Government Health Services in Kerala

Who Benefits?

One of the reasons cited to justify government intervention in health care is to correct the inequities in service provision that might arise if services are provided by private sector. But in practice government decisions are taken by a few individuals and groups and these decisions might reflect their interests than that of the community. The paper examines the role government provision of health services has historically played in Kerala.

RAJEEV SADANANDAN

The imperfect nature of the market for health services is often cited as the reason to justify government intervention in health sector. As pointed out by Arrow[1] for health services market to approximate a perfectly competitive equilibrium and thereby to dispense with government intervention the following conditions must be satisfied: a competitive equilibrium should exist, increasing returns to scale should not be present, and all the cost and utilities must be marketable. These conditions are not satisfied due to the presence of significant externalities. It has been pointed out[2] that the private provision of health care services will be discriminatory against the rural population, the poor and the chronically sick. They, therefore, find a need for intervention even in those societies which consider health care to be part of society's reward system. Government intervention is seen necessary to balance the inequities that may arise if provision of health services is left to the private sector.

But decision-making in government is the outcome of a bargaining process transacted within a given social, economic and political melieu by a few persons with disproportionate access to information and ability to influence decision-making process. Decisions emerging from this process may reflect, not the collective public choice of the community, but the private interest of a few. As pointed out by Birdsall and James (1990) government intervention might be inequitable as groups better able to influence decisions are able to meet the goals of their members at the expense of the welfare of the community. Since health is considered a merit good such groups are able to negotiate a larger share of funding from the exchequer which is then used to finance the product mix that suits the private interest of the groups involved in decision-making . Thus while government intervention in health sector is justified to prevent discrimination in the provision of health care, it is possible that the intervention itself accentuates the discrimination. This paper attempts to analyse the nature and impact of government intervention in health sector in Kerala state, India in the light of the above observations.

Kerala's achievements in health care, achieved against a backdrop of low economic growth, are well documented.[3] A factor whose importance has been accepted by nearly all the attempts to explain Kerala's health status is the intervention by the state. The paper reviews investment decisions in the pre-independence period followed by an analysis of the budgets of post-independence Kerala to, examine the share of resources allocated to different the expenditure categories and institutions. The impact these have had on the distribution of health care facilities; the response of the private sector to these decisions and the way it has affected consumption of health care in the state is looked at. The attempt will be to verify the extent to which reasons cited for government intervention have been met in the health sector in Kerala.

Pre-Independence Period

History of Kerala is divided into two periods: up to India's independence and the formation of Kerala and after. Pre-independence, Kerala consisted of the princely kingdoms of Travancore and Cochin and the Malabar district of the Madras presidency of British India. The western system of medical care (Kerala traditionally had the Ayurvedic system of medicine), was introduced into Malabar by the British and then in Travancore and Cochin by the maharajas.[4] However the British where reluctant to recognise the existing social realities of Malabar, such as the caste system. Hence they failed to persuade the local people to adopt allopathic practices on a large scale. The maharaja of Travancore, himself a convert to the allopathic system of medicine, influenced his subjects by setting an example himself and by persuading the upper classes to follow suit. He also took care of the possible social and religious hostility that might have arisen by accommodating existing beliefs like the reluctance of the members of the upper castes to touch and be touched by others.[5] Such active promotion with adequate provision of the services gave the people of Travancore an opportunity to become familiar with the benefits of such measures as inoculation and vaccination.

In Travancore the state considered the provision of health care services and the promotion of its utilisation a duty of the state.[6] This may have been the first step in generating a demand for health services. By contrast , the colonial government of Malabar set up institutions only to cater to the British and their employees. Perhaps realising the futility of trying to maintain an island of good health in a population suffering from periodic epidemics, the facilities were made available to the 'natives'. Even then it was made contingent upon the local population making a substantial contribution in constructing and maintaining the infrastructure. This was an unreasonable expectation of a population who have not been convinced of the benefits of modern medicine. Not surprisingly very few institutions survived in Malabar.

