand hospitals and dispensaries for a population of only 7 million. Later, after the network was in place, further expansion shifted to upgrading and expanding existing facilities, a process that continues today. By the 1950s, Sri Lanka thus ended up with the far-flung facility network that minimized distance, which is so important for reaching the poor. As more contemporary analyses have found, distance is as important a factor as quality in the demand for health services in developing countries (Lavy and Quigley 1983). By building so many facilities, the distance that the poor have to travel to obtain care was reduced, and a key barrier to access was removed.

Abolition of user fees

In common with most British colonies, government hospitals charged user fees prior to the 1930s. However, a means-tested exemption was provided to those considered poor, and the income limit was set so high that most rural patients did not pay. Yet in the electoral scenario that emerged after 1931, even these limited fees were considered unreasonable. User fees were abolished in 1951 by the UNP government in power at the time but were reintroduced in 1971 by a Trotskyite finance minister. Demand for health services, especially by the poor, immediately plummeted, and the fees were again abolished by the next UNP government in 1977. Consequently, in Sri Lanka user charges have never been a barrier to access by the poor, and the national policy of free care has been firmly supported by all major political parties and, in fact, was instigated by the most promarket of them.

The emphasis on hospitals

The health reforms, from the beginning, relied heavily on hospitals in extending coverage. Unlike in many developing countries today, Sri Lankan health planners early recognized not only the insurance function of a hospital, but also the fact that most illnesses could not be prevented and thus needed to be treated through curative interventions. They thus believed that hospitals had to play the lead role in combating illness and allocated budgetary resources accordingly. The prioritization of hospitals in the health ministry budget was thus an important feature of official health policy from the 1930s and marked a major change from British colonial policy, which had concentrated on preventive, sanitation, and quarantine measures for the rural population.

Indigenization of medical department

The health ministry that executed these reforms was distinctively different from other ministries. In the latter part of the British occupation, government departments were no longer the preserve of British civil servants, and Sri Lankans were progressively recruited into them. This process of indigenization had most advanced in the case of the medical department, regarded by the British as the least important or prestigious. Not only were almost all its personnel Sri Lankan by 1930, but it was also the first department in which the most senior civil service position could be filled by a local. This departmental history was important. It imbued the ministry with a distinctive pro-poor attitude: its personnel took pride in the fact that it was the first to be controlled by Sri Lankans, which encouraged an ethos that saw the mission of the ministry as "serving the masses." This contrasts with neighboring India, where the Indian Medical Service was seen as an agent of the occupiers (Jeffery 1988).

Tradeoff of quality versus access

As rural access to services improved in the 1940s, the health ministry was met with sustained and wholly unanticipated surges in patient demand. For example, in 1948 total inpatient numbers increased by 22 percent; outpatients, by 30 percent. Government hospitals were filled beyond their design capacity, and average bed-occupancy rates of more than 200 percent were common. In this situation, medical personnel and planners often pushed for measures to restrict demand, including closing hospitals when bed-occupancy breached the official limit of 200 percent, because further admissions would damage treatment quality. However, political pressures not to restrict access made it impossible for the health ministry to accede. In several instances, doctors were dismissed from service for implementing departmental rules on overcrowding, after patients refused admittance complained to their legislators, who then complained to the health minister. In this situation, an implicit tradeoff was made to prioritize access to services over service quality. Although it had the perverse result of making overcrowding inevitable, it benefited the poor, because any measures that might have restricted demand would have affected the poor inevitably more than the rich.

Productivity improvement

The ambitious expansion of health services that was planned and achieved was expensive. After the

mid-1950s, fiscal constraints made it impossible for the government to increase the health budget, and subsequently health spending fell as a share of national income. Despite this, political leaders would not accept any reductions in services by the MOH or any policies to restrict demand. Faced with these conflicting pressures, the ministry responded by searching relentlessly for productivity increases and pushing its staff to work harder. To do this it had to rely largely on administrative and managerial measures, ranging from simple changes such as reducing the minimum distance allowed between hospital beds to changing the pension regulations, so that doctors were compensated adequately for working longer hours. Over time this created an organizational culture that has promoted continuous productivity increases.

