Health Expenditure across States – Part I

Ravi Duggal Sunil Nandraj Asha Vadair

HEALTH CARE, like education, housing, old age security and other social provisions, has nowhere in the world been able to make an effective contribution without the active participation of the state. Even in the most advanced countries the role of the state has been extremely critical in assuring that health care becomes universally and more or less equitably available. Investment in health care is a necessary social investment without which the large mass of working classes cannot realise good health and contribute to the economy.

In India, though the state has a large stake in the health sector, investment has not been effectively utilised. Part of the reason is a maldistribution of investment and part, other factors such as the growth of the private sector which makes for an unhealthy competition for manpower resources, etc. The unchecked growth of private health care and its absolutely unregulated functioning in India, unlike in most other countries where a large private sector exists, has made profiting from human misery a big business. The consequence of this is underdeveloped health services, public and private, and the poor health of the people in the country.

Documentation on the health sector, like other social sectors is quite unsatisfactory. Thanks to state institutions there is some basic accumulation of information on the health sector, though mostly on the public health sector. Whereas some information on private health institutions and human power are available due to a system of registration, even though incomplete and inadequate, information on investment and financing of the private health sector is virtually non-existent, except for few small field research studies.

The main clearing house for most information, including on the health sector is the Central Statistical Organistion (CSO) which is supported by the state statistical bureaus in collating and compiling information. Information is gathered from the various departments, ministries and other public bodies of the central and state governments. A time lag of two to three years is considered normal. Of course, some departments and some states are more efficient and hence in such cases their own data compendia are more up-to-date. Apart from this data is also generated through large-scale surveys, etc., by the National

Sample Survey Organisation (NSSO) and the Registrar General's Office (RGO). While the former covers a very wide range of social and economic facts the latter is largely concerned with demographic and related parameters including the census operations. Both the NSSO and RGO have made invaluable contributions to the information system in the country and the quality of their data is definitely much better than the returns which public agencies file for the CSO to compile. However, even these agencies have not been able to overcome the time lag.

For the health sector the clearing house at the national level is the Central Bureau of Health Intelligence (CBHI) which too has state level health bureaus compiling and processing health information. The CBHI, for various reasons, is a very poor clone of the CSO. It brings out an annual publication called Health Information of India (earlier called Health Statistics of India) which is the main compendium on health sector data for the country. Despite computerisation, the quality of data has deteriorated over the years and the agencies which supply the data have become indifferent to the quality of information gathered.

State health departments, health programme desks, state medical and other councils, medical colleges, hospitals, district health offices, etc. private bodies like registered practitioners, nursing homes and hospitals, laboratories and diagnostic centres and pharmaceutical companies do not comply even with the rudimentary requirements of filling the minimum returns. Given the above scenario the health services data are at best proximate indicators. However, the data pertaining to public sector health expenditures are very reliable and all this is available in a single document, the Combined Finance and Revenue Accounts published by the Comptroller and Auditor General of India. As yet data are available only upto 1985-86 in published form. For the years after this we have relied on state budget documents.

Public expenditures on health care and selected health programmes/activities constitute the main focus of the present compilations. However, one cannot look at expenditures in isolation of the services being provided and hence we have also put together selected health infrastructure data.

STRUCTURE OF HEALTH CARE SERVICES

The structure and pattern of health care delivery has been a continuum from the colonial period. After independence no attempt has been made to radically restructure health care services in spite of the recommendations of the Bhore Committee Report [Government of India 1994]. On the contrary, aspects contributing to inequality were strengthened; for instance, production of doctors for the private sector, concentration of medical services disproportionately in the urban areas, financial subsidies by the state for setting up private practice and private hospitals, allowing a large number of doctors and nurses trained at the cost of public exchequer to migrate abroad.

Though in India we have a significantly large public health sector, the larger private health sector, mostly for curative care, completely dwarfs the former's presence. The private sector has witnessed rapid growth since the mid-70s, and its presence is overwhelming in the area of general practice. Numerous studies show that over 80 percent of such care is provided by the private sector. With regard to hospital care available data shows a 50-50 share between the two sectors. Data culled out from various sources and presented in Tables A and B provide the necessary evidence in this respect.

Apart from the public-private dichotomy which restricts access of the poor to health care services, there is an even more severe inequality that of rural-urban distribution of health care services. Rural areas are neglected both by the public sector and the allopathic private health sector. For instance, in 1991 of all hospitals and beds in the country only 32 per cent, and 20 per cent respectively, were in the rural areas, i e, 0.57 hospitals and 20.3 beds per 1,00,000 population in rural areas as compared to 3.53 hospitals and 238 beds per 1,00,000 population in urban areas.

To improve the access of the rural population, the state has been setting up primary health centres (PHCs) in rural areas. During the Sixth and Seventh Plan period there was a massive expansion of the PHC Infrastructure to reach the target of one PHC per 30,000 rural population. Except for some states, this target has been realised but this has not had the expected impact of making

primary health care universally and freely available. Studies done even during the latter years of the Seventh Plan and also more recently shows that PHCs are grossly underutilised primarily because they are inadequately provided (staff, medicine, equipment, transport, etc) and because the entire focus of the health programme through PHCs is incompleting family planning targets [ICMR 1991; Gupta JP et al 1992; Ghosh B 1991].

So what does the rural population do to meet its medical care requirements? They either crowd the taluka or district hospitals or even private practitioners and private hospitals in the cities when the situation demands, or more often they use locally available private practitioners who are mostly qualified in non-allopathic systems or persons running a practice without any qualification. The 1981 census, for instance, showed that as many as 59 per cent of qualified nonallopathic doctors worked in the rural areas, while only 27 per cent of allopathic doctors were working in villages and that too mostly in government service. For the non-qualified practitioners, there is no national level data available. A study in UP by SRI-IMRB gives an estimate of about 1,87,000 rural private practitioners (in 1990) for the state, with only half of these having formal qualifications in any system of medicine [Rhode J E, Viswanathan H 1994].

India is a large country with very marked inter-regional differences - linguistic, ethnic, historical, geographical, economic and political. All these differences in tandem contribute to the development or underdevelopment of the health sector. It is evident from the tables (2 to 6) that there exists a close relationship between the overall development of the state and its health infrastructure development. States with the better health infrastructure availability are also the economically better developed ones. The exception of Kerala is well known and does not need further discussion. Then north eastern states, other hill states, and smaller states show a better achievement in availability of health services because of the low population density in these states. Perhaps Goa is the only state amongst these that may be regarded as having a good level of health care development.

Further, within the states the rural-urban gaps hold for all states. However, some states which have had a consistently high investment in the health sector, especially in rural areas have been able to reduce this gap. For instance, where bed:population ratios are concerned, the least urban-rural gap is in Kerala (twice). Punjab (thrice) among major states and Goa (four times), Manipur (twice) and Mizoram (five times) among the smaller states. The largest gap is in Bihar (76 times) J and K (73 times), Haryana (40 times), Rajasthan (37 times), Himachal (55 times) and Meghalaya (115

times). Also it is therefore no coincidence that in the former group of states the rural population enjoy a better status than in the latter group.

HEALTH CARE EXPENDITURES

The presence of the private health sector is overwhelming. Therefore, it is natural that it accounts for a larger part of health care expenditure also. Unfortunately, at the macro level there is virtually no information on private health expenditures. In the recent years micro studies have provided a good deal of information on the private health sector, including expenditures.

Various micro studies right from 1944 onwards to the most recent show that the share of the private sector in health care expenditures has always been around 80 per cent of total health expenditure. The 1944 study by R B Lal quoted by the Bhore Committee report showed private health expenditure to be Rs 2.50 per capita as

against a state health expenditure of Rs 0.36 per capita. Similar studies in various states by S C Seal in the 50s showed private health expenditure to be between 83 and 88 per cent of total health expenditure. In studies done in 60s and 70s also an average share of the private health sector was above 80 per cent [Duggal R 1991]. Recent studies also show a similar pattern. This clearly indicates that the financial burden borne by households is substantial and given the overall poor purchasing capacity such a heavy private burden becomes questionable. Because when illness strikes it necessarily eats into food consumption and other necessities, and worse still, the capacity to earn if the patient happens to be an earner.

As stated at the outset the main focus of the present compilation is public health expenditures in the country and the states.¹ Public health care service, in India even though grossly inadequate are large in numbers and are involved in providing a wide array of services, unlike the private

Table A: Reported Utilisation of Health Care Facilities in Selected Important Studies (Percentages)

Study					Source	of Care	:				
·		Public Hospital	PHC/ Public Disp	Priva Hospi		Practi- tioner		Tradi- tional	Self Care	Other	Total
NSS-1986-87											
(All India)											
(OPD cases)	Rural	17.7	7.9	16.2		53.0	-	-	-	5.2	001
	Urban	22.6	4.6	18.1		51.8	_	-	_	2.9	100
(Inpatients)	Rural	55.4	4.3	38.6		-		-	_	1.7	100
-	Urban	59.5	0.8	38.5		_	-	_	_	1.2	100
NCAER-1990)										
(All India)	Rurai	28.0	9.9		(44.4)		10.8	_	-	6.9	100
	Urban	31.2	7.9		(44.8)		13.6	-	_	2.5	100
KSSP-1987											•
(Kerala) FRCH - 1984	Rural	(2:	3.0)		(53.0)			-	12.0	12.0	100
(Maharashtra											
4 districts) FRCH - 1987	Rural	(3.	3.1)		(58.4)		-	1.6	6.9	-	100
(Jalgaon Dist	rict)										
-	Rural	(1	1.1)		(84.6)		-	1.7	2.6	_	100
	Urban	(10	5.9)		(77.5)		-	3.7	1.9	-	100
FRCH - 1990											
(Madhya Prac	tesh 2 d	ist)									
-	Rural	2.8	14.8		(73.9)		1.3	1.0	6.2	-	100
	Urban	14.8	0.3		(71.9)		3.2	0.8	9.4	-	100

Sources: 1 NSSO, 1989; 2 NCAER, 1992; 3 Kanan, Thankappan et al 1991; 4 Duggal R S Amin, 1989; 5 George A et al, 1993.