In Travancore the supply of health services is seen to have led to a demand for more. The share of budgetary allocation

for health rose from 1.09 in the period 1863-68 to 4.31 in the period 1905-10 at a time when the total budget of Travancore was growing. When the missionaries reached Travancore they found that the best method to attract converts to their faith was by catering to the existing demand for education and health services. The state encouraged them and the people came to enjoy the benefits of state and missionary munificence. The third and fourth decade of the 20th century, when the effect of state intervention was beginning to be evident on the supply side, was also the time caste- and community-based groups were vying to gain organisational strength. Every group made it their aim to secure for the target group the benefits of both education and health care.[7]

A comparison in Table 1 with British India and Mysore, the princely state in neighbouring Karnataka state shows that, while both the princely kingdoms had better availability of hospitals and beds than British India, Travancore had a better geographic spread of institutions and a greater availability of beds than Mysore. The differentials in the availability of beds narrow down in the 1930s but the increase in beds in Mysore appears to have taken place in large hospitals while in Travancore a large number of small hospitals came up. (Beds in Mysore increased by 120 per cent while the number of institutions increased only by 73 per cent. In Travancore the number of institutions went up by 120 per cent while the beds increased by 29 per cent). During the period when transportation was not easy, the strategy of Travancore to build a large number of small hospitals appears have served to bring the modern medical facilities closer to the rural population.

On the eve of the formation of Kerala Travancore-Cochin (the two princely states had already been brought together after independence) had 76 beds per 1,00,000 population while Malabar had 34.[8] These were the result of decisions by the princely rulers. But the decision by elected legislatures to follow the same expenditure pattern shows that by state intervention demand for health care services had grown to an extent from which it had to be reflected in the decisions of the legislature. The elected governments tried to expand the reach of the health system and to bring the health facilities of erstwhile Malabar to the level available in Travancore-Cochin. They were checked by financial problems which were, it has been argued, the result of expenditure decisions in the health and education sectors.

Health Sector Budgets

A comparison of the share of medical and public health services in the total revenue expenditure of Kerala with the average for all-Indian states shows that, in Kerala, health services (including medical and public health services)[9] always had a consistently higher percentage share till the end of 1970s. Since then the difference between Kerala and the other states in the percentage share of health services have declined. A comparison of the per capita expenditure on health between the two regions also show a similar pattern (Table 2). Various factors could have contributed to this. But since the slowing down of investment in health sector coincides with the beginning of Kerala's fiscal difficulties, it is highly probable that the latter has a causative impact on the former.

Since mid-1970s Kerala has had a budget deficit in the revenue account (in which the recurring expenditure of salaries, office expenses, purchases and interest payments are incurred ; more than what the other Indian states have had. George[10] attributes this to Kerala's investment in the social and community development ser-

Table 1: Health Facilities in British India, Mysore and Travancore – Institutions and Beds

Year	Institutions Per (1,000) sq mile			Beds Per 1,00,000 Population		
	British India	Mysore	Travancore	British India	Mysore	Travancore
1925	3.62	6.89	10.23	18.55	21.22	37.93
1930	5.51	9.24	13.51	21.01	22.51	39.25
1935	5.78	9.58	15.74	19.24	37.48	41.37
1940	6.80	11.90	22.56	21.27	46.78	46.81

Sources: (a) *Statistical Abstract for British India*, Department of Commercial Intelligence and Statistics, Government of India (1948).
(b) *Statistical Abstract of Mysore*, Government of Mysore, Bangalore (1951).
(c) *Statistics of Travancore*, Government of Travancore (1921,1931,1936,1941).

Table 2: Share of Health in the Total Expenditure – Average of All Indian States and Kerala

Year	All States		Kerala	
	Percentage Share	Per Capita Expenditure	Percentage Share	Per Capita Expenditure
1960-65	8.30	2.61	10.45	3.46
1965-70	7.96	4.56	10.41	6.05
1970-75	8.30	7.33	9.58	8.67
1975-79	9.80	13.39	10.33	19.06
1980-85	9.77	26.04	9.14	31.85
1985-90	9.54	47.88	9.07	48.98
1991-95	8.12	95.47	8.60	113.18

Source: Reserve Bank of India Bulletin, Various issues.

