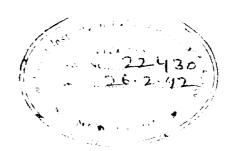
PUBLIC EXPENDITURE ON HUMAN DEVELOPMENT IN INDIA: TRENDS AND ISSUES

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Public Expenditure on Human Development in India -- Trends and Issues

India, the second most populous country in the world, has a level of human development which has been termed low [UNDP(1990) and UNDP(1991)]. In terms of the latest human development index. India ranks 123rd among 160 countries with a value of human development index (HDI) of only 0.308, with the highest value of HDI at 0.993 and the lowest at 0.048 in 1991. The state of human development is, thus, below what one would expect in a country which is considered the largest democracy. This is only one of the several peculiarities that the country has: as Mundle(1986) points out, impressive feats jostle for space with abject failures in various areas of human development in India. The third largest trained army of manpower coexists with the illiterate half of the population, noteworthy feats by Indian medical professionals do not prevent a still high rate of infant mortality and a life expectation at birth far below even several developing countries like Sri Lanka, and a large part of the population do not have access to adequate, safe and regular water supply while firms manufacturing soft drinks chalk up huge sales. It is natural to ask whether the government has only been a disinterested spectator in these areas, or has at least tried to improve matters for those who need assistance to realise their full potential. In this paper, we attempt to see the extent of governmental involvement in human development in terms of expenditure incurred on relevant heads.

Low levels of human development are both indicators of as well as a step in the vicious circle of poverty. It is thus not possible to look at human development without at least touching upon the problem of poverty, and any policy stance must consider both together and has to be a mixed strategy of directly attacking poverty with increased supply of public goods and indirectly achieving the desired goals through overall economic development [Bhagwati(1988) and Ahluwalia(1990)]. Public expenditure on human development in India attempts a three-pronged strategy: (a) Provision of basic human needs, (b) immediate steps to contain poverty, and (c) development of potential for income generation by target groups. The logical places to look for the government strategy on human development in a planned economy like India are the plan documents; these, however, are omnibus volumes containing laudable lists of objectives but little by way of either relative emphasis on them or clear strategies to achieve specific targets. In any case, human development as such does not find a place in our plan documents (except in the Minimum Needs Programme¹); its components, however, are included in the functional categories that the plan document addresses. Thus,

^{1.} This is a part of overall plan effort whereby an attempt is made to meet predetermined norms of certain basic human needs over a given time period.

the broad strategy mentioned above is based on 'revealed preferences' of the government rather than any declared $policy^2$. Each of the three 'prongs' subsumes simultaneous governmental action on several fronts. The main objective of this paper will be to assess the relative emphasis on different facets of human development and to identify any shift in the emphasis during the last decade -- for the nation as a whole and for selected individual States. The paper will also examine inter-State differentials. These will be examined on the basis of data on public expenditures. Finally, some issues relevant to public expenditure on human development will be briefly outlined.

I. Aggregate Trends

Table 1.1 shows the shares of several functional heads in the public expenditure of the Centre and States combined together and the share of public expenditures in the national income. Two of the ratios given in the table were among the three that the Human **Development Report 1991** focussed on: the public expenditure ratio (last row) and the social allocation ratio (the ratio of expenditure on social services to total public expenditure). It can be seen that the public expenditure ratio is not low even by international standards at around 40 per cent, and it is growing.³

The social allocation ratio has been, on the other hand, low by international standards at around 20 per cent. This ratio is growing too, though slowly. Between 1974-75 and 1980-81 it grew from 18.54 per cent to 19.79 per cent. By 1989-90, however, it had crossed the 20 per cent mark at 20.31 per cent. Within social services, education and allied functions accounted for a reasonably steady percentage of total expenditure of around 10 per cent, with small fluctuations. Medical, public health, sanitation and water supply also exhibit a similar feature, with a lower share of around 4.5 per cent. If family welfare is also included, it would show a small increase. The share of housing grew between 1974-75 and 1979-80 from 0.57 per cent to 0.80 per cent, but then fell (with fluctuations) to 0.54 per cent in 1989-90. Social security and welfare accounted for only 0.47 per cent in 1974-75⁴. By 1980-81 the percentage rose to 0.82 and in 1989-90 the figure stood at 1.15 per cent. Thus, starting from a low base

2. The last decade has, however, produced two official policy documents in this area -- National Policy on Education (1986) and National Health Policy (1983).

3. Such ratios, of course, have to be looked at in the context of the base figure -- national income in this case. With low base figures, even high ratios may not imply a large amount in absolute terms.

4. The non-plan expenditure on social security and welfare is not included in the expenditure on social services. A relatively higher amount is spent in the non-plan account. The relevant figures are separately given in Table 1.1 in conformity with the data source.

year figure, it has grown considerably to overtake housing as a priority concern for the government in general.

Another important human development expenditure is food subsidy. Although this is a combination of consumer subsidy and producer's subsidy and thus not a part of human capital formation, it certainly is a part of the human development effort as it can be called 'productive consumption'. Its share has, however, fallen from 2.08 in 1974-75 to 1.86 per cent in 1980-81 and to 1.78 per cent in 1989-90.

Expenditure on agricultural and allied services combined with those on irrigation and power exhibit a more or less constant share in total public expenditure between 1974-75 and 1989-90, although there are fluctuations from year to year. The contribution of these expenditure to human development are less direct and less immediate, but are more or less permanent and self-sustaining. It is interesting to note that the relative emphasis on social services (even if we consider only education, health and allied functions) is greater than on agriculture, irrigation and power. One can deduce that the decision-makers have tried to keep a balance between various aspects of human development while giving slightly higher weightage to direct action on the human development front.

Thus, as far as relative emphasis on different aspects of human development are concerned, social services in general (health and related areas and social security in particular) have assumed greater significance in India with the passage of time. Education and allied matters as well as housing continue to be assigned the same weightage as fifteen years ago. So do agriculture, irrigation and power. Food subsidy appears to be losing the relative weight attached to it earlier.

A major effort in human development in India is being made through the programmes to remove poverty. There are overlaps between expenditures on poverty eradication programmes and the functional heads discussed above, but the massive effort merits a separate mention. Since most of these expenditures are under plan account, it is more convenient to see expenditures on these programmes from the plan expenditure data than from the available budgetary data from which it is very difficult to find expenditures on anti-poverty programmes. We postpone a look at these figures to a subsequent section discussing disaggregated information.

To get an idea of how the public expenditures have kept pace with the income level of the country the public expenditure ratio is important. As we have seen above, the public expenditure ratio has been rising in India quite fast until 1986-87; since then, it has not risen. Coupled with our observations regarding the share of human development items in total expenditure, it implies a rising share of all human development items in the national income except food subsidies. Relative growth of these items as percentages of national income would follow the same pattern as seen from table 1.1. At the ground level, however, what matters is the actual availability of various services. In an analysis of expenditures, the closest approximation of this is the per capita expenditure on various services. Table 1.2 provides the data for the country as a whole. This also allows us to check whether growth in population has nullified the rise in public expenditure on various services or not. Evidently, it has not. Food subsidy, which grew the least among the items considered, rose by about 500 per cent between 1974-75 and 1989-90, from Rs. 5 to Rs. 30. In 1980-81 the figure was Rs. 10. Per capita expenditure on social services rose from Rs. 46 in 1974-75 to Rs. 98 in 1980-81 and to Rs. 343 in 1989-90.