Compulsory posting and dual medical practice

An important pre-1930s reform concerning private practice has facilitated expansion of coverage to rural areas. When the health department was first established, medical officers were not permitted to engage in private business, consistent with general civil service regulations. However, the department discovered that it was hard to recruit medical officers from the United Kingdom to work in Sri Lanka owing to the difficult working conditions and low pay. It was therefore decided to allow medical officers to supplement their official salary by doing private practice outside official work hours and off government premises. This enabled the department to recruit and retain medical staff. This policy was in effect in the 1930s, by when most new recruits were local graduates. It has supported expansion of coverage into rural areas, because the health ministry cannot afford to pay market wages to entice doctors, but doctors can substantially raise their incomes by private practice. In rural areas where the government medical officers are usually the only physicians, private practice can be lucrative. In 1970-77, when private practice was abolished, the distribution of government doctors to rural areas suffered, as did overall retention of medical officers in the health ministry.

The health ministry has adopted another policy to improve availability of medical personnel in rural areas: rotating all junior doctors-on a regular basis and compulsorily-posting many of them to rural areas. This policy has been enforced by firing doctors who refuse to comply, a significant disincentive because junior doctors cannot obtain specialist training outside the public sector. Through the carrot of specialist training and seniority, which are necessary for doctors to earn the highest private practice incomes, doctors are persuaded to accept lower than market wages during the early part of their careers.

4.3 Evaluation of Reforms

Between 1931 and 1951, Sri Lanka expanded access to health services by using direct government provision and building a highly dispersed health facility network in rural areas. The reforms fundamentally altered the health system. They changed it from one in which the urban rich used modern medical services and rural people relied on traditional providers, to one in which the whole population had easy access to and used modern medical services. This involved not only increases in coverage, but also a change in health-seeking behavior as rural Sri Lankans were persuaded to switch from traditional to modern medical care. So effective was the expansion in coverage that by 1951 Sri Lanka was able to achieve quantitative levels of health service access comparable to many middle-income developing countries today and substantially equalize use of modern medical treatment between rich and poor. In addition, this expansion of coverage involved access to not only primary care services, but also to general hospital services, including inpatient treatment. The aggregate increase in population coverage was between 200 and 300 percent during the 20-year period (table 18).

There is an important aspect to this expansion in coverage. Since the initial reforms in the 1930s, a major implicit goal of health care provision has not been to improve health outcomes, but to protect households against the catastrophic economic impacts of severe illness. The reforms have not

only increased access to services but have also extended insurance protection to the poor in the form of hospital services. This has been possible because the public sector has allocated the largest share of the budget to hospital services, and has implicitly accepted the role of the health services in providing insurance against the catastrophic financial risks of illness.

Cost implications of scaling up and targeting

The expansion in services during the scaling-up phase of the reforms involved large increases in government outlays in funding. After the 1950s, however, the government could not continue to increase funding to keep up with the increases in patient demand manifest since the early 1930s. At the end of the scaling-up phase, the reforms could easily have imploded, because increased demand so outstripped financing capacity as to endanger the principle and practice of universal access. That this did not happen can be attributed to two factors: technical efficiency gains in the public sector substituted substantially for the lack of additional funding, and implicit targeting was achieved by interaction with private sector supply.

Table 18 Sri Lanka: Expansion of health service coverage, 1931-1951

Item	1927	1931	1936	1946	1951
Inpatient admissions (per 100 capita)	3.7	3.3	6.0	7.5	11.0
Outpatient visits (per capita)	0.5	0.6	1.0	1.1	1.5
Government health expenditure (GDP)	0.8	1.4	1.7	1.3	1.5

Source: IHP databases and official statistics.
Note: Data derived from IHP databases and official statistics. Data are given for 1927 to provide an indication of the pre-reform trends. Other years selected based on availability of data, which are incomplete for the 1939-1945 time period owing to wartime censorship of government administrative data.