Table 3: Percentage Share of Expenditure Categories in Kerala's Health Budgets

	1960	1965	1970	1975	1980	1985	1990	1995
Pay and allowances	36.60	39.13	43.26	54.52	52.24	56.94	62.48	62.78
Office expenses	5.68	10.56	5.68	4.92	4.34	3.98	3.35	5.23
Medicine	39.14	37.93	33.83	31.11	31.16	25.64	25.43	18.11
Hospital accessories	2.55	8.51	8.42	2.96	4.91	3.45	2.36	3.93
Vehicles	0.11	0.48	0.31	0.15	0.22	2.05	0.21	0.37
Construction	14.86	0.02	6.83	3.95	5.18	5.83	2.85	7.52
Grants-in-aid	1.05	3.36	1.66	2.39	1.96	2.12	3.33	2.59

Source: Computed from *Demand for Grants and Detailed Budget Estimates*, Government of Kerala, (various years).

Table 4: Growth of the Number of Personnel in the Health Department

Year	Teachers	Officers	Doctors	Clerks	Paramedics	Support	Total
1960	93	38	730	541	2068	3608	7078
1965	593	51	880	889	3148	6149	11710
1970	624	86	1074	764	3557	6532	12637
1975	919	100	1892	1725	8339	9174	22149
1980	938	76	1878	1699	8300	10194	23085
1985	1175	271	2441	2430	11315	13403	31035

Source: Administration Reports of the Health Services Dept ,Government of Kerala (various issues).

vices in general and education and health in particular its plan programmes. These two sectors have a large revenue component.[11] Continuous investment in these sectors will increase expenditures and, unless revenue generation either from these or other investments do not rise proportionately, a deficit would result adversely affecting the capacity of the state to maintain the level of services provided, let alone increase the quantum of investment. But the data on medical institutions and beds show that this has not happened, largely due to private sector investment.[12] It will be argued that the emergence of the private sector to make up for the reduction of investment in the public sector is itself the result of the allocation of resources in the public sector. In order to appreciate this, a detailed examination of the pattern of the Kerala government's expenditure in health is necessary.

The purposes for which the health budget of a state allocates resources may be classified into the following categories: Pay and Allowances, Office Expenses, Medicine and Diet, Hospital Accessories, Vehicles, and Construction. Different groups receive different benefits from these areas of expenditure. If pay and allowances are raised without corresponding increases in productivity then employees derive a disproportionate benefit from an increase in public expenditure as compared to the taxpayer/consumer. Medicine and diet provided free of cost to persons below a certain income will benefit the lower income group at the expense of the non-poor taxpayer. An increase in hospital accessories and construction will be neutral across income classes but will benefit consumers especially those who depend on publicly provided health services.

An examination of the percentage share of the expenditure categories shows that the expenditure on pay and allowances of the health services personnel, which constituted only 36.6 per cent of the total expenditure in 1960 has risen steadily at the expense of other categories especially diet and medicine which fell from a share of 39.14 per cent in 1960 to 18.11 per cent in 1995 (Table 3). The percentage share of expenditure on hospital accessories, where a rising trend would have been necessary to keep up with the developments in technology, has remained at the 1960 levels except in two years.

Health personnel are in a better position to influence expenditure decisions than consumers. With better access to information they are able to assess in advance the impact of any decision while the consumers would become aware only when they seek the services and might still not make the connection between the shortage of facilities and public finance decisions. Being a clearly-defined organised group the health department personnel are capable of ensuring that their pay and allowances are increased, higher paying jobs are created for promotion opportunities to existing personnel, their perquisites are protected even when the budget is reduced. On the other hand are the poor who would benefit if the medicines and food are provided free of cost. A government, faced with shrinking resources, is forced to arbitrate between two groups with conflicting interests and vast difference in the ability to influence decisions. It is obvious that unless a con-

Table 5: Output Per Employee in the Health Department

Year	Inpatients	Outpatients	Major Operations	Minor Operations	Deliveries
1960	73	1664	7	36	12
1965	69	1983	4	23	12
1970	78	1628	4	17	11
1975	54	1135	4	13	8
1980	45	924	Not Available		
1985	41	822	3	8	Not Available

Source: Administration Reports of the Health Services Dept, Government of Kerala (various issues).