Figures in parentheses are combined percentages of the columns on either side.

TABLE B: PROFILE OF PUBLIC AND PRIVATE SECTORS (PERCENTAGE DISTRIBUTION)

Hos	pitals	Disper	nsaries	Hosp	Beds	Allo	paths
Pub	Pvt	Pub	Pvt	Pub	Pvt	Pub	Pvt
*	*		*	•	+	39.6	60.4
81.4	18.6	•	*	78.5	21.5	•	*
56.2	43.8	86.2	13.8	71.6	28.4	29.4	70.6
54.7	45.3	*	•	73.9	26.1	26.6	73.4
44.1	55.9	50.6	49.4	70.1	29.9	*	•
42.6	57.4	40.4	59.6	67.8	32.2	*	*
	Pub * 81.4 56.2 54.7 44.1	81.4 18.6 56.2 43.8 54.7 45.3 44.1 55.9	Pub Pvt Pub ** * * ** * * ** * * 56.2 43.8 86.2 54.7 45.3 * 44.1 55.9 50.6	Pub Pvt Pub Pvt ** * * * ** 18.6 * * 56.2 43.8 86.2 13.8 54.7 45.3 * * 44.1 55.9 50.6 49.4	Pub Pvt Pub Pvt Pub ** * * * * ** 18.6 * * 78.5 56.2 43.8 86.2 13.8 71.6 54.7 45.3 * * 73.9 44.1 55.9 50.6 49.4 70.1	Pub Pvt Pub Pvt Pub Pvt ** *	Pub Pvt Pub Pvt Pub Pvt Pub ** * * * * 39.6 81.4 18.6 * * 78.5 21.5 * 56.2 43.8 86.2 13.8 71.6 28.4 29.4 54.7 45.3 * * 73.9 26.1 26.6 44.1 55.9 50.6 49.4 70.1 29.9 *

Note: * Not Available.

Source: Health Information of India, respective years.

sector which provides only curative and diagnostic services.

The ministries of health and related bodies provide curative services (mostly, in urban areas), health insurance programmes for specified organised sector employees and government employees, run national control and eradication programmes for diseases like leprosy, tuberculosis, AIDS, malaria, blindness, guineaworm, goiter, etc, run institutions to provide education for doctors, nurses and paramedics and for the conduct of medical and related research, run a primary health care programme in rural areas and a massive family planning programme right across the length and breadth of the country. For running this there is a large bureaucracy and a huge army of line workers. For instance, as of March 1991 in the rural areas the state was employing 3.11,455 line workers (doctors, nurses, pharmacists, paramedics) and 2,93,400 support staff (clerks, wardboys, drivers, surveyors, etc). It may be noted that these were 39 per cent less than the stated requirement for the existing health infrastructure in place. The bureaucracy too is huge. The Central Ministry of Health employs over 30,000 persons. The figures for the states is not available but it must be a whopping amount considering the fact that health services are a state-subject. To finance this apparently massive infrastructure the central and state governments are today spending Rs 7,867 crore of which the share of states is 91 per cent (including central grants). This amount works out to Rs 85 per capita and is only 2.63 of total government expenditure and barely 1 per cent of GDP.

For the purpose of analysis, health expenditure refers mainly to expenditure incurred by the ministries of health and family welfare. Hence, it excludes water supply and sanitation (which falls under the purview of rural and urban development ministry) though classically it has always been clubbed under health. Health includes curative care or medical care (hospitals and dispensaries), preventive and promotive programmes, medical education, family planning, Employee State Insurance Scheme (ESIS), Central Government Health Services (CGHS), etc. The data provided with regard to hospitals refers to both public and private sector, and expenditure on hospitals and dispensaries refers to only the public sector. In India hospitals gets defined as any institution that provides indoor care. The people who compile data do not have a clearcut definition, e.g., two-bedded institutions can either be a dispensary or a hospital. A large number of dispensaries also provide indoor care, e.g. giving a drip when needed. Demarcation between the two is not very clear. A smaller institution with 10 to 15 beds is defined as a nursing home, especially in the private sector. We have reasons to believe that the number of private hospitals is much larger [Nandraj S 1994]. Public

hospitals mainly consist of rural hospitals, cottage hospitals, civil hospitals, teaching hospitals, non-teaching hospitals, special hospitals (maternity, mental, TB, leprosy. With regard to diseases control, national programmes were setup. These are preventive and promotive in nature designed to tackle

particular disease, i e. communicable diseases, contagious diseases, etc. There are around 15 national diseases programmes functioning in the country. These are for diseases and illnesses like TB, malaria, filaria, leprosy, diarrhoea, blindness, STD, mental health, AIDS, cancer, etc.

TABLE C: RURAL-URBAN DISPARITIES IN HEALTH CARE SPENDING AND FACILITIES

	Urban Servi		Rural 1 Serv		Urban/ Rural	Urban/ Rur al	Urban/ Rural
	Rupees Per Capita	Per Cent of Total Health	Rupees Per Capita	Per Cent of Total Health	Disparity (Times) in Spending	Disparity (Times) in Availability of Beds	Disparity (Times) in Availability of Doctors 1990*
Punjab							
1990-91	124	50	38	36	3	3	3
1991-92	147	50	47	38	3 3		
1992-93	149	52	44	36	3		
Kerala							
1990-91	171	70	16	20	11	2	3
1991-92	169	68	20	22	8		
1992-93	195	68	23	22	8		
Tamil Nadu							
1990-91	109	65	14	17	7	20	11
1991-92	120	66	15	16	8		
1992-93	128	66	15	15	8		
West Bengal							
1990-91	142	68	13	17	11	15	6
1991-92	133	67	13	18	10		-
1992-93	142	67	14	17	10		
Maharashtra							
1990-91	76	55	19	22	4	15	5
1991-92	77	53	23	25	3		
1992-93	75	52	26	28	3		
Gujarat				-			
1990-91	84	59	15	21	6	16	6
1991-92	91	60	16	19	6		-
1992-93	96	60	16	19	6		
Andhra Pradesh				• *			
1990-91	92	59	9	16	10	23	11
1991-92	96	60	9	16	11		
1992-93	106	59	10	15	11		
Madhya Pradesh	_			- **			
1990-91	68	51	12	31	6	36	18
1991-92	75	53	12	27	6		•
1992-93	79	53	13	28	6		

Notes: * Estimated on the basis of Census of India 1981: Economic Tables.

@ includes Medical Education and Employees State Insurance Scheme (ESIS)

Sources: (1) Detailed Demand for Grants 1992-93, respective states: 1990-91 Actuals, 1991-92 Revised Estimate, 1992-93 Budget Estimates.

(2) Health Information of India. CBHI, GOI, 1991.

Table D: Ranges (1992-93) and Means
(1990-93) of Expenditures on Salaries and Materials and Supplies of Selected Programmes
in 8 States (Percentages)

		Salaries		Materials and	Supplies
		Range	Mean	Range	Mean
ī	Malaria	(MP) 65-95 (KE)	79	(KE) 0.5-30 (MP)	14
2	Leprosy	(MH) 76-89 (TN)	83	(TN) 4-10 (KE)	6
3	Tuberculosis	(MH) 25-94 (MP)	55	(MP) 0.7-73 (KE)	40
4	Urban Hospitals	(GJ) 63-77 (AP)	66	(AP) 19-31 (TN)	24
5	Teaching Hospitals	(TN) 48-66 (AP) 1	58	(AP) 13-50 (TN)	25
6	Rural Hospitals and Dispensaries	(KE) 64-88 (PJ)	73	(GJ) 2-34 (KE)	15
7	PHCs	(AP) 74-89 (KE)	83	(WB) 6-17 (AP)	10

Note: The abbreviations in parentheses are names of states with the minimum and maximum range values.

Source: Same as Table C.

The data presented is for the states as they exist today. The union territories have been combined together and shown under union government. i.e. the latter includes expenditures by the union territories and the central government. It is well known that the states that exist today are different from those in the 50s and 60s. As far as possible we have tried to merge territories that belong to the present-day states.²

As is evident from the health expenditure tables (7 and 8) the investment by the public sector for health care has been inadequate to meet the demands of the people. The state has, over the years, committed not more than 3.5 per cent of its resources to the health sector. In fact, during the 70s itself a declining trend is perceptible and this has become more marked during the 90s. The budgeted expenditure for 1994-95 at 2.63 per cent of total government expenditure is the lowest ever. Thus, the tables clearly reveal that the investment by the state in the health sector is very small both in the overall economy as well as within the public domain.

The most persistent declining trend has been on expenditure for hospitals and dispensaries, especially since the 80s. This decline may be seen in the context of the massive expansion of private hospitals since the late 70s. The expenditures on disease programmes and medical education have been less affected. Family planning expenditure has grown rapidly up to 1991-92 and since then slowed down. Similarly the maternal and child health (MCH) programme reached a peak during 1991-94 while the mission approach was active to meet targets for immunisation, but the current year's budget has drastically cut funds for this programme.