Even these figures may not tell the complete truth as nominal amounts can be misleading during inflation. To look at expenditures in real terms, table 1.3 expresses the figures in the preceding table in constant(1981-82) prices using the wholesale price index⁵. The last column provides the annual compound growth rate of real per capita expenditure over the span of fifteen years. From these figures, it is clear that even in real terms, all the selected expenditure items have grown though, of course, growth rates vary. All the social service items show growth rates of greater than 5 per cent per annum in real per capita terms except housing (4.38 per cent). We have already observed that the share of most of the human development items in total public expenditure have increased; hence it is not surprising that they exhibit higher annual growth rates than total public expenditure. Only expenditure on housing and food subsidies grew less as compared to the total public expenditure.

Thus, the aggregate figures reveal that although the ratio of public expenditures to national income is not low and exhibits a rising trend, expenditures on human development items are low, even after a steady rise over the fifteen year period analysed, in terms of their share in the total expenditure and in real per capita terms. However, if the observed halt in the rise in public expenditure ratio is temporary and the present level does not constitute a structural or ideological ceiling, and if social services do not lose their weightage, expenditures on human development will not be low for long. Whether this would result in better achievements in the provision of the actual services or not is a different matter altogether. The concluding section of this paper may throw some light on this issue.

II. Disaggregated Trends

Given the large size of the nation, it is to be expected that there will be substantial variations in the trends in public expenditure between subnational units, i.e., the States. In fact, the Indian Constitution allocates most of the functions related to human development to the States and the role of the Central government is secondary in this sphere. Even when the

^{5.} The applicability of this price index is debatable in this context. We have used it only because of its ready availability. Figures in table 1.3 should therefore be accepted with due caution.

Central government incurs some expenditure in these areas, they are mainly routed through the State governments, so that, by and large, they show up in the State level public expenditure figures. All the figures in the previous section are net of intergovernmental transfers. To give an idea about the share of States (and Union Territories) in the selected expenditure items, Table 2.1 shows the expenditure incurred by the government as a whole (combined) and by the States and Union Territories for a few selected years. The table amply bears out the Constitutional division of responsibilities between the two levels of government.

Our main interest lies in inter-State variations in the trends in public expenditure on human development subjects. The data source here is different from the one used in the previous section, and has limited the analysis to some extent, just as the analysis in the previous section is limited by data availability. Table 2.2 is the counterpart of table 1.1 with two major differences. The data cover 10 years instead of 15 and are presented for two subperiods (1980-81 to 1984-85 and 1985-86 to 1989-90) for easy tractability. The subperiods also correspond to the horizon of the Sixth and the Seventh five year plan. It may be noticed that the expenditure items covered are less than in the previous section and even the seemingly common items are not exactly the same.⁶ The reported data, it is hoped, will provide sufficient information for broad conclusions.

As far as shares in total public expenditures are concerned, there is a substantial variation between States considering either of the subperiods. During 1980-85, Punjab and Haryana attached a weight of 25 per cent to social services which was the lowest among the States excepting Sikkim. The highest of around 41 per cent was in Kerala. Most of the States, however, showed a figure close to the average of 30 per cent. During 1985-90, the share of social services in total expenditure was the lowest in Uttar Pradesh (where it was low during 1980-85 also) at about 25 per cent and Haryana had a share only slightly higher. Punjab increased the share of social services to near the average during 1985-90. The highest share was again in Kerala, though it had fallen a little during 1985-90 from the 41 per cent for the earlier subperiod. A similar pattern is observed in the case of education and related services within social services; the similarity is probably due to the fact that this head accounts for the major share of expenditure on social services. Rajasthan clearly attaches a much greater weight to health and related expenditures than other States as the figures show. This is probably explained by the expenditure on water supply in the State -- a large part of which is desert area -- visited by droughts once in every few years, and a high cost of providing services due to the low density of population. The other States are not too far away on either side of the average for all States. In general, the share of expenditure on health and related services is about half that of education and related services at around 8 per cent. The average

^{6.} A comparable series of data with required details could of course be built up from the original source -- the budget documents. This is, however, an extremely difficult task, complicated by the change in budgetary classification in 1985-86.

share of housing in total expenditures is relatively insignificant at below one per cent but Gujarat and Orissa show greater expenditure on this head than other States.

Table 2.2 also gives the percentage of loans advanced for social services and housing in total expenditure. These are not very high and do not change the relative position of States even when added to the total outlay except for housing. The total share of housing still remains small. We have not considered revenue and capital expenditures (except loans) separately in this table. However, examination of the details reveal no interesting patterns except that:

(a) in general, capital expenditures are higher in all special category States except Assam than in other States relative to revenue expenditures in human development items,

(b) Bihar appears to have the highest capital-revenue expenditure ratio among non-special category States in these areas, and

(c) capital component in the total expenditure is sizeable only in housing, as may be expected.

Table 2.3 shows the public expenditure on selected items as percentages of the State domestic product (SDP) for the two subperiods as in table 2.2^7 . Data for only 14 States and their weighted average is reported as SDP figures for other States are not yet available. These data show that the average public expenditure ratio has gone up from 22 to 24 per cent. It may be remembered that the overall public expenditure ratio was around 40 per cent in recent years. The difference is explained by the Central expenditure mainly. Between States, this ratio does not vary much, but the highest ratio is observed in Rajasthan and the lowest in West Bengal during both the subperiods.

The ratio of public expenditure on social services to SDP shows considerable variation. Although the averages for the two subperiods are 7.23 and 8.49 per cent, Kerala is way above average with ratios of 10.14 and 11.50 per cent for the two subperiods. Other States exhibiting ratios above the averages for both subperiods are Andhra Pradesh, Orissa, Rajasthan, and Tamil Nadu. The lowest ratios are observed in Haryana, Maharashtra and Punjab. There is an apparent inverse relationship between SDP and the ratio of SDP spent by the government on social services. The probable cause would be perceived need for such expenditure, though the hypothesis needs further analysis. Within social services, the ratio of public expenditure on education and health and water supply to SDP follow more or less the same pattern observed for social services as a whole. Andhra Pradesh and Orissa exhibit ratios very close to the average in both these cases, while Rajasthan shows a very high ratio in the case of health, water supply and sanitation. We have already commented on the high expenditure on water supply in Rajasthan. As far as housing is concerned, priorities attached to it by States vary considerably, with Andhra Pradesh, Bihar, Haryana and Punjab attaching a

7. The second subperiod for this table is 1985-86 to 1888-89 due to the non-availability of data on SDP for the year 1989-90. The SDP data used are the estimates for the new series starting from 1980-81.

relatively low priority to it while it gets the highest weight among the States in Orissa, followed by Gujarat, Madhya Pradesh and Maharashtra. As noted earlier, loans advanced for social services are insignificant for social services as a whole, but not so for housing. On an average, loans amount to more than 50 per cent of the outright expenditure on housing. In Maharashtra, Madhya Pradesh, Orissa and Gujarat -- States where *expenditure* on housing is high compared to other States as a ratio of SDP -- loans for housing are insignificant.

Table 2.4 shows the levels of nominal per capita public expenditure on the selected heads. The first fact to be noticed is that despite the low ratios to SDP, Punjab, Haryana, Maharashtra and Gujarat show high levels of per capita public expenditure, because per capita SDP is high in these States. The highest levels are observed, however, in the case of States that were excluded in the previous table excepting Assam. These are all 'special category' States entitled to Central assistance at much lower future costs than other States, of which Assam did not enjoy this benefit until very recently. The relevance of this observation to public expenditure is obvious from the numbers for special category States as a group and it is clear that these figures are not comparable to those for the other States.