Table 6: Share of Institutions in the Health Budget – Kerala

Institutions	1960	1965	1970	1975	1980	1985	1990	1995
Medical education	9.44	13.37	11.82	10.91	12.42	14.38	13.80	1.06
Medical college hospitals	2.83	20.55	22.53	18.85	19.67	18.71	19.84	32.28
Medical establishment	3.67	3.03	2.72	1.82	1.7	1.71	1.98	1.4
Other hospitals	82.8	60.48	61.6	67.61	65.22	64.57	62.73	53.72
Grants	1.21	2.58	1.33	0.80	0.99	0.63	1.64	0.63

Source: Computed from Demand for Grants and Detailed Budget Estimates, Government of Kerala, (various years).

Table 7(a): Distribution of Institutions and Beds in Rural and Urban Areas

Category	1960		1970		1980		1990	
	Institutions	Beds	Institutions	Beds	Institutions	Beds	Institutions	Beds
Teaching	1	788	5	3127	6	4846	7	6162
Large (Urban)	26	6474	36	9167	50	12423	57	15405
Large (Rural)	4	1664	6	2296	16	3922	23	5295
Medium (Urban)	33	1828	30	1682	27	1468	28	1488
Medium (Rural)	17	704	40	1684	48	2141	99	4470
Small(Urban)	26	247	37	315	45	326	30	159
Small (Rural)	341	1271	387	2241	721	3268	995	4274
Total (Urban)	86	9337	108	14291	127	19039	121	23084
Total (Rural)	262	3639	433	6221	786	9355	1118	14169
Total	348	12976	541	20512	913	28394	1239	37253

Source: Administration Reports of the Health Services Dept, Government of Kerala (various issues).

Table 7(b): Distribution of Institutions and Beds in Kerala by District

Districts	1960		1970	1975	1980	1985	1990	1995
	Institutions	Beds	Institutions	Beds	Institutions	Beds	Institutions	Beds
Thiruvananthapuram	53	3131	53	4065	91	5094	121	6384
Kollam	35	810	53	1310	92	2012	121	2539
Alappuzha	38	1607	54	2343	81	3336	100	4220
Kottayam	27	775	42	1720	61	2603	95	3098
Idukki	14	71	16	118	46	351	59	795
Ernakulam	42	1633	81	2174	87	2748	116	3768
Trichur	38	1947	62	2839	87	3462	113	4322
Palakkad	30	605	55	1017	90	1537	113	2230
Malappuram	19	245	44	720	74	1036	114	1830
Kozhikode	14	1215	31	2673	59	3502	87	4284
Wayanad	11	90	15	163	24	336	42	749
Kannur	20	749	33	1203	72	1825	97	2374
Kasargode	7	98	21	167	49	552	61	660
Total	348	12976	541	20512	913	28394	1239	37253
Average	27	998	42	1578	70	2184	95	2866

Source: *Administration Reports of the Health Services Dept*, Government of Kerala (various issues).

scious effort is made to favour the poor, expenditure decisions will be so taken as to benefit more powerful groups at the expense of the poor.

If the purpose of government provision of health services was to ensure availability of health facilities to the poor it is doubtful if the decisions were favourable to such an outcome. When investment on drugs, supplementary nutrition, equipment and buildings are reduced consumers of the publicly provided health services in general stand to lose. But the worst affected will be the poor who would have received them free of cost. But if the intention of government was to make available the most important component of health care, viz, qualified personnel, then the decisions would have been in the right direction, assuming that the personnel have been equitably distributed across the state.

Has the increased expenditure on personnel lead to better service for the consumer? Personnel of the health department maybe classified as teaching doctors, officers, doctors, paramedics and support staff. The maximum growth has occurred in the category of teaching doctors. While this is partly influenced by the low base the increase in absolute numbers is striking (12.63 times while the total increased by 4.38 times). While the number of officers have grown (by 7.13 times) their span of supervision has shrunk. This implies that persons occupying higher categories now discharge functions previously undertaken by lower level personnel (unless the nature of job has changed qualitatively over time).

There are very few broad indicators of productivity in the government health sector; the most reliable being the number of outpatients, of inpatients, major operations, minor operations and deliveries. Judged by these indicators the increase in the number of health personnel and increase in the higher positions has not resulted in a corresponding increase in productivity; in fact productivity has been allowed to decline (Table 5).