Further, when we calculate per capita growth rates of health expenditure, we find that except for a few earlier years the total government expenditure has been significantly more than on health, and especially so in the 90s. Thus, health care expenditure has not kept pace with increase in government expenditure. With regard to public health expenditure's share in national income it peaked in the mid-80s to 1.3 per cent of per capita NNP and since then has declined to 0.95 per cent. Under structural adjustment there has been further compression in government spending in an effort to bring down the fiscal deficit to the desired level. This compression has an adverse impact on the social sectors, more specifically the central health sector. Analysis of data by National Institute of Public Finance and Policy gives evidence for this compression which has taken place over the last decade. It shows the state's share in health spending has increased from 71.6 per cent in 1974-82 to 85.7 per cent in 1992-93 and that of the grants from centre

declined drastically from 19.9 per cent in 1974-82 to 3.3 per cent in 1992-93. Further, the breakdown of central assistance to states reveals that central programmes or centrally sponsored programmes are the most severely affected. The share of central grants for public health declined from 27.92 per cent in 1984-85 to 17.17 per cent in 1992-93 and for diseases programme from 41.47 per cent in 1984-85 to 18.50 per cent in 1992-93 [NIPFP 1993].

Further, as seen in the preceding section the rural-urban gap is wide. While the infrastructure availability in rural and urban areas should suffice to tell the story about where the state's investment in the health sector goes, it is worthwhile looking separately at the expenditure labelled as rural and urban in the public expenditure data.

Culling rural-urban expenditure data separately is a project in itself but we have done this exercise for the most recent years but only for a few states in the tables C and D. The expenditure data in the above tables refer to hospitals and dispensaries, including medical education and insurance in urban areas and rural hospitals, dispensaries and PHCs in rural areas (it may be noted that these expenditures are between 74 per cent and 90 per cent of all health expenditure in these states).

Table C shows that the volume of spending on health services in the rural areas has a direct relationship with availability of health care facilities. While Punjab is the perfect representation of this relationship, Kerala appears to contradict it. However, Kerala's high disparity in spending between urban and rural areas is with relatively high spending in both urban and rural areas.

Another dimension of rural-urban disparity in investment is the additional investment in health care in urban areas by mumicipal bodies. Most municipal bodies spend between one-fourth and one-third of their budget on health programmes whereas rural local bodies do not spend anything significant on this account [NIUA 1983, 1989].

We have already seen that medical care (hospitals and dispensaries) constitute the single largest category of health care spending (mostly in urban areas) by the state and as a programme it is a down trend. Family planning is the next large category of expenditure which is mostly spent in the rural areas. The other two large categories of spending are national disease control programmes and medical education. While the former investment has helped in assuring that provision of selective preventive health care stays on the national agenda, the latter has mostly helped in providing the necessary human power for the private health sector and hence has been more of a drain on the public exchequer.

Finally, what happens to the funds at the disposal of the public health sector in terms of input compositions, i.e. salaries of staff, commodity purchases, etc. Again, since compilation of this was not possible for all states on a time series basis we did this exercise for the same eight states as in the earlier table. The results are given in Table D.

From this table we find that general salaries take away an exceptionally large proportion of expenditure on all activities and the interstate variations for salaries at least is very small. PHCs and disease programmes especially have very high proportions for salaries hence these programmes are bound to have little effect since the other necessary provisions are grossly madequate. Hence allocative efficiency becomes a major question of concern.

Notes

[We thank S. I. Shetty, and Padma Prakash for their encouragement, guidance and support in preparation of this paper and for giving us an opportunity for working with them. We are also grateful to the Division of Fiscal Analysis, Department of Economic Analysis and Policy, Reserve Bank of India, Bombay for giving us access to their library.]

- 1 Data up to 1981 in this paper are derived from an earlier published analytic compendium titled State Sector Health Expenditures: A Database: All India and the States (Duggal R, Nandraj S, Shetty S 1992) on state health expenditure up to 1985 through the Foundation for Research in Community Health, Bombay. Data for the later years have been compiled by the authors as part of the ongoing work at the Centre for Enquiry into Dealth and Allied Themes (CEHAT). Bombay.
- 2 Union Government: 1953 to 1956 data for Delhi has been merged. Andhra Pradesh: Accounts shown separately from 1954, 1956 data for Hyderabad has been merged. Gujarat: Between 1951-1960 data was given for the then existing Bombay state. We have included this data under Maharastra. Hence, this period data includes the present-day Gujarat, Haryana; Accounts shown separately from 1967, Jammu and Kashmir: Accounts shown separately from 1960. Karnataka: 1951 and 1956 data for Coorg has been merged. Up to 1972 it was named Mysore, Kerala: 1952 to 1956 data is for State of Travancore and Cochin. Madhya Pradesh : Vindhya Pradesh, Madhya Bharat, Bhopal have been merged. Maharashtra: 1951 to 1956 data is for Bombay state which includes Gujarat. Punjab: 1951 to 1956 PEPSU has been merged. Rajashthan: 1952 to 1956 Aimer has been merged. Tamil Nadu: Up to 1968 it was named Madras. Arunachal Pradesh: Accounts shown separately from 1976. Goa. Daman and Diu: Accounts shown separately from 1964. Mizoram: Accounts shown separately from 1973. Pondicherry: Accounts shown separately from 1964. Himachal Pradesh: Between 1958 and 1963 it was

under union government administration. Manipur: Accounts shown separately from 1964. Meghalaya: Accounts shown separately from 1971. Nagaland: Accounts shown separately from 1964. Sikkim: Accounts shown separately from 1976. Tripura: Accounts shown separately from 1964.

References

- CBHI, various years, Health Information of India, GOI, New Delhi.
- Duggal, R. S Nandraj, S Shetty (1992): State Sector Health Expenditures: A Database, All India and the States, FRCH, Bombay.
- Duggal, R. S Amin (1989): Cost of Health Care, Survey of an Indian District, FRCH, Bombay.
- Duggal, R (1991): 'Private Health Expenditures', Medico Friend Circle Bulletin 173-74, July-August.
- Duggal, R. A Jesani, M Gupte (1984): NGOs in Rural Health Care, Vol II, Comparative Survey of NGO and PHC Services and Utilisation Patterns, FRCH, Bombay.
- George, A. I Shah, S Nandraj (1993): A Study of Household Health Expenditure in Madhya Pradesh, FRCH, Draft Report.
- Gupta, J P. R S Gupta, P Mehara et al (1992): Evaluation of the Functioning of Area Ddevelopment Project in Health Sector in India for Improving the Health Care System, NIHFW, New Delhi.
- Ghosh B (1991): 'Time Utilisation and Productivity of Health Humanpower, A Case Study of a Karnataka PHC', IIM, Bangalore.
- Government of India (1946): Report of the Health Survey and Development Committee (Chairman: Joseph Bhore), Manager of Publications, New Delhi.
- ICMR (1991): Evaluation of Quality of Family Welfare Services of Primary Health Centre Level, New Delhi.
- Kannan, K.P., K.R.Thankappan, V.Raman Kutty and K.P. Aravindan (1991): Health and Development in Rural Kerala, KSSP, Thiruvananthapuram.
- Nandraj, S (1994): 'Beyond the Law and the Lord: Quality of Private Health Care', Economic and Polictical Weekly, Vol XXIX, No 27, July 2, Bombay.
- National Council of Applied Economic Research (NCAER) (1992): 'Household Survey of Medical Care', New Delhi.
- National Sample Survey Organisation (NSSO). Morbidity and Utilisation of Medical Services, 42nd Round, July 1986-June 1987. Report No 364, Dept of Statistics, GOI, New Delhi.
- National Institute of Public Finance and Policy (NIPFP) (1993) (Draft report): Structural Adjustment Programme Its Impact on the Health Sector, New Delhi.
- National Institute of Urban Affairs (NIUA) (1983): 'A Study of Financial Resources of Urban Local Bodies in India and Level of Services Provided', New Delhi.
- -(1989): Upgrading Municipal Services, Norms and Financial Implications, Recent Studies, Series Number 38, New Delhi.
- Rhode J E. H Vishwanathan (1994): 'The Rural Private Practitioner', *Health for the Millions*, February, Vol 2, No 1, New Delhi.

SAMEEKSHA TRUST BOOKS

Selections of Articles from Economic and Political Weekly

General Editor: Ashok Mitra

Industrial Growth and Stagnation

Edited by

Deepak Nayyar

A selection of essays presenting the main strands in the debate on industrialisation in India. The contributors analyse the factors underlying the deceleration in industrial growth from the mid-1960s to the mid-1970s and discuss the conditions and policies for a return to the path of sustained growth. Alternative hypotheses about the macroeconomic determinants of and constraints on industrial growth in India are examined, focusing on the performance of the agricultural sector, intersectoral terms of trade between agriculture and industry, disproportionalities within and between sectors, the level of investment in the economy, the nexus between public and private investment and the relative significance of supply and demand constraints.