Ignoring the special category States, the highest levels of per capita expenditure on social services are observed in Kerala, Punjab Gujarat and Haryana. It is remarkable that despite a much lower SDP per capita, per capita expenditure on social services in Kerala is as high as in a State like Punjab and higher than in Gujarat. It shows the high priority that is attached to social services in the State. Low levels of per capita expenditure on social services are observed in Bihar and Uttar Pradesh; the pattern that emerges is that of a significant positive correlation between per capita SDP and per capita outlay on social services with Kerala, Rajasthan, Orissa, and Haryana being the exceptions in varying degrees.

As in the earlier tables, the figures for education and related services, and health and related services exhibit the same pattern observed for social services. As for housing and loans for social services and housing, the observations made while discussing the preceding table apply in this case also and need not be repeated.

Finally, we look at the real per capita expenditures by deflating the figures in Table 2.4 by SDP deflators. This is the only State-specific price index readily available. We avoid using an All India index because then any possible change in the patterns observed in Table 2.4 due to prices would be ruled out, and there would not be much meaning in such an exercise. The real per capita expenditures are reported in Table 2.5. Total real public expenditures per capita are high in Punjab, Haryana, Maharashtra and Gujarat as in the preceding table. None of the other observations need revision either, which implies that the variation in change in prices is not large enough to make a strong impact on the relative position of States.

III. Plan Expenditures on Poverty Removal Schemes

As mentioned earlier, poverty removal schemes have been an integral part of the planning effort in India. This is coupled with a minimum needs programme chalked out separately, but subsumed under various functional heads; it consists primarily of various human development items. The poverty removal schemes mainly attempt to improve the income generating capacity of the poor through provision of employment opportunities.

The important schemes under this category are: Integrated Rural Development Programme (IRDP) and the allied programmes of Training of Rural Youth for Self Employment (TRYSEM) and Development of Women and Children in Rural Areas (DWCRA); Jawahar Rozgar Yojana (JRY) incorporating National Rural Employment Programme (NREP)and Rural Labour Employment Guarantee Programme (RLEGP) in operation before April 1989; Drought Prone Area Programme (DPAP); and Desert Development Programme (DDP).⁸ IRDP and the allied schemes are expected to work through identified individual beneficiaries below poverty line; they are provided financial and other support for acquiring minor assets and requisite skill to ensure a permanent increase in income-earning capacity through self-employment. The objective of JRY is somewhat different: the resources under this scheme are to be utilised to build up community assets while providing wage employment (often food wages) to alleviate urgent needs of the poor. DPAP and DDP, as the names imply, are applicable to specific areas and are mainly concerned with water management.

Tables 3.1 and 3.2 provide the data on per capita plan expenditure on major poverty removal schemes and other functional heads related to human development for the two plan periods. It can be seen from the magnitudes that in the context of public expenditures these schemes are quite significant. Employment guarantee schemes other than JRY have been left out; public expenditures on these schemes are quantitatively significant only in Maharashtra.

Unfortunately, the present method of plan financing is somewhat biased in favour of States with higher resource potential, whereas the need for public expenditures are highest in the States with low per capita SDP. This is because the expenditures on these schemes are shared between the Centre and the States, and the higher the share of the State, the greater is the bias. Various means to allocate Central transfers in such a way as to allow the latter States to spend more than they would be able to on their own have been devised: some of these work well while some others do not. JRY resources are allocated between States on the basis of proportion of rural poor in the State to the total number of poor in the country and Centre-State sharing of costs is on a 80:20 basis. IRDP allocations are based on multiple criteria and the financing is on a 50:50 basis. Even taking into account the incidence of poverty (by itself) does not necessarily do justice to the poorer States, as it can be high even

^{8.} All the above schemes are for rural areas. The only important urban scheme, Nehru Rozgar Yojana, is of a relatively recent origin.

in relatively rich States (e.g., Maharashtra) if income distribution is highly skewed, but such States should either bear a larger share of the costs of these programmes themselves, or the allocations should be related to both incidence of poverty as well as the level of per capita SDP. The figures reported in the tables reflect the results of all these factors. Among the three States with lowest per capita SDPs, Orissa has been able to spend relatively higher amounts on anti-poverty programmes and social services on the plan account. The other two -- Uttar Pradesh and Bihar -- spent lower amounts on these two heads. Kerala's expenditures on social services do not exhibit the same high levels that were observed in the other tables; this implies that a large part of its expenditure on social services is in the non-plan account. Punjab, Haryana and Gujarat show fairly high levels of plan expenditure on anti-poverty programmes and on social services. Several other observations can be made on the basis of figures reported in these two tables, but we leave that to the reader.

IV. On Education and Health

In this section, we discuss two aspects of human development -- education and health -- in greater detail to highlight the issues that arise with government action in such areas involving substantial expenditure. These can be termed primary items of human development and interrelations between the two are widely accepted [Minhas(1991)].

IV.1 Education

The latest Census of India puts the literacy rate at 52 per cent for the country as a whole. This, coupled with the fact that in 1950-51 the country had a literacy rate of only about 19 per cent shows the spread of education, but it also shows the ground still to be covered. We have already seen that the public expenditure on education in real terms has been continuously growing: are the results commensurate with these expenditures? Further, could the government spending be rearranged to yield better results? It is difficult to answer either of these questions categorically, but some pertinent facts may suggest possible changes in government spending policy. Table 4.1 puts some of the relevant data together.

Public expenditure on education in India, in terms of both absolute level per capita (about \$10) and percentage of GDP (3.4 per cent), is lower compared to even some developing countries like Kenya (\$16: 5.5 per cent), Egypt (\$32: 4.2 per cent), Thailand (\$34: 4.2 per cent) and Malaysia (\$156: 8.5 per cent) [World Bank (1989)]. The comparison does indicate inadequate government spending which probably needs to be stepped up. But is the little that is spent, spent well? Various studies suggest several improvements. Some of them are summarised below.

Given the high illiteracy, it is argued, it is necessary to concentrate on primary education first, and provide subsidised higher education only residually. A Statewise picture does not show this to be taking place as States with lower literacy rates are not necessarily spending more on primary education. Rao and Mundle (1991) show that if total subsidies to various levels of education are calculated, in general the primary level receives the least. It will perhaps be better utilisation of scarce resources to recover costs to a substantial extent at the higher levels and cross-subsidise elementary education. The decision to allocate resources should be based on social rates of return from different levels of education. Even otherwise, unless a majority of children of schoolgoing age are actually able to go through school, the expenditure on higher education can never be equitable, as those would be for the privileged few who complete schooling. It may not even be necessary to subsidise all education, as the private expenditure on education appear to be substantial.

The enrollment ratio at the primary level is now almost 100 per cent but dropout rates are still high, mainly due to the fact that the meagre expenditure on primary education is thinly spread over a vast number of pupils, resulting in poorly equipped schools without minimum basic facilities and a low standard of education [Minhas(1991)]. Also, given that illiteracy and lack of education is concentrated among the poor, many children have to give up education to earn their livelihood through paid work or as family help. While poverty is a problem that has to be tackled within a wider perspective, the high dropout rate indicates a need to improve the quality of education.

Special attention must now be paid to adult education if the literacy rate has to be improved in the short run. Women must be targeted in particular, mainly because illiteracy is much higher among females; moreover, this has important effects in the spheres of health and family planning. This programme, unfortunately, has not been very successful so far. Attention must be paid to the causes of its failure and their removal.