The budget of health department is allocated among major institutions. They may be classified into medical establishment, medical education, medical college hospitals, other hospitals and grants to other institutions. A crucial choice administrators have to make is in distributing resources between these institutions. The difference in resources received by the institutions is an index of the capacity of the beneficiaries of these institutions to influence allocations in their favour.

As maybe expected, the hospitals absorb the largest share of resources. But the growth of investment in the field of medical education including medical college hospitals is striking . An increasing share of resources has been directed to expand the provision of medical education and sophisticated tertiary medical services in urban areas. A recent study has assessed the expenditure on a medical student to be approximately Rs 1,00,000 per annum.[13] while he pays an annual fee of Rs 1,500. Therefore a large component of the expenditure on medical education is a subsidy to the medical student. This large subsidy is justified if the practice of medicine was unattractive as a profession; if most of the students were poor or if their services are available to the state at a subsidised rate. The number of persons who compete for entry into the course (24,300 applicants sought admission for 800 seats in 1998) shows that medicine is not unattractive as a profession. The socio-economic profile of the students of one medical college for one year was examined . Of the 182 students whose cases were examined 115 (63 per cent) were the children of highly placed bureaucrats or professionals who did not need the subsidy . In 1997, of the 1,284 doctors requested to join government-run rural hospitals, 444 failed to join . Hence subsidy of medical education from government funds is neither needed nor justified in terms of returns to the society and is another instance of an influential group appropriating public funds to meet a private need.

The increased allocation of resources to medical college hospitals ensures the availability of highly specialised medical facilities at subsidised rates in large cities. If the private sector is not willing to invest in advance facilities or if the public are not able to consume them due to high cost of the services, public provision of the services can be justified; if there is no serious resource constraint. But if adequate basic facilities are not available in peripheries, then to channelise funds to specialised medical care does not promote equity. While technically these services are free for the poor, especially from the rural areas, are handicapped by the access cost and lack of knowledge or power to insist on a specific procedure while the urban rich obtain these services at a subsidy.

If this hypothesis were true a similar bias maybe expected to operate in the allocation of resources for other hospitals too. The indicators examined are number of institutions and beds.

Hospitals and Beds

For this study the rural/urban classification of places of the 1961 Census has been retained. Hospitals have been further classified as large, (beds>99), medium (24<beds<100), and small (beds <24). The classification is important since all services, except family planning and immunisation services, are indexed on the bed strength. The minimum number of four nurses required for providing inpatient care will be available only if the institution has 24 beds as nurses are allotted at the ratio of one nurse to six beds. Sanctioning of institutions with less than the minimum number of viable beds, while temporarily deflecting local dissatisfaction does not improve the availability of inpatient care

for the population in the catchment area of the institution.

The number of institutions in the rural areas increased especially in the small hospital category while the hospitals in urban areas moved into higher categories with the addition of new beds the most obvious being the increase in the beds of the teaching hospitals. Most of the rural institutions were added in the category of primary health centres which are established based on externally determined demographic norms. As per the staff pattern referred to earlier, inpatient care will be available only in medium and large hospitals, i e, only 122 of the 1,118 rural hospitals will have inpatient care. While rural areas are provided adequate FW and immunisation services, for inpatient care the rural patients have to travel to urban centres or access private hospitals if available in their villages. Government intervention appears to have succeeded in correcting rural/urban differentials in family planning and immunisation services; but in providing basic obstetric and curative service the inequities have been reduced only marginally. (Urban areas had 3.84 times the number of rural beds in 1960 while in 1990 this had been brought down to 2.36.) And these services, unlike family planning and immunisation services, are dependent on decisions made by the health services department in the state.

Kerala, with dispersed settlement pattern, a literate and politically organised rural labour force is often cited as the exception that tests the rule of urban bias in development.[14] To some extent this is borne out by the fact that the divergence between rural and urban areas did not grow but came down marginally. The explanation for the disparities not being significantly reduced may be found in the way investment decisions are made in the government health sector. The medical colleges, with demarcated departments and backed by organised beneficiaries, appropriate a large portion of divisible resources available to the modern medicine sector. These are entirely urban-oriented. The Health Services Department, which manages the other hospitals, then invite investment proposals from the peripheral hospitals. These are prepared exclusively by doctors, with no participation from other stake holders. These are then pruned, first at the district and then at the state headquarters level. Since no feedback is given to the periphery the decision-makers at centre can shape the final proposals to suit their priorities which may not necessarily reflect the priorities of the state. The asymmetry in information also make it possible for decision-makers to propose ornamental investments such as beds with insufficient staff. Most often, when a politician argues the case for increased investment in the health sector, it is the brief of the urban specialist and services in the urban hospitals where they are based.