362 pages

Rs 275

Poverty and Income Distribution

Edited by

K S Krishnaswamy

While there has been, over the years, a perceptible increase in per capita income and expenditure and possibly some decline in the incidence of poverty in India, what still remains is massive and of a kind that is not remedied quickly or smoothly. Even with radical policies, the shifts in income and occupational structures to make a serious dent on it will take more than the rest of this century. In the welter of recent exchanges between the government and the opposition as well as between planners and market advocates on the strategy of growth, these issues have been largely obfuscated. It is therefore more than ever necessary today to recognise the magnitude of the problem and the inadequacy of the measures adopted so far to deal with it.

pp viii + 420

Rs 240

Available from

OXFORD UNIVERSITY PRESS
Bombay Delhi Calcutta Madras

Table 1: Health Care Services: All India

1961 1966 1971 1976 1981 1986 1981 1986 1981 1986 1981 1986 1982 1982 1983 1984 1984 1984 1984 1984 1984 1984 1985					Actuals	in Numbers	গ্ৰ					A.	100,000	Population			
3054 3982 3862 1465 6805 7764 10145 11174 .70 .81 .70 .72 .99 1.02 229634 299904 348655 148866 504538 594747 622668 664135 52.28 60.75 63.60 72.79 73.64 77.79 9406 9459 12180 11696 16754 25871 29189 27431 2.14 1.92 2.22 1.90 2.45 3.38 *	Year	1961	1966	1261	9261	1	1986	1988	1661	1961	9961	161	1976	1861	1986	1988	1661
229634 299904 348655 148866 504538 594747 622668 664135 52.28 60,75 63.60 72.79 73.64 77.79 9406 9459 12180 11696 16754 25871 29189 27431 2.14 1.92 2.22 1.90 2.45 3.38 * * 151129 210504 268712 319254 * 398238 * * 27.57 34.14 39.22 41.76 35584 * 80620 113455 150399 207430 * 311235 8.10 * 14.71 18.40 21.95 27.13 2695 5069 5131 5373 5568 14145 16756 22243 0.75 1.27 1.17 1.11 1.06 2.45 - - - 27929 37931 51192 98987 112004 131098 - 6.36 7.87 9.74 17.18	Hospitals	3054	3982	3862	1465	6805	1764	10145	11174	.70	18:	.70	27.	66:	1.02	1.27	1.32
9406 9459 12180 11696 16754 25871 29189 27431 2.14 1.92 2.22 1.90 2.45 3.38 * * 151129 210504 268712 319254 * 398238 * 27.57 34.14 39.22 41.76 35584 * 80620 113455 150399 207430 * 311235 8.10 * 14.71 18.40 21.95 27.13 2695 5069 5131 5373 5568 14145 16756 22243 0.75 1.27 1.17 1.11 1.06 2.45 - 27929 37931 51192 98987 112004 131098 - 6.36 7.87 9.74 17.18	Beds	229634	299904	348655	118866	504538	594747	622668	664135	52.28	60.75	63.60	72.79	73.64	77.79	78 19	78.70
* * 151129 210504 268712 319254 * 398238 * 27.57 34.14 39.22 41.76 35584 * 80620 113455 150399 207430 * 311235 8.10 * 14.71 18.40 21.95 27.13 2695 5069 5131 5373 5568 14145 16756 22243 0.75 1.27 1.17 1.11 1.06 2.45 - 27929 37931 51192 98987 112004 131098 - 6.36 7.87 9.74 17.18	Dispensaries	9406	9459	12180	96911	16754	25871	29189	27431	2.14	1.92	2.22	06.1	2.45	3.38	19.5	3.25
35584 * 80620 113455 150399 207430 * 311235 8.10 * 14.71 18.40 21.95 27.13 2695 5069 5131 5373 5568 14145 16756 22243 0.75 1.27 1.17 1.11 1.06 2.45 27929 37931 51192 98987 112004 131098 6.36 7.87 9.74 17.18	Allopathy Doctors	*	*	151129	210504	268712	319254	*	398238	*	*	27.57	34.14	39.22	41.76	*	47.19
2695 5069 5131 5373 5568 14145 16756 22243 0.75 1.27 1.17 1.10 2.45	Nurses	35584	, *	80620	113455	150399	207430	*	311235	8.10	•	14.71	18.40	21.95	27.13	•	36.88
	PHCs	2692	5069	5131	5373	5568	14145	16756	22243	0.75	1.27	1.17	1.1	1.06	2.45	2.81	3.55
	Sub Centres	i	}	27929	37931	51192	78686	112004	131098	1	1	9.36	7.87	9.74	17.18	18.77	20.90

Notes: Beds = Beds in hospitals and dispensaries. Nurses = Nurses and Midwives. PHGs = Primary Health Centres. * = Not available; — = Not applicable.
Sources: Health Information of India. Central Burean of Health Intelligence (CBH). Ministry of Health and Family Welfare (MOHFW), Government of India (GOI), respective years.

Table 2: Hospitals: All India

	A 11 1 1 1.
	T. V
	Tall A.

							Number per		.00,00	1,00,000 population	ion									
		1961			1966		1971	1976		1861			1986			1988			1991	
Үеаг	Rura	Urban	Total	Rura	Urban	Total	Total	Total	Rural	Crhan	Total	Rural	['rban	Total	Rural	Lithan	Total	Rural	Urban	Total
Major States																				
Andhra Pradesh	.52	2.34	% .	33	3.71	93	66.	80 80	7.	3.52	1.14	.37	2.98	1.03	36	2.78	86.	99:	4.71	1.75
Assam	*	*	94.	.74	1.90	01 -	\$3	.32	.20	3.57	5:	.24	359	8	.56	4.10	£6:	92:	4.74	1.20
Bihar	*	*	*	80.	2.47	31	<u>~</u> ;	7	.03	2.37	32	.12	2.15	8	=	2.10	74.	01:	1.95	35
Gujarat	*	•	*	.15	1.4	20	2.	.56	Ĩ.	7.53	2.43	9	69.01	1.78	\$	10.94	4.00	.70	11.26	4.34
Haryana	*	*	*	3	3.44	Z	.73	69:	8.	2.79	\$.07	1.98	:52	.07	1.88	20	1 0:	1.73	8 2
Jammu and Kashmir	*	*	*	*	3.45	19	69	79.	7 0.	79.7	٠ <u>٠</u>	61.	2.77	Ε.	. 18	2.76	.78	.26	2.72	8 .
Кататака	.56	1.67	.81	.17	2.34	89	.65	Ę	87.	1.73	69.	91.	99.1	19	8 0:	2.07	19.	8 0.	1.90	Ş.
Kerala	£.	1.53	. 49	38	1.46	55	55	2.52	2.88	3.42	7.98	76.	2.09	1.20	1.7.1	6.22	7.35	5.34	7 80	7.02
Madhya Pradesh	.24	2.23	.53	.13	1.86	₽	9	43	.17	56.1	53	.13	1.89	15	.17	2.00	.5 8	5 9:	8 7.	19:
Maharashtra	3 ;	3.18	96:	8.	2.78	.87	.78	53	25	4 10	2 .6	% :	5.25	2.18	.48	5.94	2.54	.71	5.78	2.67
Orissa	.63	5.50	.94	.55	5.41	76	86.	66:	79:	11 §	1.15	19:	4.28	1.07	8 †	4.42	66:	7	3.92	16:
Punjab	.20	5.96	1.53	8 0:	3.39	98.	96.	76.	16:	3 10	15.1	.87	2.84	1.41	\$8.	5.66	1.38	69.	2.33	1.14
Rajasthan	œ.	6.52	1.55	.83	80.9	1.72	17.	69.	60:	2.86	<i>1</i> 9:	10:	2.57	79.	.07	2.45	8	.04	1.98	6
Tanjil Nadu	20	99.	† 6:	*	*	74	62:	83	0₹.	1.75	.78	.32	1.68	78	.25	1.76	92.	.24	1.68	.73
Uttar Pradesh	7.	4.35	\$.	4	4.94	<u>1.0</u>	.92	89.	01:	3.22	%	8 0:	2.76	95	8 0.	2.59	.56	.07	2.38	53
West Bengal	35	2.12	78	.28	1.86	<i>1</i> 9:	19.	19:	38	1.77	.75	.30	1.68	19.	.29	%	Ŗ	17.	1.51	9.
Other States																				
Arunachal Pradesh	*	*	*	*	*	*	3.6	7	2.71	14.48	3.48	<u>8</u> .	8.21	1.74	7.	66.9	1.77	1.59	5.72	5.10
Goa, Daman and Diu	1.52	8.91	2.71	2.42	28.68	8.22	16.7	1.85	3.27	15.92	7.36	6.46	10.51	8.06	4.98	13.28	8.48	5.95	11.53	8.50
Mizoram	*	*	*	•	*	•	06:	76.	19.1	2.46	1.82	*	5.47	2.03	æ.	3.48	16.1	8 0.1	3.15	2.04
Pondicherry	*	8.99	2.17	.36	5.57	2.14	1.70	1.30	*	3.80	1.99	*	2.45	1.43	*	2.25	1.36	*	7.00	1.27
Himachal Pradesh	38	5.62	.71	55	10.96	1.24	1.13	7.1	ς;	10.74	1.31	:53	11.16	+ -	25	10.26	1.34	.49	9.44	1.25
Manipur	86.	7.35	7.	\$8.	4.77	1.30	1.12	96.	1.34	1.86	2	66.	2.04	1.23	1.62	98:	141	1.59	2	1.37
Meghalaya	*	*	*	*	.45	3.37	40	6.	ક્	4.14	.82	80.	4.21	7 8°.	80	3.96	98 .	*	2.43	\$
Nagaland	*	•	.•	*	*	*	29.5	4.80	7	4.16	4.39	3.13	5.45	3.52	2.67	4.91	3.05	5.09	4.76	2.55
Sikkim	*	*	*	*	•	*		1.90	15.1	1.96	1.58	*	09	1.39	*	12.53	1.32	*	14.25	1.24
Tripura	61.	8.74	96	-	5.28	96	.71	.78	=	3.76	.73	.24	1.03	37.	7	997	.87	.	3.10	₹
All India	.28	2.50	.70	.2ÿ	2.68	8 9.	.70	.72	۶۲.	3.12	<u>(%</u>	.28	3.26	1.02	16.31	3.50	1.27	22	3.51	1.32

*: Not Available
Norts: Rural-Urban not available for the year 1971 and 1976.
Sources: Health Information of India, CBHL MOHEW, GOL: respective years.