Institutional change

To achieve this expansion in coverage, Sri Lanka transformed its government health ministry's mission from serving the workforce of the occupation authorities to serving the rural people. Moreover, the expansion created a management culture focused on productivity improvement as the means of expanding coverage within limited resources. This was done without changing the civil service structure or regulations and relied primarily on organizational ethos and culture.

Health outcomes

The expansion in coverage enabled Sri Lanka to rapidly reap the advances in medical technology that had been made globally in the previous half century and substantially reduce mortality in all areas and in every population subgroup. Not only were health indicators dramatically improved after 1945 as a result of the better access to medical treatment, but a process was also started that substantially reduced health inequalities between urban and rural and rich and poor Sri Lankans. The health reforms started a process of rapid and continuing mortality decline that has enabled Sri Lanka to complete its mortality transition in less than a half century.

As noted, more than half the increase in service volume was achieved through productivity increases. By the 1950s, the government was able to start reducing health spending as a share of GDP, while still continuing to expand and improve services.

The other contribution to meeting the financing gap involved in committing to universal coverage has come from the dynamics of demand for public and private services. As noted, the health ministry has permitted dual practice by its medical officers since the 19th century and takes a laissez-faire attitude to the private sector. Consequently, in all areas some private medical services are available, and in rural areas almost all outpatient services are provided on a fee-for-service basis by government medical officers. Even in urban areas, where there is significant private inpatient provision, the attending physicians are usually government specialists, or they are full-time private GPs, most of

whom, for many years, worked in the public sector (Rannan-Eliya, Jayawardhane, and Karunaratne 2003). Consequently, there is little difference in the technical quality of medical services in the public and private sectors. The only reason that patients choose to pay for private services, when they can, in theory, see the same doctors for free in government hospitals, is that in the private sector the hotel amenities are better, the facilities are less crowded and the queues shorter, the opening times can be more convenient, patients can choose their doctor, and the doctors and staff will spend a little more time with the patient and are perhaps more polite and courteous. In this context, the richer patients, who have a higher opportunity cost of waiting and a greater preference for the consumer aspects of quality, voluntarily choose to use the private sector. This choice is reflected in a strong prorich gradient in the use of private outpatient services and a propoor gradient in the use of public outpatient services. For inpatient services, for which few Sri Lankans without insurance can afford to pay out of pocket, the gradients are less obvious. This situation allows the government-without having to identify rich and poor directly-to effectively target its spending to the poor and maintain its explicit commitment to universalism, while relying on the rich to reveal their own preferences by voluntarily opting out.

Politics and sustainability

There is no evidence to suggest that Sri Lankan politicians are significantly more altruistic and concerned for the poor than those in any other country. When the malaria epidemic of 1934-35 struck, most politicians stood by and left the population to fend for itself. However, the political system, where political power must be obtained though the ballot box and where the voters are not disinclined to throw out incumbents, taught political leaders to be highly sensitive to the demands and preferences of the people, including the rural poor. Thus, the political leadership embarked on health reforms that invested significant public funds in expanding access to free health services and subsequently ensuring that this system was maintained and improved. This sensitivity to social preferences has also been behind the prioritization of budgetary resources for hospitals. Because the political rationale still exists for governments to maintain the system, as long as the population favors it, the current health care system is sustainable. At the same time, the political system has been effective in transmitting its concerns about financial costs to the health ministry, so overall government health expenditures in Sri Lanka have never been high by international standards.