The erstwhile Malabar district of British India (now split into Kasargode, Kannur, Wayanad, Kozhikode, Malappuram), Palakkad and Idukki districts, lagged behind other districts of the state in the availability of medical facilities in 1960. By 1975, while the Malabar region and Idukki continued to have less than the average number of institutions per district the disparities were considerably reduced. But the institutions that were opened were in the category of primary health centres. A more reliable indicator of resource allocation is the number of beds (Table 7). At the formation of the state the Malabar districts (except Kozhikode), Idukki, Kottayam and Kollam had less number of beds than the average while Trivandrum had three times the state average. The availability of beds in Malabar districts and Idukki continued unchanged over the years; the districts of Wayanad, Kasargode and Idukki had less than 10 per cent of the average number of beds.

In the case of both rural areas and backward districts while disparity in the number of institutions have been reduced, in the provision of inpatient care inequities have been mostly maintained. Where the state executive had to make investment decisions no effort was made to reduce inequities in the provision of health services. If a rural patient has to obtain health care services from the government he has to bear, in addition to the cost of health care which is subsidised, the access costs such as transportation, wages foregone, expenses of relocating to a far away place, which is not subsidised. The pattern of development followed by the government health system has placed the

Table 8: Percentage Share of Government and Private Sector: Medical Institutions, Beds

Year	Government		Private	
	Institutions	Beds	Institutions	Beds
1976	53.32	58.82	46.68	41.18
1986	23.23	40.50	76.77	59.50
1995	22.70	36.22	77.30	63.68

Source: Government of Kerala (1985, 1995).

Table 9: Distribution of Hospitals Between Rural and Urban Areas (Percentage Share)

	Government		Private	
	Rural	Urban	Rural	Urban
Institutions	86	14	66	34
Doctors	33	67	49	51
Beds	25	75	53	47
Paramedics	39	61	51	49

Source: Kannan et al (1991), p117.

Table 10: Private Hospitals and Beds

	Institutions		Beds	
	1985	1995	1985	1995
Thiruvananthapuram	369	431	3744	4807
Kollam	440	498	6364	9390
Alappuzha	508	495	5017	5828
Kottayam	376	474	6189	7642
Idukki	194	239	3521	3944
Ernakulam	436	542	8646	11418
Thrissur	256	288	5101	8345
Palakkad	142	180	1013	2105
Malappuram	188	237	1931	3313
Kozhikode	241	372	2411	3714
Wayanad	88	111	1594	1769
Kannur	190	264	2550	3952
Kasargode	138	157	949	1290
Total	3566	4288	49030	67517
Average	274.3077	329.8462	3771.538	5193.615

Source: Government of Kerala (1985, 1995).

rural population at a disadvantage in accessing inpatient care in comparison to urban population which has to incur much less access cost and enjoys subsidised health care.

If access cost to private health institution is negligible, the point at which cost of access to a government health institution is equal to the subsidy, the patient becomes indifferent between private and government provided health care, other conditions remaining the same between the two. If private sector provides services closer to patient's home the cost of access to the service gets reduced to the level of offsetting government subsidy. Thus the shortage of government services in some areas of the state provides an opportunity to the private sector. Even in the areas favoured by government if the demand has not been adequately met by government provision private sector will have an incentive to invest.

Response of Private Sector

The data on private health institutions are available from surveys conducted in 1978, 1986 and 1995. By 1986, the decade from which the fiscal crisis has been reducing investment, the private sector had already moved in to the vacuum created by the slowing down of government investment. Interestingly between 1986 and 1995 private sector seems to be investing more in expanding large hospitals thereby once again following the pattern set by government sector (Table 8).

To find out if the private sector had concentrated on areas left unattended by the private sector we need to examine the rural/urban mix of private sector facilities. A study by Kannan[15] and others found that the while in all resources except number of institutions the government sector had favoured the urban regions except in the case of doctors the private sector had concentrated on rural areas (Table 9).