It has been suggested that often there is leakage from even the small government expenditure on education. Ravishankar(1989) discusses the possible leakages in the cases of Maharashtra and West Bengal through grants to non-government secondary schools; the lesson from his analysis clearly is that privatisation of education with price controls and cost underwriting through grants is a system worse than the present one – privatisation, if thought necessary, with only quality regulation is probably the right approach. Bagchi and Rao (1987) illustrate a similar problem of waste due to divorcing of financial responsibility from other responsibilities in their case study of Kerala.

Lately, vocational studies have been emphasised at the secondary level in several policy statements including plan documents. This has, however, not been very successful so far. It is now necessary to rethink the policy on this, and consider other options like on-the-job training.

Central grants for education have been too insignificant to affect policies at the State level; its own role also has not been significant. After *National Policy on Education* (1986) was put forth, the Central role increased in this area, but the momentum could not be maintained and several goals of the above policy had to be scaled back or postponed. It may perhaps be useful to guide State policies on education to a greater extent through an increased Central

role, particularly when powerful lobbies seem to be operative at the State level which impede the spread of education, the only long-term weapon to break the hold of such lobbies.

IV.2 Health

UNDP(1991) uses two indicators of health for judging the standard of health services: infant mortality rate and the life expectancy at birth⁹. It shows life expectancy at birth in India to be only 59 years compared to an average of 63 years for developing countries, and 65.5 years for the world. Infant mortality rate (under five) in India is 145 per thousand while it is 116 for developing countries on an average, 18 for industrial countries and 104 for the world. While these indicators are improving fast in India (the latest estimate of infant mortality rate puts it at 91), the figures show that India has a long way to go before it reaches average levels for the world, let alone the levels of developed countries. Some disaggregated data on health services and indicators are provided in table 4.2.

Government spending on health as a proportion of GNP and in absolute per capita terms is not too low in India compared to some other Asian countries, and private expenditure on health in India is higher than government expenditure; together, they add up to more than 4 per cent of the GNP [Griffin(1990)]. There are several countries with health indicators better than India with less resources devoted to it. This points towards some obviously necessary expenditure reallocations.

First, given the relatively high levels of private spending, the government should concentrate on public health, leaving expensive hospital services to the private sector as far as possible. In the existing government hospitals, Griffin shows, the cost per bed is very high and this needs to be brought down. The subsidy on hospital services should be better targeted.

The allocation of resources between medical personnel, medical equipments, and medical supplies are likely to have an optimum given their costs; government hospitals (non-government ones would do so in their own interest) should take steps to approach this optimum. Several experiments on this are being tried out by various voluntary agencies; their experience may provide valuable inputs. One issue that is relevant here is that of the availability of medical attendance at birth. It has been suggested that a relatively greater emphasis on paramedics and other medical personnel with limited training instead of the present emphasis on fully trained doctors can reduce infant mortality to a considerable extent through trained medical attendance at birth at a lower cost to the government. This would also reduce the mortality rate before and during childbirth. As a matter of fact, infant mortality does seem to be correlated (see table 4.2) inversely with trained medical attendance at birth.

^{9.} There may be an element of double counting here. The high correlation between infant mortality rate and life expectancy at birth are well known. It would probably be better to use a measure of life expectancy which excludes the infant mortality.

There have been criticisms based on the higher share of urban areas in total expenditure relative to their share in population, but these critiques ignore the fact that this is probably because costly referral hospitals are located in urban areas; a large part of their expenditures could be on patients from rural areas. However, the basic point that rural areas should not be neglected to appease vocal urban residents remains valid.

Also, the fact that supply of poor quality drinking water and lack of proper sanitation facilities still cause epidemics even in Delhi underlines the importance of concerted action on all relevant fronts instead of the isolated approach usually adopted (further accentuated by the fact that the authorities responsible for these may be different). Given the high infant mortality rates, it is also necessary to improve female/infant nutrition and emphasise a widespread primary health network to avoid deaths at birthtime or soon thereafter. Infant mortality rates must be brought down for the success of family planning also; the tendency of having more children as insurance against the death of some can be curbed by reducing the perceived risk of having fewer children. In this connection, the Integrated Child Development Scheme (ICDS) deserves mention. This scheme aims at better nutrition, health, education and other aspects of child development in one package.

Central expenditure on health sector is small, though not insignificant, compared to the public expenditure at the State level, but most of it is devoted to medical education. Since inter-State disparities in health indicators are marked, the Central government would probably do better to supplement the State government expenditure on health services in the States with inadequate services.

Finally, development of an effective medical insurance system may relieve the government of a large part of its expenditure on hospitals. In this endeavour, however, it is necessary to design a system which would avoid the spiralling costs of health services, observed and attributed to the prevailing medical insurance system in some developed countries.

V. Related Issues

One of the most important questions in the present context is: how well do the public expenditures translate into actual provision of services? This is obviously not automatic; there are efficiency issues -- both allocative and technical -- involved. It is beyond the scope of the present paper to go into a detailed discussion of this issue, but we provide a highly suggestive bit of empirical evidence. Considering the Human Development Index computed by Shiva Kumar (1990) following the UNDP method for Indian States, its simple correlation with per capita real public expenditure on social services works out to 0.84 (for a sample of 15 non-special category States). From this, it appears that public expenditures do matter to a considerable extent. Tulasidhar and Sarma (1991) reach a similar conclusion regarding expenditures on health. Pending a detailed analysis of the impact of public expenditure on the availability of social services, we may adopt a working hypothesis that public expenditures do translate into provision of these services to a substantial extent. The major issues then are: (a) are these adequate given the needs? and (b) how far is it possible to raise them toward the desired levels?

Adequacy or otherwise of public expenditure on various human development items can be judged in two ways. One would be to compare the levels obtaining in India to those obtaining elsewhere. *Human Development Report 1991* tabulates public expenditures on selected social services in various countries as percentages of their GNP. While these ratios are not too low in India considering the figures for some other countries, many of them are far higher than in India; consideration of achievements in human development (in areas like education and health) brings the inadequacy of the present level of public expenditures into sharp focus. Within India, there are wide differences between States, and we have already seen how low per capita real expenditures are in States like Bihar and Uttar Pradesh on social services. Thus, while public expenditures on human development appear to be inadequate for the country as a whole, the inadequacy is far more pronounced in some States than in others.

The other way of looking into adequacy of public expenditures on human development is to compare the actuals with normative estimates of the same. The norms may be given exogenously (e.g., minimum calorie requirements per person in different age groups to estimate public expenditure requirement on nutrition) or may be estimated endogenously (e.g., some sort of an average adjusted for relevant factors). Subbarao(1991) is an example of the former, while the normative estimates of public expenditure on various heads in the Final Report of the Ninth Finance Commission (1989) are examples of the latter. Looked at in any fashion, it is difficult to deny that public expenditures on human development in India are small compared to the need and that there is a considerable variation among States in the need for further public expenditure on human development.

The next issue then is: is it possible to raise them and to what extent, particularly in the States where the present levels are lower compared to other States? But before we discuss this question, we must make a few observations on the possibility that provision of social services can be improved without raising public expenditures substantially.

To improve social services without raising public expenditures, two strategies are possible: (i) restructuring public expenditures and (ii) appropriate policy adjustments. Considering the first, the oft repeated plea to reduce defence expenditure and redirect it to human development is not very relevant in India for two reasons; first, the ratio of defence expenditure to total public expenditure in India is not very high, and second, in the federal setup of India, human development is primarily the responsibility of the States while defence is a Central subject; reduction in defence expenditures will result in increased outlay on human development only if several other conditions are met. Any restructuring of public expenditures, it appears to us, would have to be confined to the States themselves, the feasibility of which seems to be dim in the short run. The States have to keep a balance between immediate poverty removal, human development and long-term economic growth. The resources available, however, are not large, particularly after meeting contractual obligations of debt servicing and wage payments to government employees in administrative departments. However, within social services themselves, some restructuring should be possible, and is probably desirable. The States must decide on their priorities in human development in a rational manner and tailor public expenditures to suit these. For example, public expenditure on primary education should get the highest priority and higher general education the lowest. Another would be a shift in emphasis from curative to preventive in health care.¹⁰ Even such limited restructuring can pay dividends.