Number per 1,00,000 population Table 3: Beds: All India

Year	1961	- <u>36</u>	1971	9261		1881			1986			1988			1991	
	Total	Total	Total	Total	Kural	('rhan	Total	Rural	Urhan	Total	Rural	Lithan	Total	Rural	Urhan	Total
Major States																
Andhra Pradesh	55.78	65.31	71.82	67.04	9.43	242.06	63.68	8.68	216.79	61.20	9.13	202.65	59.25	12.55	206.66	64.55
Assam	31.43	46.27	52.92	36.42	12.13	382.09	\$0.19	15.40	402.69	56.87	17.51	166.64	66.30	20.1 0	352.83	\$6.98
Bihar	22.33	33.43	79.97	37.70	8.86	253.25	19.33	15.04	257.12	\$ 6.16	3.24	245.27	34.68	3.07	228.12	32.70
Gujarat	38.78	59.80	59.93	64.62	10.48	290.92	17.76	13.41	309.96	90:11	21.76	346.51	130.67	31.34	363.95	145.76
Haryana	*	52.01	.61.28	16.69	10.05	248.71	62.27	4.91	202.43	51.33	4.92	196.99	51.12	4.57	69.19	45.38
Jammu and Kashnir	86.61	90.83	86.73	92.68	5.10	3.8.39	68.94	6.73	465.19	110.42	\$.98	437.35	105.79	<u>∞</u>	421.39	106.65
Кататака	65.27	82.08	84.61	92.41	13.99	264.10	86.25	14.02	255.84	86.58	11.58	244.64	82.42	9.31	232.25	78.26
Kerala	71.42	89.63	101.98	225.40	112.58	450.45	175.92	149.46	459.20	220.12	197.56	481.54	266.56	202.94	131.33	263.20
Madhya Pradesh	30.75	39.39	36.70	39.64	3.21	146.28	12.24	2.99	147.18	34.59	4.37	145.26	36.03	43.38	21.37	18.27
Maharashtra	69.94	82.74	74.24	77.43	13.52	306.69	116.22	17.53	328.45	132.78	20.58	307.55	128.94	26.05	13.255	144.64
Orissa	31.32	45.09	49.51	48.36	10.16	291.57	13.59	9.86	269.76	42.83	8.09	277.97	43.17	11.05	261.15	¥.
Punjab	119.17	70.78	72.87	83.14	68.51	250.72	118.95	74.45	231.35	119.63	68.23	233.43	116.44	54.66	213.19	101.77
Rajasthan	52.27	63.77	67.38	64.23	5.93	225.63	52.16	6.02	226.67	54.73	5.84	216.86	53.15	3.11	182.30	14.
Tamil Nadu	71.43	75.00	67.07	92.87	12.46	233.29	85.23	14.97	227.58	86.44	12.37	236.95	88.41	11.94	234.85	88.17
(ittar Pradesh	35.76	38.00	43.87	47.29	7.83	219.01	45.74	7.63	191.55	12.47	7.34	180.15	40.65	6.93	165.38	38.20
West Bengal	83.22	86.47	91.28	91.65	23.69	270.05	88.89	17.67	275.17	87.15	17.10	264.43	84.26	15.42	251.70	80.14
Other States																
Arunachal Pradesh	*	•	252.40	229.95	105.01	1047.60	18.81	53.72	675.63	114.75	53.93	587.47	11.84	75.11	\$60.08	134.32
Goa, Daman and Diu	189.73	291.42	240.62	242.94	68.99	707.20	275.60	122.74	456.75	254.92	109.40	486.00	268.13	119.70	440.38	266.37
Mizoram	*	*	84.24	116.44	86.03	276.65	133.06	62.07	457.10	208.99	74.59	354.00	186.51	88.30	321.10	195.86
Pondicherry	255.23	278.07	280.05	253.86	25.06	717.30	387.28	30.77	599.50	363.44	29.70	583.35	364.88	14.82	552.57	354.95
Himachal Pradesh	48.32	148.23	132.64	136.62	26.70	749.76	81.76	17.31	895.70	89.40	16.51	886.19	89.70	16.80	832.46	87.79
Manipur	62.30	55.48	77.56	76.59	38.45	230.12	89.10	30.85	213.77	80.49	60.97	144.84	83.93	57.92	137.39	79.92
Meghalaya	•	80.51	19.97	115.02	7.13	\$92.54	112.89	6.18	713.52	136.48	5.86	672.16	129.38	*	496.84	92.86
Nagaland	*	•	199.05	177.79	136.86	410.03	179.24	51.56	417.76	112.33	47.21	393.69	105.78	38.29	377.45	16.96
Sikkim	*	*	*	145.18	85.94	391.51	135.28	*	1218.44	145.83		1316.15	139.09	*	1496.11	130.08
Tripura	42.03	62.48	51.15	70.37	5.25	492.09	58.74	7.46	364.90	55.48	11.26	347.96	59.16	11.82	299.77	55.78
All India	52.28	60.75	63.60	72.79	16.51	261.56	73.64	8181	76.035	97.77	18 49	256 59	78 10	22.26	241 06	78 70

Notes

Beds includes beds in hospitals and dispensaries.

Rural-Urban breakup not available for the year 1961 and 1976.

Not Available.

Health Information of India. CBHI, MOHFW, GOI, respective years.

Sources:

Table 4: Dispensaries: All India Number per 1,00,000 population

V.211		1901			1066		107	701		1801			1086			8801			1001	
	Rural	Lithan	Total	Rural	Urban	Total	Total	Total	Rural	Lithan	Total	Rural	(Iman	Total	Rural	Urban	Total	Rural	Lithan	Total
Major states																				
Andhra Pradesh	1.41	69.9	1.39	2.79	12.30	5.69	1.84	1.68	1.31	4.29	1.32	1.23	3.63	1.32	1.19	3.39	1.27	.28	11.	.27
Assam	•	•	5.86	5.87	62.66	5.51	4.77	2.38	2.26	19.73	2.18	5.09	17.40	1.99	1.56	12.80	1.47	1.50	12.02	4.
Bilur	*	•	1.83	1.44	14.03	1.39	1.47	74	19.1	11.31	1.43	15.5	17.00	2.21	.58	3.89	.52	\$5.	3.62	4 .
Gujarat	*	*	6.13	6.76	18.20	5.95	4.58	1.45	1.62	3.58	1.38	5.85	11.93	9.47	9.52	18.86	15.00	9.33	17.78	15.22
Harvana	*	•	*	1.21	5.71	1.60	1.56	1.75	1.47	5.23	1.93	.78	2.53	99.	.34	8 .1	1.38	.32	96:	1.32
Jammu and Kashnur	*	•	3.20	15.10	70.01	13.87	12.45	11.73	13.14	49.27	10.82	11.65	39.87	9.43	10.95	36.38	9.21	9.92	31.70	7.90
Kamataka	3.57	12.42	3.17	7.61	8.54	2.76	2.56	3,59	4.37	10.76	3.85	4.29	10.01	3.68	3.44	7.87	2.40	1.97	4.40	. 88 88.
Ketaki	1.33	7.48	1.17	1.22	6.54	1.07	1.17	2.77	1,43	14.88	2.95	\$ 00.0	17,21	5.48	7.52	23.42	7.51	5.82	16.24	6.0
Madhya Pra iesh	1.49	16.8	1.36	1.08	16.3	1.02	£6.	1.25	1.26	4.96	1.23	% .	3.00	80.	\$ \$	2.00	95.	.30	86.	.42
Maharashtra	1.68	4.27	1.98	2.33	5.47	2.22	1.99	2.42	3.02	5.59	5.58	1.59	2.7	10.26	1.83	3.02	12.36	1.65	2.61	1.69
Onsa	1.20	17.84	1.24	1.36	16.85	- -	1.51	1.40	96.	7.20	1.14	.82	5.61	76.	19:	4.08	.70	8	3.12	.62
Punjah	4.08	13.63	4.49	1.82	5.95	2.19	2.13	3.82	10.62	27.73	8.85	11.93	29.49	69.6	10.50	25.47	8.54	8.80	20.81	7.12
Rajasthan	1.07	5.49	1.53	69.	3.37	1.30	2.43	2.47	3.21	12.02	3.52	2.57	9.08	3.08	2.46	8.51	2.94	9.	.20	.63
Tannil Nadu	2.01	5.52	1.83	•	*	1.71	2.72	#.	96.	1.96	1.38	8.5	1.68	1.29	0 †	.79	·94	4 .	77.	.92
Uttar Pradesh	1.17	7.92	1.45	.29	1.84 1.84	64.	1.58	1.12	1.30	5.92	7	1.30	5.58	1.40	1.25	5.24	1.34	∞	4.81	1.26
West Bengal	1.79	5.53	1.68	1.33	÷.04	1.30	1.17	œ	89 :	- 88 - 1	11:	16:	2.47	06:	&	2.35	.86	83	2.19	∞.
Other States				٠																
Arunachal Pradesh	*	•	*	*	*	*	16.47	15.65	1.18	15.651	10.45	4.17	38.29	3.89	4.68	18.47	4.30	3.98	28.62	3.61
Goa. Daman and Diu	5.14	26.73	4.95	*	*	17.52	3.6	3.19	4.35	9.10	3.68	24.01	36.67	19.81	45.81	62.87	53.50	44.54	52.85	49,29
Mizoram	•	*	*	*	*	•	15.4	3.63	*	*	*	7.29	12.30	4.58 4.58	5.41	7.74	<u>«</u> ,	5.69	6.62	3.21
Pondicherry	6.17	19.10	5.15	*	*	+ 0+	1 .66	3.90	7.97	7.28	4.63	16.9	4.91	4.88	16.9	4.50	4.63	4.83	2.80	3.80
Himachal Pradesh	6.53	96.66	6.12	12.23	170.55	11.86	14.65	4.50	4.53	54.91	4.65	4.59	51.38	4.71	4.40	47.90	87.7°	4.07	42.71	4.17
Manipur	7.16	75.00	6.79	69.9	52.51	97.9	5.50	5.13	4.69	13.05	3.66	4.14	11.12	3.20	3.96	10.50	3.05	3.71	69.6	2.85
Meghalaya	*	*		*	*	*	5.63	4.86	5.21	23.62	4.34	4.51	66.61	3.75	4.28	18.83	3.55	1.47	6.38	1.31
Nagaland	•	*	*	17.17	198.88	16.26	14.91	12.39	11.00	59.88	10.19	7.47	15'Li	7.23	6.87	33.85	6.28	2.67	27.13	5.35
Sikkim	*	•	•	*	•	*	•	9.12	2.26	11.75	1.90	•	•	*	35.85	303.34	32.32	36.63	184.71	33.45
Tripura	8.37	84.47	8.49	7.64	70.09	7.12	6.81	6.48	6.57	53.20	6.14	9+:11	73.85	10.17	15.58	93.92	13,60	20.16	111.94	17.31
All India	1 30	4.35	7 1 7	1 92	7	1 92	222	1 90	2.21	7.26	2.15	7 30	7 3.1	3 38	2.29	6.8.1	147	98 -	5 38	1.25