As has been pointed out, the availability of beds is the most reliable indicator of resource allocation. While the government sector has made available only 25 per cent of its beds in rural areas private sector has based 53 per cent of their beds in rural areas. Since private sector has a greater number of hospitals and since a large percentage of these have inpatient facilities (52.29 per cent in 1986 survey and 45.66 per cent in the 1995 survey) it is obvious that it is the private sector which ensures that adequate inpatient facilities are available in rural areas. While the government have deployed 64 per cent of their health staff in urban areas the private sector deploys 50 per cent of their staff in rural areas. Thus the private sector has stepped into mitigate the impact of urban bias of the government sector. One of the stated purposes of government intervention appears to have been stood on its head in Kerala. A comparison of the health statistics of different Indian states show that in what places Kerala ahead of the other states is the health status of rural population. If the most of the provision of health services in rural area, except family welfare and immunisation services, are provided by the private sector the prevailing beliefs about a "support lead security"[16] administration of Kerala may need to be re-examined, at least in the area of curative health services.

It has been pointed out that the districts of Kasargode, Wayanad and Idukki had lesser government investment than the others. If private sector responded to this shortage as an opportunity then these districts should receive a proportionately larger share of private investment (Table 10). It may be seen that the private sector too has favoured the more developed districts but the pattern diverges from government sector. Thiruvananthapuram and Kozhikode which had the largest number of beds and Malappuram and Palakkad which had a large number of institutions in the government sector is accorded very low priority by the private sector. The private sector has not moved in to fill the gap in the lesser developed districts left by the government sector. It stayed where it was likely to get returns on its investment and reduced its commitment in the developed districts most favoured by government. Interestingly the private sector seems to have favoured Idukki, the only district in Travancore with poor government provision of health services.

While private sector has, to some extent, corrected the inequity in government provided health services they too appear to have avoided some of the under served areas. Therefore it is probable that some of the population is denied availability of adequate medical facilities. Since private medical facilities are available only to those able to pay it is also probable that some, who are unable to pay, are denied access to health care. A survey of the consumption of health services conducted by the National Sample Survey Organisation of India in

1986-87 had found that the only reason why persons in Kerala with ailments considered serious did not take treatment was financial.[17] This was much larger in rural areas. (14.66 per cent of the rural population who did not take treatment as against 4.54 per cent of the urban). When the choice of institutions is examined while 55.65 per cent of the urban population chose government facilities only 43.38 per cent of the rural population did so. While the majority of all income classes in the rural areas used private hospitals the poor in the urban areas preferred government facilities. The presence of government facilities made possible near universal access of the urban population to hospitalisation services, a facility that was denied to the rural poor. In services which have non-marketable externalities, such as immunisation and family planning services are mostly provided by the government institutions in both the urban and rural areas.

Conclusion

Intervention by the princely rulers of Kerala had generated a demand for modern medical services. The services set up by them were expanded by the elected legislatures. But gradually a bias in favour of urban areas, medical education and interests of employees of the health department appears to have been established. A large network of institutions were set up to provide family welfare and immunisation services with positive impact on reduction of birth rates and infant mortality. But in hospitalisation services, the intention to ameliorate rural-urban disparities and to redress regional inequity was not met fully. A large share of resources was appropriated to pay salaries of personnel without corresponding increase in productivity and to subsidise medical education with very little benefit for the welfare of the community. When resources were reduced the share of these powerful groups was protected at the cost of the community. The bias of investments in the government sector provided an opportunity for the private sector to invest in less areas favoured. The private sector has invested more of their resources in the rural areas but has not concentrated on regions ignored by the government sector. The distortions in the supply of government services has adversely affected hospitalisation services to the rural poor. A percentage of the rural poor are prevented from accessing hospitalisation services due to inability to pay. The adverse impact on the household finances of even those who manage to pay could be high. The family welfare and immunisation services are well provided in the government sector.