The second primarily relates to enlisting the help of the private sector. While the government cannot abdicate the responsibility of ensuring the supply of public goods of reasonable quality, it is not always necessary for it to produce and supply these itself. Since private expenditures on many of the social services are substantial, particularly in urban areas, it may be possible for the government to restrict its role to supervision and regulation of private supply of public goods in many areas of human development, allowing the resources thus freed to be channelised into areas requiring government production and supply. In fact, some States in India have already started moving in this direction. This particular issue has implications for user charges also; we shall discuss them in the context of resource mobilisation for increased public expenditure.

Increased public expenditure on human development, given other elements of the same, are possible under one or more of the following circumstances:

- (a) the States resort to higher budget deficits;
- (b) the States increase their revenue receipts; and,
- (c) the Central transfers to States increase.

The first is neither desirable nor possible, and can be rejected out of hand. Let us examine the other two possibilities in some more detail.¹¹

The States' own revenue receipts can broadly be divided into two parts -- tax revenue and non-tax revenue. Tax revenue of State governments have grown at a more or less similar rate in all States and the rate of growth would probably be considered reasonable at around 14 per cent per annum during the last decade. In terms of buoyancy with respect to SDP,

^{10.} The difficulty with such restructuring, however, is that there is practically no research on the optimal allocation of public expenditure among different components of a broad category of social service taking into account costs of provision and other relevant factors including the relative weights that the society attaches to each component.

^{11.} The discussion below relies heavily on Bagchi and Sen (1991).

there are variations, but considering individual States either the difference is insignificant or the low buoyancy only signifies an already high level of per capita tax revenue and/or little possibility of any substantial additional resource mobilisation. Thus, while there may be possibilities of marginal increases in tax revenue (agricultural income is believed to be undertaxed by many economists), the magnitude of additional resources mobilised cannot reasonably be expected to be high. The other possibility of raising non-tax revenue receipts appears to be the more promising line of action. These are primarily commercial income and user charges received by the State governments. State government enterprises have typically proved to be a drain to public funds instead of adding to them and getting rid of loss-making enterprises of commercial nature should substantially improve the budgetary position of the States. Rationalisation of pricing and proper management should minimise the burden of other public enterprises. Some States are lucky to be endowed with substantial forest and mineral resources. While forest resources are being exploited fully (some may even say excessively), States cannot do much to raise resources from the mining activities as they only get royalties fixed by the Central government which also has the right of extraction; the attempt by some States to raise substantial resources from minerals through cesses on minerals has been circumscribed by recent court judgements. However, cost recovery in the supply of several public goods holds out promise. The overt and covert subsidies implicit in the pricing of social and economic services are enormous and appear to be irrational.¹² A rationalisation of these and feasible targetting should generate substantial resources. The fact that some public goods supplied by the private sector can get away with far higher prices than those charged by the public sector indicates consumers surpluses which can be mopped up by the government by judicious use of product differentiation and pricing policy.

As for Central transfers, these take place through three channels: Finance Commission awards, plan transfers, and discretionary transfers. The first is decided upon by the Finance Commissions appointed every five years for this purpose. As mentioned earlier, the last Finance Commission did attempt normative assessment of public expenditures, but in the final analysis this was considerably diluted because of the overwhelming importance of tax devolutions, various adjustments made in the normative estimates and ad hoc grants; the normative estimates also aim at reducing disparities between States rather than estimate need for public expenditure in an absolute sense. In any case, the total volume of these transfers are limited by (a) the revenue from taxes that are constitutionally divisible and (b) the perceived ability of the Central government to shoulder the burden of grants. The formulae evolved for distribution of the divisible pool also have to take into account factors other than 'need' in the interest of efficiency. Thus the possibility of a drastic increase in Central transfers through this mechanism is not very bright. The distribution of plan transfers are determined by the Gadgil formula which is not directly connected to need for public expenditure, especially on human development. Moreover, these often have matching requirements difficult for the relatively backward States to meet. The fact that plan transfers have a fixed loan component

^{12.} See Rao and Mundle (1991) for estimates of subsidies in the supply of public goods.

also is a deterrent for many States now, as the interest burdens are already high. The only real possibility of States getting additional funds through plan transfers for human development appears to be through a substantial increase in the weight attached to human development by the decision-makers in the planning process. The other channel of discretionary transfers depends to a large extent on the available resources at the Central level; given the unprecedented deficits obtaining at the Central level, it is not likely that transfers on this account would rise much. Thus, the States cannot reasonably expect much increase in Central transfers in the short run. This is extremely distressing, because the States which rank lowest in terms of human development are the ones which do not have much of revenue potential and it is difficult for them to raise public expenditure on human development without assistance. It is thus more important now than ever that Central transfers are designed to aid the States which need it most.

In sum, therefore, it appears that the only real possibility of increase in public expenditure on human development is through a restructuring of public expenditures and rationalisation of user charges. As discussed above, these should be combined with appropriate policy changes which will result in better availability of social goods without imposing a burden on the State exchequer. Kerala's success in reaching 100 per cent literacy, after all, is not entirely due to public expenditure on education.

Table 1.1
Selected Expenditure Items as Percentages to Total Expenditure
(Revenue and Capital Expenditure of Centre, States and Union Territories)

Item	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-9 (R.E.
ood Subsidy	2.08	1.45	2.56	2.15	2. 23	2.06	••••••• 1.86	1.75	•••••• 1.49		1.66	2.19	2.22	1.97	1.90	1.7
. Centre	1.99	1.38	2.49	2.15	2.20	2.06	1.84	1.73	1.48	1.50	1.65	2.16	2.18	1.97	1.89	1.7
b. States	0.08	0.07	0.08	0.00	0.03	0.00	0.02	0.02	0.01	0.03	0.02	0.03	0.03	0.01	0.01	0.0
Gocial Security & Welfare (Non-Plan)	1.33	1.19	1.14	1.15	1.12	1.31	1.38	1.53	1.61	1.64	1.41	1.73	1.48	1.43	1.33	1.34
ocial & Community Services	18.54	17.98	18.37	18.73	18.61	18.72	18.79	19.37	19.48	19.65	19.37	19.45	19.56	20.38	20.35	20.31
. Education, Art & Culture	10.76	10.21	10.03	10.35	10.09	9.95	9.89	10.02	10.22	10.03	9.82	10.13	9.76	10.69	10.82	11.20
2. Scientific Services & Research	0.93	0.94	0.93	0.91	0.85	0.82	0.74	0.85	0.91	0.88	1.05	1.08	1.01	0.92	0.99	0.9
. Public Health, Sanitation & Water Supply	4.18	3.90	4.03	4.25	4.27	4.53	4.57	4.76	4.67	4.85	4.54	4.54	4.44	4.66	4.54	4.14
. Family Welfare	0.46	0.49	0.85	0.43	0.43	0.42	0.41	0.47	0.61	0.70	0.64	0.70	0.62	0.63	0.61	0.6
. Nousing	0.57	0.56	0.72	0.71	0.79	0.80	0.61	0.71	0.67	0.68	0.58	0.55	0.67	0.59	0.55	0.54
. Urban Development	0.26	0.32	0.34	0.39	0.35	0.37	0.38	0.35	0.43	0.38	0.65	0.38	0.53	0.50	0.47	0.40
. Broadcasting	0.20	0.23	0.30	0.25	0.23	0.22	0.21	0.24	0.20	0.27	0.26	0.31	0.44	0.45	0.42	0.4
. Labour & Employment	0.46	0.44	0.46	0.47	0.62	0.69	0.79	0.74	0.59	0.51	0.58	0.55	0.55	0.54	0.50	0.49
. Relief on a/c Natural Calamities (Plan)	0.02	0.16	0.00	0.08	0.11	0.09	0.12	0.07	0.01	0.02	0.00	0.01	0.18	0.01	0.00	0.0
0. Social Security & Welfare	0.47	0.49	0.48	0.65	0.68	0.61	0.82	0.87	0.90	1.05	1.02	0.91	1.09	1.12	1.14	1.1
1. Others	0.22	0.23	0.25	0.23	0.19	0.23	0.24	0.29	0.27	0.26	0.23	0.28	0.28	0.26	0.30	0.27
griculture, Irrigation and Power	13.50	12.86	11.79	11.46	13.35	14.56	14.38	13.91	13.56	13.47	14.00	13.99	12.62	13.87	13.66	13.42
otal Expenditure	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
As percentage of national income)	(24.17)	(28.07)	(29.33)	(28.04)	(30.39)	(31.59)	(32.02)	(31.57)	(33.97)	(33.59)	(36.20)	(37.01)	(40.04)	(39.45)	(37.46)	(40.36