4.4 Key Conditions

The key conditions for Sri Lanka's success in expanding access were as follows:

- *Democracy.* A competitive electoral process has ensured that the political elite must take into account the preferences and needs of the poor and forced policy makers to build an accessible health system in every part of the country.
- *Taxes.* The early availability of a ready tax base in the form of export taxes on tea, rubber, and coconut enabled the government to provide the public financing to pay for service expansions for the rural poor.
- *A committed and efficient public sector.* Sri Lanka still faced the challenge of how to expand services within limited budgetary resources. It succeeded primarily because its centralized civil service management of health care services gave it an efficient means of expanding services through continuous productivity gains.
- *A pragmatic approach to targeting.* The approach involves adopting an explicit commitment of universal access but implicitly allowing the rich to opt out and use private services, thus allowing government spending to be focused on the poor.
- *The existence of models.* At various points, Sri Lankans were able to copy, emulate, or aspire to introduce models of health care delivery. These provided them with a template for transformation and reduced the need to experiment. The models included Western biomedicine introduced by the European occupiers, the free health care provided to estate workers and civil servants, and the British health ministry organization that took root in colonial times.

CHAPTER 5: Lessons for Other Countries

Sri Lanka offers many lessons for broadening access to basic health services to the poor in developing countries.

Democratic accountability can ensure that health systems are responsive to the needs of the poor

For health systems to be responsive to the needs and preferences of the poor requires that the political system itself be responsive to their wishes. A democratic political system in which the poor are given voice through regular, free, and fair elections can be an effective mechanism for achieving this, although the scale and level of electoral representation are important mediating factors. Democratic accountability should not be confused with community participation or cost sharing or political decentralization. Sri Lanka has had little success with community participation in local government or in running individual facilities, but the most basic decisions about the health system are not made locally, but nationally. It is at the national level that the poor have had a voice.

In fact, the most important issue for the poor-the redistribution of resources from the wealthiest parts of the country to the poorest-can be resolved only through central government action. But well-meaning technocratic intentions will not permanently guarantee attention to the poor. Only when a political system has incentives to consider the interests of the poor will it actually do so, and continue to do so. Political considerations frequently override technical concerns, and Sri Lanka's history provides numerous examples of public choices superior in welfare terms to choices by experts. At the same time, for a health system to be able to act on the preferences of the poor it must not emasculate its capability to do so. Building and maintaining efficient systems for public revenue collection and public production of health services are integral to making democratic accountability real in poor countries.

Fair access for all should be a priority goal of health systems

Equity of access to services must be a priority goal if health gains are to reach the poor. All health systems operate under resource constraints. Inevitably, some attempt will be made to match supply and demand, but almost all rationing mechanisms have negative implications for the poor. Unless fair access is the highest priority, choices about rationing will be made that will shortchange the poor. Sri Lanka's democratic political system ensured that fair access was the priority goal. This led to the disavowal of user fees and other financial barriers to accessing health services, the building of a highly dispersed government health care system that reduced nonfinancial barriers to access such as travel costs, the imposition of incentives for government providers to accept all patients regardless of cost and quality implications, and the outranking of concerns for rational referrals by the principle of free choice of providers.

Health systems must provide the poor with insurance against catastrophic illness

Independent of the impact on health status, health systems make an important contribution to the welfare of the poor when they provide insurance against the economic costs of severe illness. This has been one of the most important objectives of Sri Lankan health policy, recognized as early as 1935. Its importance is reflected in the highest priority given to inpatient services in government budgetary allocations. The economic costs of illness include not only the cost of medical treatment, but also the care and feeding of the patient, and the loss of income as household members must divert time from their normal household and other activities to tend the sick. Catastrophe insurance cannot be provided by charity or by private markets in any country. Only public action can provide it either through free inpatient services or some other method of social insurance.