Notes: Rural-Urban breakup not available for years 1971-76.

* Not applicable
Sources: Health Information of India. CBHI, MOHFW, GOI, respective years.

Table 5: Primary Health Centres and Sub Centres: All India

Number per 1,00,000 population

Year	1961	19	966	1	971	19	976	1	981	19	86	19	88	1	991
	PHCs SCs	PHCs	SCs	PHCs	SCs	PHCs		PHCs	SCs	PHCs	SCs	PHCs	SCs	PHCs	SC ₈
Major States		· · · · · · · · · · · · · · · · · · ·													
Andhra Pradesh	.65	1.20		1.19	3.55	1.09	8.14	1.02	10.40	2.23	15.55	2.77	17.05	2.64	16.26
Assam	.63	.15		.78	2.86	.94	3.01	.82	4.47	1.73	13.92	2.27	18.94	2.23	25.78
Bihar	.84	1.26		1.16	6.95	1.05	7.64	.96	9.49	1.76	14.09	2.20	14.75	3.33	19.74
Gujarat	.97	1.63		1.31	8.07	1.18	9.00	1.07	10.65	1.70	23.79	2.57	24.53	3.24	26.41
Haryana	*	*		1.08	8.02	.97	8.09	.88	10.30	2.22	17.77	2.62	18.81	3.22	18.73
Jammu and Kashmir	1.11	1.58		2.00	6.70	1.89	6.55	1.82	8.02	2.58	10.50	4.57	25.57	4.78	26.87
Karnataka	.96	2.17		1.19	8.89	1.10	9.61	1.14	12.20	1.75	18.00	2.13	19.31	3.66	25.17
Kerala	.58	1.00		.91	8.93	.85	9.27	.80	8.75	2.08	15.72	2.77	18.31	4.27	23.85
Madhya Pradesh	.74	1.27		1.28	6.88	1.20	7.99	1.14	12.81	2.00	15.90	2.15	18.56	2.33	23.45
Maharashtra	.78	1.36		1.12	8.01	1.04	8.60	1.06	9.98	3.02	20.02	3.34	20.08	3.41	19.41
Orissa	.68	1.38		1.56	7.71	1.45	9.40	1.35	8.76	2.62	17.12	3.03	20.29	3.75	19.89
Punjab	1.76	2.50		1.23	7.07	1.14	7.70	1.06	17.34	13.57	20.53	13.67	20.28	14.35	20.11
Rajasthan	.85	1.21		1.09	4.78	.96	6.73	.86	6.89	1.93	15.74	1.85	15.07	3.91	23.92
Tamil Nadu	.49	.96		1.74	13.90	1.41	10.63	1.18	10.47	2.15	20.85	2.37	23.19	1.17	23.71
Uttar Pradesh	.80	1.25		1.07	4.50	1.05	8.39	1.01	9.09	1.91	16.85	2.35	19.15	3.27	18.09
West Bengal	.63	.72		.71	3.99	.86	4.34	.86	6.95	2.83	17.13	3.03	16.90	3.13	15.95
Other States														•	
Arunachal Pradesh		*		16.66	*	15.18	*	7.62	12.53	* .97	9.82	2.98	19.87	4.25	22.96
Goa, Daman and Diu	*	3.29		2.38	8.08	2.20	8.79	2.04	13.20	1.97	24.58	2.70	22.05	3.48	21.04
Mizoram	*	*		*	*	1.20	.90	3.76	35.49	13.49	50.19	8.65	53.78	9.48	59.59
Pondicherry	.71	4.34		4.02	10.97	4.27	.11.75	4.16	15.26	14.17	25.24	6.22	25.21	8.27	26.20
Himachal Pradesh	1.21	1.40		2.33	8.11	2.15	8.53	1.95	16.46	3.90	22.43	.59	25.33	4.31	32.19
Manipur	.84	1.46		1.50	4.72	1.01	5.46	2.77	13.87	3.80	28.99	4.12	32.38	5.15	31.80
Meghalaya	*	*		1.04	2.89	1.43	6.53	2.10	8.86	4.12	23.75	4.21	22.77	5.52	23.89
Nagaland	.29	•		1.94	5.38	< 1.96	7.68	2.60	10.39	6.38	23.61	3.00	22.33	3.28	19.99
Sikkim	*	*		*	*	2.20	9.66	5.65	11.31	6.31	29.35	5.92	37.33	5.97	37.18
Tripura	.96	1.81		1.65	2.15	1.68	4.84	1.53	7.33	3.85	12.95	2.25	16.77	2.11	21.28
All India	.75	1.27		1.17	6.36	1.11	7.87	1.06	9.74	2.45	17.18	2.81	18.77	3.55	20.90

Note: Only rural population taken.

* Not available, sub-cont 1961, 1966 not applicable.

Sources: Health Information of India, CBHI, MOHFW, GOI, respective years.

Table 6: Doctors and Nurses: All IndiaNumber per 1,00,000 population

Year	19	61	19	71	19	81	19	91
	Doctors	Nurses	Doctors	Nurses	Doctors	Nurses	Doctors	Nurses
Major States				11 11 11 11 11 11 11 11 11 11 11 11 11				
Andhra Pradesh		8.97	22.18	16.66	43.05	20.32	49.67	23.34
Assam		8.97	32.05	11.04	36.35	13.00	47.08	10.18
Bihar		2.83	18.54	6.52	26,22	11.09	30.55	10.29
Gujarat		*	26.23	9.54	42.99	14.45	52.98	59.00
Haryana		*	*	*	*	13.97	*	20.73
Jammu and Kashnur		*	16.22	*	44.53	*	55.80	*
Karnataka		*	26.43	6.29	51.05	13.94	98.58	52.21
Kerala		.33	27.09	19.43	45.95	37.48	56.72	78.41
Madhya Pradesh		5.54	11.53	9.55	8.07	15.50	16.92	88.00
Maharashtra		23.02	45.28	39.10	65.43	54.03	62.72	48.64
Onssa		2.87	19.70	7.49	30.67	11.26	35.19	50.23
Punjab		28.42	91.20	64.67	127.88	94.56	134.51	116.25
Rajasthan		*	12.95	11.01	25,43	15.33	32.01	22.38
Tamil Nadu		23.43	45.46	34.34	65.69	51.75	81.94	60,49
Uttar Pradesh		3.66	14.59	3.86	21.54	6.78	23.91	9.24
West Bengal		13.89	58.02	11.38	60.15	16.23	61.38	25.26
Other States								
Arunachal Pradesh			*	*	•	*	*	_*
Goa, Daman and Diu		*	*	*	*	•	*	. *
Mizoram		*	*	•	*	*	*	
Pondichery		*		•	•	*	*	*
Himachal Pradesh		•	•		*	4.44	*	29.82
Manipur		•	*	*	*	*	*	•
Meghalaya		•	*	*	*	*	*	
Nagaland			*	•	*	*	*	*
Sikkim		•	*		*	*		*
Tripura		•	*	*	*		*	*
All Índia		8.10	27.57	14.71	39.22	21.95	47.19	36.88

Note: Only rural population taken.

Not available

Sources: Health Information of India, CBHI, MOHFW, GOI, respective years.