Basic Source: Indian Economic Statistics (Public Finance)

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Table 1.2 Per Capita Expenditure (in current prices) on Selected Items (Revenue and Capital Expenditure of Centre, States and Union Territories)

Item	1974-75	1975-76	1976-77	1977-78	197 8-7 9	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	19 8 5-86	1986-87	1987-88	1988-89	1 989 -90
																(R.E.)
Food Subsidy	5.17				8.91	9.05	9.69	10.21	10.06	11.72	14.96					
a. Centre	4.97	4.12	8.15	7.56	8.78	9.04	9.57	10.09	10.00	11.50	14.82	21.74	25.77	25.19	27.09	29.83
b. States	0.20	0.20	0.25	0.01	0.13	0.01	0.11	0.12	0.06	0.22	0.14	0.29	0.40	0.07	0.13	0.27
Social Security & Welfare (Non-Plan)	3.32	3.55	3.72	4.05	4.48	5.74	7.21	8.92	10.92	12.59	12.71	17.41	17.51	18.28	18.98	22.56
Social & Community Services	46.17	53.65	60.23	65 .88	74.28	82.23	97.91	113.18	131.75	150.73	174.21	195.81	230.88	261.16	291.10	342.68
1. Education, Art & Culture	26.78	30.46	32.87	36.42	40.27	43.70	51.52	58.56	69.11	76.98	88.34	101.99	115.19	137.00	154.82	189.93
2. Scientific Services & Research	2.31	2.80	3.05	3.19	3.41	3.59	3.86	4.99	6.12	6.78	9.45	10.87	11.88	11.85	14.14	15.37
3. Public Health, Sanitation & Water Supply	10.42	11.64	13.20	14.96	17.03	19.89	23.82	27.79	31.61	37.22	40.80	45.72	52.42	59.75	64.96	69.81
4. Family Welfare	1.16	1.47	2.78	1.53	1.70	1.83	2.16	2.77	4.15	5.40	5.78	7.07	7.35	8.09	8.78	10.45
5. Housing	1.42	1.67	2.35	2.49	3.17	3.50	3.18	4.15	4.55	5.20	5.23	5.58	7.85	7.53	7.81	9.13
6. Urban Development	0.65	0.95	1.10	1.38	1.41	1.64	1.99	2.03	2.90	2.92	5.85	3.79	6.27	6.36	6.73	7.78
7. Broadcasting	0.50	0.69	1.00	0.88	0.93	0.97	1.10	1.39	1.34	2.09	2.30	3.16	5.19	5.82	6.01	7.93
8. Labour & Employment	1.14	1.30	1.49	1.66	2.46	3.01	4.12	4.31	4.00	3.90	5.23	5.55	6.43	6.94	7.19	8.31
9. Relief on a/c Natural Calamities (Plan)	0.06	0.48	0.00	0.27	0.46	0.39	0.62	0.38	0.09	0.17	0.04	0.13	2.13	0.12	0.05	0.00
10. Social Security & Welfare	1.18	1.47	1.57	2.29	2.70	2.69	4.29	5.10	6.07	8.07	9.18	9.15	12.83	14.37	16.31	19.43
11. Others	0.55	0.70	0.81	0.81	0.74	1.01	1.25	1.71	1.83	2.00	2.03	2.79	3.33	3.33	4.30	4.54
Agriculture, Irrigation and Power	33.62	38.39	38.66	40.30	53.27	63.94	74.92	81.29	91.72	103.35	125.92	140.83	148.95	177.70	195.31	226.47
Total Expenditure	248.98	298.43	327.80	351.82	399.15	439.24	521.05	584.24	676.27	767.13	899.38	1006.79	1180.17	1281.54	1430.28	1687.13

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Basic Source: Indian Economic Statistics (Public Finance).

(Rs.)

Table 1.3 Per Capita Expenditure (in 1981-82 prices) on Selected Items (Revenue and Capital Expenditure of Centre, States and Union Territories)

(**R**s.)

											(RS.)						
iten			1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90 (R.E.)	Growth(% 1975-90
Food Subsidy	8.31	7.02	13.37	11.46	13.49	11.69	10.59	10.21	9.59	10.39	12.46				17.65		5.08
a. Contre	7.99	6.70	12.98	11.44	13.30	11.68	10.47	10.09	9.53	10.20	12.34	17.34	19.42	17.55	17.57	18.0 0	5.25
b. States	0.32	0.32	0.39	0.01	0.19	0.01	0.12	0.12	0.05	0.20	0.11	0.23	0.30	0.05	0.08	0.16	-1.47
Social Security & Welf (Non-Plan)	5.34	5.76	5.93	6.14	6.79	7.43	7.88	8.92	10.41	11.16	10.59	13.88	13.20	12.74	12.31	13.61	7.18
Social & Community Services	74.26	87.23	95.94	99.74	112.46	106.30	107.04	113.18	125.60	133.63	145.06	156.15	173.99	181.99	188.78	206.80	6.38
1. Education, Art & Culture	43.07	49.53	52.36	55.14	60.97	56.49	56.32	58.56	65.88	68.24	73.55	81.33	86.81	95.47	100.40	114.62	5.84
2. Scientific Services & Research	3.72	4.56	4.86	4.83	5.16	4.64	4.23	4.99	5.84	6.01	7.87	8.67	8.95	8.26	9.17	9.27	6.32
5. Pub Hith, Santtn & Water Supply	16.76	18.93	21.03	22.66	25.79	25.72	26.05	27.79	30.13	33.00	33.97	36.46	39.50	41.64	42.12	42.13	6.27
4. Family Welfare	1.86	2.39	4.43	2.31	2.58	2.37	2.36	2.77	3.95	4.79	4.81	5.64	5.54	5.64	5.69	6.31	7.88
5. Nousing	2.28	2.72	3.75	3.78	4.80	4.52	3.48	4.15	4.34	4.61	4.35	4.45	5.92	5.25	5.07	5.51	4.38
5. Urban Development	1.04	1.55	1.76	2.09	2.14	2.13	2.17	2.03	2.76	2.59	4.87	3.02	4.72	4.44	4.37	4.69	9.39
7. Broadcasting	0.81	1.12	1.59	1.34	1.41	1.25	1.20	1.39	1.27	1.86	1.92	2.52	3.91	4.06	3.90	4.79	10.88
8. Labour & Employment	1.83	2.12	2.38	2.51	3.72	3.90	4.50	4.31	3.81	3.46	4.35	4.43	4.85	4.83	4.66	5.01	6.06
9. Social Security & Welfare	1.90	2.39	2.50	3.47	4.08	3.48	4.69	5.10	5.78	7.15	7.64	7.30	9.67	10.01	10.58	11.73	12.57
10. Others	0.89	1.13	1.29	1.22	1.13	1.31	1.36	1.71	1.74	1.77	1.69	2.23	2.51	2.32	2.79	2.74	7.38
Agriculture, Irrigation and Power	54.07	62.42	61.58	61.02	80.65	82.65	81.91	81.29	87.44	91.62	104.85	112.31	112.24	123.84	126.66	136.67	6.09
Total Expenditure	400.45	485.24	522.15	532.66	604.32	567.83	569.65	584.24	644.68	680.08	748.86	802.86	889.35	893.06	927.55	1018.18	5.58