Efficiency in health service production is more important than resource mobilization in overcoming resource constraints

Fair access in resource-constrained environments requires that health services be efficient producers. Sri Lanka did not respond to its budget constraints

by limiting service delivery, but expanding services by using efficiency gains of 1 to 4 percent every year in its public sector. Sri Lanka was better able to achieve efficiency gains to mobilize additional resources than spend more money. The potential for such efficiency gains in health systems should throw into question the assumption that tight resources pose insuperable barriers to ensuring better health for the poor. Sri Lanka completed its health transition and achieved access to health services similar to OECD economies while spending less than 50 percent of the World Bank-stipulated "minimum cost-effective package"-and without resorting to user fees, community financing, or insurance.

Pessimism about the relative inefficiency of public sector health service production is as unwarranted empirically as it is theoretically

Sri Lanka's experience is unusual, but it should not be assumed that the public sector is inherently incapable of efficient service delivery or necessarily the worst of possible alternatives. Sri Lanka's government hospital system has been effective both in achieving high efficiency and in generating continuous efficiency gains. This was done without giving autonomy to individual hospitals, without decentralization, and without changing civil service conditions of employment, despite the existence of strong health sector unions. More attention by researchers and by policy makers needs to be given to understanding the determinants of efficient performance by public sector providers, and perhaps more than is now given to maximizing efficiency in private delivery. Experience in Sri Lanka (and several countries with similar health departments; e.g., Malaysia, Hong Kong [China], and Mauritius) suggests that within the spectrum of public sector organization patterns, unobserved and poorly understood possibilities remain for excellence in public sector delivery. Since Sri Lanka neither pays its health personnel well nor uses performance-related financial incentives, the evidence indicates that nonfinancial incentives and organizational culture can be more important determinants of performance.

Cost-effectiveness of interventions and a disease-focused approach to allocational efficiency are irrational and inefficient guides to resource allocation and may lead to erroneous use of resources

Sri Lanka never relied upon cost-effectiveness or disease focus as a guide to allocating resources. Allocating resources according to specific diseases and interventions would have been mostly impossible inasmuch as resources were budgeted by facility and input type, and physicians make decisions about treatment at the lowest level. As to cost-effectiveness decisions, Sri Lanka never had the data or expertise to make the necessary calculations. The Sri Lankan experience fundamentally contradicts the basic conclusions of most cost-effectiveness analysis. Sri Lanka, influenced by its political process, has placed government resources where they would have the greatest marginal welfare benefits in the context of social inequality and dual public and private markets. Inpatient care has been favored not because of its health impact, but because of underlying welfare gains in terms of risk protection, and the inability of private markets to ensure adequate supply. Routine primary care receives a lower share of government budgetary resources, because many households are likely to be able to pay for adequate care themselves from private sources.

Use of consumer quality differentials in a dual public-private system can be a more effective mechanism of targeting health subsidies than explicit targeting

Sri Lanka found that targeting any subsidy to the poor faces the informational constraint that governments lack sufficient information to distinguish accurately between the poor and the rich. This is the same information constraint that prevents poor countries from relying on income taxation as the main source of general revenue. Consistent with the insight from the theory of optimal income taxation that tax and subsidy systems should be incentive compatible, a health system can efficiently target health subsidies by enforcing universal access and relying on differentials in consumer quality to persuade richer individuals to self-select

private services. Such a system, as in Sri Lanka, is politically sustainable as long as sufficient people continue to use the public service. That this is a general attribute of the health system is demonstrated by similar outcomes in several other ex-British dependent territories with similar health systems, such as Jamaica, Barbados, Mauritius, Malaysia, Hong Kong (China), and Ireland.

Endnotes

1. Two of provinces were merged in 1987, but in late 2006, Sri Lanka's Supreme Court declared the merger illegal as the required referendum of their voters had not been held.

2. The intensive empirical research this would take has not been a priority for most research-funding agencies.

3. For the sake of comparison the U.S. dollar per capita spending levels given in this and the following paragraphs are in constant 1990 U.S. dollars, to permit direct comparison with the spending estimates published in World Bank (1993).