Table 7: Expenditure on Health: All India

Year	1950-51	1955-56	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1991-92	1992-93	1993-94 RE	1994-95 BE
D				A:	Amount in	Rupees M	illion					
Revenue expenditure	210.55	£00.00	107/00	1606 00	225			2215201	50010.55	<0000 0 c	64005.10	
health	218.55	509.83	1076.82	1685.90	3351.18	6111.66	11888.12			62039.06		
Disease programme	23.73	89.49	280.51	263.40	456,86	824.95	1540.33	3174.14	5505.76	6722.49	7479.62	7477.53
Hospitals and	96.15	193.87	427.92	654.07	1249.59	2768.22	5147.53	10270.37	12026 90	17161.34	10724 21	20255 54
dispensaries Medical education	90.13	193.87	427.92	634.07	1249.59	2/08.22	5147.55	10270.37	13920.80	17101.54	19724.51	20255.54
	10.91	12.73	60.31	126.19	239,60	534.05	1077.90	2353.92	5299.40	6818.85	7845.83	6046.06
training research	10.91	12.75	00.31	120.19	259,60	787.70	1419.47	4871.83	10085,36	10264.17		6046.26 13586.78
Family welfare* Maternal and child	-	_				767.70	1419.47	46/1.63	10085.50	10204.17	12122.40	15560.76
health services*						23,66	60.38	136.14	1056.21	1117.25	1397.52	599.35
	30.62	51.78	119.65	266.14	671.90	330.19	583,99	130.14	2335.95	2771.20	3228.89	3307.04
Health administration CAP revenue	30.02	31.76	119.03	200.14	671.90	550.19	ניפ,כחיה	1285.00	2333,93	2//1.20	3220.09	3307.04
						673.23	060 (0)	2507.22	4385.05	2604.59	3358.05	3507.89
expenditure health*						0/3.23	969,00	2507.22	4585.05	2004.59	3336.03	3307.69
Total government rev		11702 91	21001 10	£120£74	97240 72	174022.0	2412777	P36201.2	1670133	2287180	2652342	2987083
expenditure	61.50.09	11705.61	21001.16	51385.76	67.509.75	174955.0	3012/7.7	823301.3	10/0155	220/100	2032342	2967063
•				D	Marian and an	INtmil	4 i					
Revenue expenditure	ŧ			D	Percentag	ie Mistriisii	CIOU					
health	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Disease programme	10.86	17.55	26.05	15.62	13.63	13.50	12.96	11.69	10.59	100.84	10.41	9.51
Hospitals and	10.00	17.55	20.0.5	1.1.02	15.05	1.550	12.90	11.09	10.59	10.64	10.41	9.51
dispensaries	43.99	38.03	39.74	38.80	37.29	45.29	43.30	37.82	26.78	27.66	27.46	25.75
Medical education	43.77	30.03	37./4	36.60	31.29	4.7.27	43,50	31.62	20.76	27.00	27.40	23.13
training research	4.99	2.50	5.60	7.49	7.15	8.74	9.07	8.67	10.19	10.99	10.92	7.69
Family welfare*	4.99	2.30	5.00	7.49		12.89	11.94	17.94	19.39	16.54	16.88	17.27
Maternal and child	*****	_				12.69	11.94	17.94	19.59	10.54	10.66	17.27
health services*						0.39	0.51	0.50	2.03	1.80	1.95	0.76
Health administration	14.01	10.16	11.11	15.79	20.05	5.40	4.91	4.73	4.49	4.47	4.50	4.20
Revenue expenditure		10.10	11.11	13.79	20.0.1	3.40	4,21	4.75	4.49	4.47	4.50	4.20
health	2.69	4.36	5.13	3.28	3.84	3.49	3.29	3.29	3.11	2.71	2.71	2.63
(leant)	2.09	₹.50	3.1.3					3.29	3.11	2.71	2.71	2.03
				C: Exp	enditure P	er Capita i	n Rupees					
Disease programme	0.07	0.22	0.64	0.53	0.83	1.34	2.25	4.15	6.37	7.60	8.27	8.09
Hospitals and dispensaries	0.27	0.48	0.97	1.32	2.28	4.49	7.51	13.43	16.10	19.41	21.82	21.91
Revenue expenditure health	0.61	1.27	2.45	3.41	6.11	9.91	17.35	35.52	60.13	70.15	79.44	85.10

Notes: RE = Revised Estimate; BE = Budget Estimate; CAP = Capital. For the year 1994-95, disease programme, hospitals and dispensaries, medical education and research, family welfare, MCH, health administration excludes central government expenditure as it was not available.

Source: Up to 1985-86 is combined finance and revenue accounts Comptroller and Auditor General of India, respective years. Other years – demand for grants, respective states.

Table 8: Revenue Expenditure on Health: Union Government and States

Year	1950-51	1955-56	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1991-92	1992-93	1993-94 RE	1994-95 BE
				A: A	Amount in	Rupees Mi	illion					
Major States												
Union Government	19.97	70.33	267.80	151.87	284.35	529.27	1022.18	2561.51	3838.14	559 0.30	6938.80	7390.10
Andhra Pradesh		39.83	75.57	124.99	259.39	398.02	876.22	1837.60	3752.55	4221.63	4648.96	5043.53
Assam	6.29	15.29	30.42	58.57	74.93	127.58	232.60	647.08	1123.45	1364.43	1432.41	1883.92
Bihar	16.47	56.61	65.27	88.30	162.53	250.08	544.11	1235.89	2713.31	3856.38	4570.34	5574.54
Gujarat		_	31.88	84.41	213.87	341.69	641.99	1480.69	2837.20	2976.32	3343.67	3593.73
Haryana				_	75.58	127.82	238.17	597.82	952.41	1084.23	1271.64	1396.29
Jammu and Kashmir		_	10.40	20.05	46.29	71.77	196.74	420.23	969.72	1223.60	1363.10	1323.40
Karnataka	0.46	16.21	46.36	71.40	159.53	377.85	603.49	1385.49	2953.10	3602.05	4237.73	5077.72
Kerala		16.67	44.49	85.18	150.11	337.75	570.92	1133-97	2226.61	2301.31	3151.60	3759.77
Madhya Pradesh	7.01	49.56	55.62	108.94	197.04	309.91	687.85	1500.99	2745.41	3371.80	4165.00	4609.97
Maharashtra	44.59	67.30	90.68	157.41	385.33	637.36	1252.05	2694.69	5273.76	6158.17	6877.81	6803.92
Orissa	6.97	11.31	25.90	69.26	107.59	196.97	408.74	739.01	1565.99	1715.06	2242.48	2208.12
Punjab	7.83	21.36	42.11	83.07	98.31	195.65	387.11	842.18	1811.89	1979.53	2201.98	2312.75
Rajasthan		28.16	44.98	92.80	212.21	296.14	569.01	1225.32	2795.12	3319.08	3715.71	4556.96
Tamil Nadu	41.89	43.79	83.12	139.48	278.50	511.54	882.32	1885.52	3790.05	4894.22	5582.60	5982.37
Uttar Pradesh	30.02	42.32	·74.01	156.18	281.12	548.21	1116.18	3712.27	6242.31	7378.80	7529.23	8003.05
West Bengal	37.17	52.03	88.18	147.52	266.91	595.02	1096.08	2015.23	3894.12	4278.69	5033.53	5397.64
Other States												
Arunachal Pradesh •			_			18.41	42.07	82.91	169.07	216.66	224.02	278.07
Goa, Daman and Div		_		11.23	19.51	37.12	53.58	118.87	276.38	308.00	344.41	350.86
Mizoram	_	_				18.65	37.90	89.30	167.15	190.89	215.59	198.63

(Continued)

^{* (}i) Family welfare and MCH from 1950-51 to 1970-71 included in medical and public health account heads. (ii) Cap revenue expenditure health are shown seperately only from the 70s prior to which it was under the ministry of works.

Table 8: Revenue Expenditure on Health: Union Government and States (Continued)