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Basic Source: Indian Economic Statistics (Public Finance).

Table 2.1Public Expenditures on Human Development(States & UTs and Total Government)

							(R	s. Crore)
· · · · · · · · · · · · · · · · · · ·	1974-75	1974-75	1980-81	1980-81	1985-86	1985-86	89-90(RE)	89-90 (R
	Total	States	Total	States	Total	States	Total	States
Food Subsidy Social Security & Welf (NP)	306.9 197.3	11.9 156.0	657.7 489.5	7.7 435.1	1671.9 1321.4	21.9 1100.6	2498.4 1872.4	22. 1632.
Social Services	2742.6	2320.9	6647.8	5723.4	14862.0	11919.2	28442.0	23779.
Education	1590.8	1428.0	3498.1	3176.2	7741.3	6465.1	15763.8	14131.
Health, Sanitation & Water	618.8	578.1	1617.7	1513.9	3469.9	3219.3	5794.1	5257.
Family Welfare	68.6	62.0	146.4	133.8	536.5	500.5	867.4	798.
Housing	84.4	62.6	216.0	134.5	423.7	274.8	757.7	549.
Urban Development	38.4	37.3	134.8	133.4	287.7	269.0	645.4	619.
Labour & Employment	67.6	45.2	279.7	215.3	421.4	245.2	689.6	407.
Relief-Natural Calamity(P)	3.5	3.5	41.8	41.8	10.0	10.0	0.2	0.
Social Security & Welf (P)	70.2	63.6	291.4	271.7	694.7	659.8	1612.8	1519.
Agriculture, Irrgn & Power	1996.9	1427.9	5087.2	4418.0	10689.1	9396.3	18796.8	12590.
Total Expenditure	14790	7271	35379	19389	76415	39712	140032	6996

Source: Indian Economic Statistics (Public Finance).

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	Servic	es	and		Water	and			Servic	es	Housing	9	Governm	ent
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1			80-85 8			85-90	80-85 8	5-90	80-85 8	5-90	80-85 8	5-90	80-85 8	5-90
Andhra Pradesh	36.4		 2 15.9	15.9		7.5	0.2	0.2	0.7	1.3	0.4	0.2	2 0.1	0.1
Assam	30.0	31.7		17.4		7.7		0.7	0.7	0.6		0.0		0.3
Bihar	30.4	30.		16.8		6.8	0.1	0.2	0.7	0.5		0.2		0.1
Gujarat	30.4	31.7	7 14.1	15.9	6.9	7.3	1.3	1.1	1.3	1.4	0.4	0.2		0.1
Haryana	24.4	27.0	11.6	13.2	7.4	6.5	0.3	0.3	0.6	0.7	0.2	0.4	0.2	0.1
Karnataka	25.4	32.4	13.5	16.1	5.9	7.4	0.5	0.6	1.2	0.8	0.2	0.2	2 0.4	0.2
Kerala	40.8	38.4	4 24.1	22.2	9.8	8.6	0.5	0.4	0.7	1.4	0.2	0.1	0.2	0.3
Maharashtra	26.8	28.8	8 13.7	15.3	7.6	7.6	1.0	1.2	1.7	1.4	0.2	0.4	0.0	0.0
Madhya Pradesh	27.7	31.6	5 12.5	14.1	8.2	8.7	0.7	0.7	0.7	0.7	0.2	0.1	0.1	0.1
Orissa	33.5	32.9	9 13.8	16.2	8.2	7.8	1.2	1.1	0.4	0.3	0.1	0.0	0.1	0.1
Punjab	24.5	29.7	7 14.1	14.6	5.8	6.5	0.4	0.5	1.3	0.5	0.4	0.2	2 0.2	0.0
Rajasthan	32.1	32.2	2 14.8	15.7	12.2	12.1	0.5	0.3	0.9	0.4	0.1	0.0	0.3	0.2
Tamil Nadu	30.3	35.3	5 14.6	17.4	8.4	8.1	0.7	0.6	2.2	2.0	0.3	0.2	2 0.3	0.5
Uttar Pradesh	26.5	25.4	4 13.5	14.2	7.0	6.6	0.4	0.4	1.0	0.8	0.3	0.2	2 0.1	0.1
West Bengal	37.8	36.0	0 17.8	19.7	8.9	8.1	0.4	0.7	1.6	1.1	0.1	0.0	0.1	0.3
Himachal Prades	h 33.8	34.2	2 15.1	15.7	13.2	11.2	0.7	0.8	0.7	0.5	0.2	0.1	0.4	0.3
Jammu & Kashmir	27.3	28.	5 10.7	10.8	12.5	11.3	1.0	1.1	0.6	0.2	0.1	0.0	0.1	0.1
Manipur	34.0	31.8	8 10.9	13.5	17.2	12.4	2.5	2.3	0.5	0.8	0.2	0.4	0.3	0.4
Meghalaya	31.4	33.7	7 16.1	17.8	9.0	9.4	1.8	1.5	0.5	0.3	0.2	0.2	2 0.8	0.1
Nagaland	28.1	29.3	5 9.9	10.5	11.2	11.0	3.0	3.1	0.2	0.6	0.1	0.5	0.2	0.1
Sikkim	23.8	29.7	7 11.2	13.5	6.0	9.3	1.7	2.0	0.2	0.2	0.0	0.0	0.2	0.2
Tripura	32.4	37.9	9 15.6	18.3	6.4	7.5	1.2	1.2	0.3	0.2	0.1	0.1	0.3	0.1
All States	30.1		5 14.8				0.7	0.7	1.1	1.0		0.2		0.2
	*******	2922:	*******	****		******	*******		38832233		*******	****	*******	*****

Table 2.2Share of Selected Items in Total Expenditures(Revenue and Capital): 1980-85 and 1985-90

(per cent)

The above figures are derived by taking ratios of totals for the sub-periods.

a. Included in Social Services.

Basic data source: Reserve Bank of India Bulletin, various issues.