With no attempts at fiscal prudence, the resources available for government health care are expected to shrink further. No willingness to acknowledge, much less confront, the bias in favour of the power groups has been shown. Hence it is unlikely that the inequities discussed above will diminish. The euphoria of the health transition achieved by the state may prevent, as it has done till now, a realistic assessment of the weaknesses of the health system in Kerala. But if decision-making occurs within a small community it is possible that the bias in decision-making will become evident and a demand for correction emerge. The decentralisation of decision-making on implementation of panchayat raj provides an opportunity to analyse the nature and impact of past investment decisions. This may lead to shedding many of the myths regarding government health services in Kerala and setting up a more equitable provision of health care. EPW

Notes

[The data collection and analysis was done as part of my M Phil course which was made possible by a sabbatical granted by my employers, the government of Kerala. I have benefited immensely by the comments of my supervisors, I S Gulati and Pulapre Balakrishnan. This version of the paper owes a lot to the late V Rajagopalan who reviewed the first draft.]

1 Arrow (1963)
2 E g, by Culyer, Maynard and Williams in Oslo (1981)
3 E g, Paniker and Soman (1984), Dreze and Sen (1989)
4 The first dispensary was started in Travancore in 1819 and Malabar in 1853, but vaccination had been introduced in Malabar in 1801.
5 Such hostility did arise in Malabar. See Das Gupta et al (1996)
6 The Maharaja stated in 1865: "One of the main objects of my government is to see that good medical aid is placed within the reach of all classes of my subjects. It is a blessing which is not at present in the power of individuals generally to secure however much so ever they may desire it. It is hence the obvious duty of the state to render its assistance in this direction" [V Nagam Aiya, *Travancore State Manual*, Government of Travancore, Trivandrum, (1906)]
7 Panikar and Soman (1984), p 91.
8 Das Gupta et al op cit.
9 Health budgets of states include allocation for the different systems of medicine, medical education, Employees State Insurance, and Public Health Services including sanitation and water supply. When referring to total health budget the reference is to all these items. But when the budgets are analysed in detail the allocation to water supply and sanitation, family welfare, ESI. Ayurveda and Homeopathy are excluded.
10 George K K (1993).
11 For the period 1974-90 the share of revenue expenditure in the social and community services averages 91.4 per cent for Kerala and 90 per cent for the other states.(George: op cit, p 92).
12 Government of India; 'Health Statistics'; New Delhi; Director General of Health Services (1979).
13 Duggal, R et al (1992).
14 Lipton, M (1977).
15 Kannan et al (1991).
16 Dreze and Sen (1989).
17 Government of India (1992).

References

Arrow, K J: 'Uncertainty and the Welfare Economics of Medical Care', *American Economic Review*, Vol 53, pp 941-73.

Birdsall, N, E James (1990): 'Efficiency and Equity in Social Spending', Working Paper No 274, Population and Human Resources Operations Division; World Bank, Washington, DC.

Das Gupta, M, L C Chen and T N Krishan (1996): *Health, Poverty and Development in India*, Oxford University Press, Delhi, pp 239-69

Dreze, J, A Sen (1989): 'Hunger and Public Action', Oxford University Press, New York, pp 221-25

– (1996): 'Indian Development: Selected Regional Perspectives', Oxford University Press, Delhi, pp 224-37.

Duggal, R, S Nandraj and S Shetty (1992): 'State Health Sector: A Database', Foundation for Research in Community Health, Mumbai, p 25.

George, K K (1993): 'Limits to Kerala Model of Development: An Analysis of Fiscal Crisis and Its Implications', Centre for Development Studies, Trivandrum.

Government of India (various issues): *Health Statistics of India*, Central Bureau of Health Statistics, New Delhi.

– (1991): *Sarvekshana*, Vol XV, No 4, National Sample Survey Organisation, New Delhi, pp s136-s571.

Government of Kerala (1987 and 1995): *Report on Survey of Private Medical Institutions in Kerala*, Directorate of Economics and Statistics, Trivandrum.

Kannan, K P, K R Thankappan, V Ramankutty and K P Aravindan (1991): *Health and Development in Rural Kerala*, Kerala Sastra Sahithya Parishad, Trivandrum.

Lipton, M (1977): 'Why Poor People Stay Poor', Harvard University Press, Cambridge, Massachusetts.

Oslo, M (ed) (1981): *A New Approach to the Economics of Economics of Health Care*, American Enterprise Institute for Public Policy Research, Washington.

Panikkar, P G K and C R Soman (1984): *Health Status of Kerala*, Centre for Development Studies, Trivandrum.