Annex Tables

Annex Table 1 Sri Lanka: Total health expenditures, 1993-2005

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total expenditures on health													
Rs. million	17,263	20,346	24,372	28,485	31,964	38,224	42,694	48,457	55,724	62,828	72,108	86,893	100,115
US$ million	358	412	476	515	542	592	607	640	624	657	747	895	996
Ratios													
Share of GDP (%)	3.3	3.5	3.6	3.7	3.6	3.8	3.9	3.9	4.0	4.0	4.1	4.3	4.2
Per capita (US$)	21	24	27	29	31	33	33	35	33	35	39	44	51
Population (million)	16.3	16.4	16.6	16.9	17.1	17.3	17.5	17.7	17.9	18.2	18.5	18.7	19.0

Source: Institute for Health Policy (IHP) Sri Lanka Health Accounts database.

Annex Table 2 Sri Lanka: Health expenditures, by source, 1993-2005 (percent of total)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
General government	44	45	47	47	47	49	48	49	47	47	45	47	47
Central government	27	26	30	30	31	33	32	33	31	31	30	32	31
Provincial government	14	16	15	15	14	14	14	15	14	14	13	13	15
Local government	2	2	2	2	2	2	2	2	2	2	2	2	2
Private sector	56	55	53	53	53	51	52	51	53	53	55	53	53
Household out-of-pocket	51	51	48	48	49	48	47	46	48	49	50	49	49
Private insurance	1	1	1	1	1	1	1	1	1	1	1	1	2
Employers	3	3	3	4	2	1	3	2	3	2	3	1	1
Non-profit institutions	1	1	1	1	1	1	1	1	1	1	1	1	1

Source: IHP Sri Lanka Health Accounts database.

Annex Table 3 Sri Lanka: Health expenditures, by provider, 1993-2005 (percentage of total)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Hospitals	33	34	37	36	37	38	38	38	37	39	39	42	43
Ambulatory care providers	32	31	29	30	28	26	27	27	27	26	27	26	27
Retailers of medical goods	22	22	20	20	21	21	21	20	22	23	22	21	20
Providers of public health services	7	6	6	5	6	6	4	4	4	3	3	3	4
General health administration	4	4	5	6	5	7	8	8	8	6	5	6	4
Others	2	2	2	2	2	2	2	2	2	2	2	2	2
Rest of the world	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: IHP Sri Lanka Health Accounts database.

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The challenges of how to use limited resources in developing countries to achieve good health outcomes, as well as effective financial protection and healthcare coverage, are universal. Although many countries have managed to increase the level of financial resources available to the health sector, the outcomes in terms of better health performance have often been mixed or minimal. How services should be best financed and delivered are constant questions for policy-makers and societies around the world, yet there continues to be limited evidence on the answers and best responses. In recognition of this, and the observation that there are several countries which are able to achieve good health outcomes despite limited resources, the World Bank undertook a major global study of what has worked in these countries that have performed the best. The World Bank identified nine countries from all regions of the world that it deemed to be good performers, and thereby could provide examples of good practices in healthcare financing for emulation in other nations. Sri Lanka was one of these countries, singled out because of its sustained success in achieving good health outcomes and effective healthcare coverage for its citizens, despite limited levels of healthcare spending and low income status.

This Sri Lanka case study, which is taken from the larger World Bank study, provides an in-depth assessment of how Sri Lanka has managed achieve this, with a cost-effective health system that relies on taxation as the chief source of public financing. The study discusses how the system of parallel public and private sectors may have been the best option for Sri Lanka, given the financial constraints that the government has faced, as well as how the pubic sector will need to be strengthened in future. It also touches on other issues and explains why, in many instances, Sri Lanka's idiosyncratic approach may have been the best solution for the country, including the long-standing policy of not charging user fees for government health services, the budgetary emphasis on hospitals, and the role of politics. It is hoped that the publication will provide readers both in Sri Lanka and outside with a better understanding of why the Sri Lankan system has been so effective, and why other countries may want to learn from it in the future.

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978-955-1707-06-4