Year	1950-51	1955-56	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1991-92	1992-93	1993-94 RE	1994-95 BF
Pondicherry			_	5.40	10.95	24.01	35.02	83.61	181.87	215.65	254.92	262.53
Himachal Pradesh		3.46		13,21	39,88	64.67	154,63	324.40	707.22	885.55	1084.00	1274.81
Manipur				4.23	10.89	20.12	53.63	95.90	216.53	239.17	220,45	191.40
Meghalaya	_		_	5.73	10.65 17.82	18.71 28.73	66.56 55.92	124.93 158.73	232.56 203.80	275.90 *	361.06 366,58	367.38 310.82
Nagaland Sikkim	_			3.7.3	17.02	4.56	12.79	37.47	95.72	122.31	122.02	145.80
Tripura				7.38	13.79	23.15	44.19	122.30	275.13	269.33	325,54	368.26
All India	218.55	509.83	1076.82	1685.90	3351.18	6111.66	11888.12	27153.91	52010.57		71825.18	78666.34
Ed ad on the story			B: As Per	centage of	Total Gov	ernment l	Revenue E	xpenditure	•			
Major States Union Government	0.47	1.30	2.53	0.49	0.58	0.51	0.48	0.52	0.45	0.42	0.45	0.42
Andhra Pradesh	- O.47	13.74	8.89	7.83	8.74	7.88	7.55	6.61	5.82	5.87	5.75	5.63
Assam	6.74	6,25	7.51	7.26	6.20	7.11	6.51	6.75	5.23	5.57	5.14	6.00
Bihar	6.32	10.40	9.02	7.05	6.53	6.33	5.72	5.68	5.66	5.87	6.24	6.89
Gujarat	****	*****	6.22	7.44	9.75	8.96	7.11	7.51	5.42	4.79	5.09	5.21
Haryana				-	8,09	6.84	5.94	7.00	4.19	4.56	3.60	2.90
Jammu and Kashmir			X.5X	6.18	6.68	5.03	7.35	7.61	6.37	6.87	7.71	6.20
Karnataka	0.35	6.06	5.83	5.69	6.32	8.82	6.74	6.60	5.96	6.44	6.56	6.39
Kerala		8.48	9.67	10.41	9.16	9,51	8.55	7.85	6.92	6.29	7.13	7.44
Madhya Pradesh	2.48	15.30	8.42	8.67	9,66	7.24	6.77	6.69	5.78	5.48	5.65	5.55
Maharashtra Omasa	6.22 5,80	7.13 4.88	7.60 7.20	6.45 7,59	8.38 7.69	6.95 7.13	6.53 7.47	5,97 7,38	5.25 5.94	5.33 5.63	5.34 6.00	4.67 5.00
Orissa Punjab	3,80	5,57	7.12	6,65	7.09	7.13	7.04	7.24	4.32	5.78	5.32	5.33
Rajasthan	2,00	11.17	9.89	9.24	9.64	8.52	8.28	8.11	6.85	6.64	6.34	6.97
Tamil Nadu	7.05	8.03	9.12	7.72	8,66	9.17	7.66	7.70	6.72	5.73	6.64	6.59
Uttar Pradesh	5.79	5.02	5.13	6.01	6.79	6.77	6.50	9.75	6.00	5.81	5.48	5.38
West Bengal	9,89	8.52	9.48	8.80	8.80	10.94	9.83	8.92	7.31	7.55	7.15	6.58
Other States		_										
Arunachal Pradesh			_	_		9.25	6.86	5.85	6.28	6.37	5.64	6.39
Goa, Daman and Di	ц			15.23	15.01	12.67	10.29	8.22	8.33	8.10	7.87	7.52
Mizoram			_	. —		5.82	7.03	6.80	5.21	5.10	4.97	4,99
Pondicherry	~		_	15.12	13.96	14.56	10.60	9.11	8.91	7.93	8.07	8.03
Himachal Pradesh		10.85		7.33	6.39	7.46	8.24	7.89	7.24	7.73	8.08	8.19
Manipur		****		5.61	7.17	7.39	7.68	6.15	5.74 6.73	6.01 7.19	5.24 7.51	4.54 7.33
Meghalaya				5.85	11.04 7.24	6.83 6.74	11.12 6.11	9, 2 0 6,96	4.17	7.19	5.39	4.78
Nagaland Sikkim			_	.7.0.7	7.24	4.98	4.17	4.83	6.01	6.81	6.10	6.78
Tripura	_	_	_	7.71	7.91	7.01	5.07	6.53	5.54	4.90	5.16	5.10
All India	2.69	4.36	5.13	3.28	3.84	3,49	3.29	3,29	3.11	2.71	2.71	2.63
			C:	Expenditu	ire on Hea	lth Per Ca	pita in Ru	pees				
<i>Major States</i> Andhra Pradesh		0.60	2.10	3.15	5.96	8.20	16.36	30.66	55.09	60.51	65.06	. 68.91
Assam	0.76	1.58	2.74	4.55	5.12	7.39	11.69	30.67	49.51	59.37	61.56	79.93
Bihar	0.42	1.33	1.41	1.72	2.88	3.96	7.78	15.82	30.69	42.62	49.35	58.81
Gujarat			1.55	3.57	8.01	11.24	18.83	39.35	67.25	69.09	76.01	80.00
Haryana	_		-		7.53	11.13	18.43	40.89	56.39	62.49	71.32	76.22
Jammu and Kashmir		-	2.92	4.90	10.02	13.54	32.84	61.35	122.13	149.77	162.08	152.99
Karnataka	0.02	0.75	1.97	2.70	5.44	11.37	16.28	33.81	64.30	76.80	88.49 103.77	103.84
Kerala		1.09	2.63	4.45	7.03	14.43	22.43	41.64	75.43	76.86 48.33	58.14	122.07 62.67
Madhya Pradesh	0.27	1.56	1.72	2.94 3.50	4.73 7.64	6.61 11.26	13.18 19.94	25.37 38.09	40.40 65.13	74.15	80.74	77.87
Maharashtra	0.48	0.70	2.29	3.51		8.15	15.50	25.54	48.48	52.05	66.72	64.40
Orissa Punjab	0.48 0.85	0.70 2 .10	1.48 3.78	6.73	4.90 7.26	12.90	23.06	45.55	87.53	93.68	102.09	105.03
runjao Rajasthan	U.a.,	1.56	2.23	4.04	8.23	9.87	16.61	31.36	61.76	71.30	77.62	92.56
Tamil Nadu	_	1	2.47	3.73	6.76	11.42	18.23	36.25	66.82	84.98	95.46	100.75
Uttar Pradesh	0.47	0.62	1.00	1.93	3.18	5.50	10.07	29.74	43.76	50.44	50.18	52.02
West Bengal	1.41	1.70	2.52	3.72	6.02	12.03	20.08	32.89	55.82	59.85	68.71	71.90
Other States		*										
Arunachal Pradesh						33.47	66.78	110.55	189.97	235.50	235.81	283.74
Goa, Daman and Di	u —		•	15.18	22.69	38.27	49.16	100.74	232.25	254.55	280.01	280.69
Mizoram			_		***	45.49	77.35	151.36	232.15	254.52	276.40	245.22
Pondicherry	_	\ -	_	12.86	23.30	44.46	58.37	119.44	219.12	250,76	286,43	285.36 227.24
Himachal Pradesh		1.33		4.21	11.53	16.71 16.10	36.13 37.77	69.02 59.20	133.94 114.57	164.29 122.65	197.09 109.68	92.46
Manipur Meghalaya	_	_	_	4.55	10.18 10.54	16.10	49.67	80.60	127.08	145,98	185.16	182.78
Magaland		_		13.02	34.27	44.20		158.73	159.22	1-4.1.20	256.35	205.84
Nagarano Sikkim	_	_	_	15.02	.14.27	17.54	39.97	104.08	227.90		277.32	324.00
Tripura	_	_	_	5.47	8.84	12.86	21.56		96,54		106.73	116.91
4 4 4 4 7 4 4 4 6 5					6.11	9.91	17.35		60.13	70.15	79.44	85.10
All India	0.61	1.27	2.45	3.41	n i i	7.71	ייוו		////. 1 .	/ 1/. 1 - 1	/ /,	17. '. 1 (

Notes: —= Not applicable: * = Not available.

RE = Revised Estimate: BE = Budget Estimate.

Source: Up to 1985-86, combined finance and revenue accounts. Comptroller and Auditor General of India, respective years. Other years, demand for grants, respective states.

PUBLIC INTEREST RESEARCH GROUP

Presents

THE STATE OF INDIA'S ECONOMY 1994-95

The annual Economic Survey of the Government of India is becoming more of a window-dressing exercise rather than reporting on the real State of the Indian Economy under the structural adjustment programme. For the last two years, a group of eminent economists, social activists, academicians, NGOs and trade union leaders have come together to prepare an **Alternative Economic Survey** which critically examines the impact of structural adjustment programmes and policies on the economy, people and environment.

To strengthen this initiative with a definite focus and coherence, this year, the <u>Public Interest Research Group</u> has brought out <u>The State of India's Economy 1994-95</u> which gives a detailed critical overview of economic and social issues. This overview highlights:

- Plunder of India's Public Assets through Privatisation of Infrastructure;
- Unsustainable External Debt:
- Subservience of Fiscal and Monetary Policies to Foreign Capital;
- Lopsided Integration of People in Productive Activities;
- Progressive Deterioration of Social Infrastructure; and
- People's Struggles against Structural Adjustment Policies

Emerging from the above overview, The State of India's Economy covers articles on the following:

- WTO and India
- Power Sector
- Telecommunications
- The Oil Sector
- Financial Sector
- u Industrial Sickness
- Industrial Relations

- Food Security
- Scam, ATR and after
- Sugar Scam
- Primary Education
- Higher Education
- Public Health
- Social Summit

- Population
- Tribals
- Fisherfolk Struggle
- **Environment**
- Alternative Strategies
 - Plus box-items on various issues and struggles

Authors

Surendra J. Patel, Arun Ghosh, S.P. Shukla, Dalip Swamy, S.L. Shetty, Krishna A.Patel, Biswajit Dhar, Jaya Mehta, Imrana Qadeer, Rama Baru, D. Thankappan, Vivek Monteiro, Sukumar Muralidharan, Praful Bidwai, Kalpana Mehta, Vinod Raina, Prabir Purkayastha, Binod Khadria, Bhagwan Das, Thomas Kocherry, Devinder Sharma and Kavaljit Singh.

Price: Rs. 50 or \$5

IAdd Rs, 10 for packaging and postage & send M.O/Bank Draft in favour of Public Interest Research Group, Delhil

Special Offer

A few copies of the Alternative Economic Survey 1993-94 are still available with us. Get a copy at the discounted price of Rs 30 only [Post Free]. This offer is open till stocks last.

Address: Public Interest Research Group, 142, Maitri Apartments, Plot No. 28, Indraprastha Extension, Delhi-110092 (INDIA)

Phone-cum-Fax: 91-11-2224233, Phone: 2432054

SACIAL RESTAURANT

A GOOD BUSINESS COLLABORATION IS LIKE A HANDSHAKE. THERE IS NO UPPER HAND.



A few region of the Alformative Economic Sourcey 1993-94 are unitariable with me

atika istinakon araifutati kantanat kantan kant

Today's business en one of global interaction and cross-border affiliations. Companies with a common purpose and direction, quick to join forces. And yet, what defines a perfect business collaboration?

At Colour-Chem, we believe it is a relationship of equals. Just as the one we share with our global associates - Hoechst AG, Germany.

As a result of this relationship, Colour-Chem has access to world-class technologies, a reach into international markets and radically different management styles.

Styles that emphasise on quality of the highest order. That lay stress on being concerned on the customer's behalf, for his time and money. And that inculcate professionalism within the organisation.

riib kalawanna ni alemanaa Sankarena na anamadan Aberbahar

Today, Colour-Chem is a Company that is on the move. With an established presence in domestic and foreign markets, and new horizons to conquer.

We are confident that we will make it happen with our partner in progress-Hoechst AG. Because ours is a relationship of equals.

Colour-Chem

indgapusatha Extension, Celhiki 18092 (NOCA) 194, Churchgate Reclamation, Bombay 400 020.

Somming Military Research Group, 142, Nation Apartment