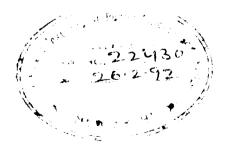


Table 2.3
Expenditure (Revenue and Capital) on Selected Items
As Percentages of State Domestic Product: 1980-85 and 1985-90

				Outla	ay (Rev	/enue ·	+ Capi	tal) o	n				Loans	For		
	Total						Medic	al,							Housi	ng
	Expen	diture			Educat	tion	Healt	•	Housi	ng a		cial	Gener		for	
			Serv	ices	and		Water		-		Sei	rvices	Housi	ng a	Gover	
	80-85	85-80	80-85	85-80	Allie 80-85			ation a	-	85-80	80-85	85.80	80-85	85-80	Serval	
Andhra Pradesh	22.39	26.69	8.15	9.16	3.56	4.09	1.73	2.04	0.03	0.05	0.16	0.33	0.09	0.06	0.02	0.03
Bihar	24.23	22.97	7.36	7.02	4.10	3.80	1.55	1.62	0.03	0.05	0.18	0.11	0.06	0.03	0.04	0.03
Gujarat	20.56	24.93	6.25	7.95	2.90	3.87	1.42	1.91	0.28	0.27	0.26	0.38	0.07	0.06	0.04	0.02
Haryana	21.91	24.35	5.35	6.36	2.55	3.15	1.62	1.58	0.07	80.0	0.13	0.15	0.04	0.08	0.04	0.02
Karnataka	23.05	25.33	5.86	8.13	3.11	3.92	1.36	1.89	0.12	0.16	0.28	0.23	0.06	0.06	0.10	0.07
Kerala	24.84	29.54	10.14	11.50	5.98	6.65	2.44	2.47	0.14	0.12	0.18	0.41	0.05	0.02	0.06	0.09
Maharashtra	19.61	21.95	5.25	6.41	2.68	3.34	1.48	1.72	0.19	0.27	0.33	0.33	0.04	0.10	0.01	0.01
Madhya Pradesh	25.30	27.17	7.00	8.65	3.15	3.79	2.07	2.49	0.18	0.21	0.17	0.19	0.05	0.03	0.03	0.03
Orissa	25.34	27.93	8.49	9.01	3.49	4.38	2.08	2.19	0.29	0.29	0.09	0.09	0.03	0.01	0.03	0.03
Punjab	20.49	22.44	5.02	6.66	2.89	3.16	1.20	1.44	0.07	0.09	0.27	0.11	0.08	0.05	0.04	0.00
Rajasthan	26.01	30.93	8.36	9.86	3.84	4.63	3.18	3.78	0.12	0.11	0.22	0.13	0.04	0.01	0.08	0.05
Tamil Nadu	24.88	23.28	7.55	8.25	3.63	3.98	2.09	1.89	0.16	0.15	0.55	0.50	0.08	0.05	0.09	0.12
Uttar Pradesh	21.08	22.51	5.59	6.11	2.85	3.33	1.47	1.62	0.09	0.10	0.20	0.19	0.06	0.05	0.02	0.02
West Bengal	18.22	19.79	6.88	7.06	3.24	3.78	1.62	1.62	0.07	0.15	0.29	0.00	0.02	0.00	0.03	0.05
Average	22.05	24.11	7.23	8.49	3.55	4.22	1.91	2.19	0.16	0.19	0.27	0.27	0.06	0.06	0.04	0.04

The above figures are derived by taking ratios of totals for the sub-periods. a. Included in Social Services.

Basic data source: Reserve Bank of India Bulletin, various issues and Central Statistical Organisation.

Table 2.4Average Annual Per Capita Expenditures(Revenue and Capital) on Selected Items: 1980-85 and 1985-90

1222238 888 32232							venue +						Loans			
	Tot	tal									•					
State	Ехр	endi-					Medic	al,							Housin	g
	tu	°e	Social	L	Educat	tion	Health	,	Hous	ing	Soc	ial	Genera	ι	for	
			Servi	ces	and	d	Water	and	9		Serv	ices	Housin	g a	Governm	ent
					Allie	6 6	Sanita	tion a							Servant	s â
	80-85	85-90	80-85	85-90	80-85	85-90	80-85	85-90	80-85	85-90	80-85	85-90	80-85	85-90	80-85 8	5-9
ndhra Pradesh	400	741	146	254	64		 31			· · · · · · · · · · · · · · · · · · ·	3	 9	 8	 9	 2	
ssam	401	735	120	233	66	128	28	56	4	5	3	4	2	1	- 6	1
lihar	281	470	85	141	47	79	18	32	0	1	2	2	4	4	2	•
iujarat	542	951	165	301	76	151	37	69	7	11	7	13	10	12	5	
laryana	640	1107	156	2 99	74	146	47	72	2	3	4	8	6	24	6	
arnataka	470	812	120	263	63	131	28	60	2	5	6	7	6	9	10	1
lerala	446	816	182	314	107	181	44	70	2	3	3	11	5	3	5	1
laharashtra	572	993	153	286	78	152	43	75	6	12	10	14	7	22	1	
ladhya Pradesh	372	643	103	203	46	90	30	56	3	5	2	5	3	4	2	
)rissa	380	679	127	223	52	110	31	53	4	8	1	2	2	2	2	
Punjab	702	1253	172	372	99	183	41	82	3	6	9	6	14	13	8	
lajasthan	409	724	131	233	60	114	50	88	2	3	4	3	3	2	7	
'amil Nadu	471	763	143	269	69	133	39	61	3	4	10	15	7	8	8	1
lttar Pradesh	320	574	85	146	43	81	22	38	1	2	3	5	5	5	1	
lest Bengal	368	629	139	227	66	124	33	51	1	5	6	0	2	1	3	
imachal Prades	n 836	1617	283	552	126	254	110	18	6	14	e	5 8	10	8	16	2
ammu & Kashmir	913	1705	249	487	98	183	114	193	9	19	5	53	7	3	5	
lanipur	888	1750	301	556	97	237	153	217	22	40	5	5 13	10	32	13	3
leghal aya	1083	1931		650	174	344	97	182	19	29	5	57	8	18	41	
agaland	2127	3934	597	1152	212	411	238	434	64	121	5	5 25	7	98	17	2
ikkim	1649	3507	392	1041	185	472	99	325	28	71	4	8	0	0	18	3
ripura	748	1592	243	603	116	291	48	119	9	18	ä	2 4	2	8	10	1
ll States	429	766	5 129	240	63	122	34	61	3	5		57	5	8	4	

The above figures are averages for five years, divided by the

projected 1983 and 1988 population.

a. Included in Social Services.

Basic data source: Reserve Bank of India Bulletin, various issues

and Census data.

		-		•		i neaus i	•			(Rs.)
State				Services	Educa Allied	ition &	Health, Supply	Water	Hou	sing
	1980-85	1985-89	1980-85	1985-89	Avera ge 1980-85	Average 1985-89	Average 1980-85	Average 1985-89	Average 1980-85	1985-89
Andhra Pradesh		410.64	120.25	141.49	======================================	62.89	25.79	======== 31.43	0.52	0.72
Assam	325.23	403.32	95.45	134.98	52.95	72.62	21.94	32.20	3.57	2.99
Bihar	229.83	236.69	69.02	72.82	38.21	39.43	14.51	16.84	0.30	0.54
Gujarat	438.17	520.85	132.01	166.74	60.84	81.15	29.96	39.89	5.85	5.79
Haryana	531.70	684.53	129.52	176.81	61.82	87.75	39.02	44.79	1.83	2.14
Karnataka	388.88	470.53	99.26	150.2 3	52.61	72.24	23.00	35.12	2.04	3.11
Kerala	350.51	420.50	143.60	164.47	84.85	94.45	34.27	34.97	1.91	1.68
Maharashtra	486.31	603.30	130.08	175.68	66.73	91.41	36.60	47.67	4.73	7.33
Madhya Pradesh	320.12	389.90	87.82	124.08	39.54	54.10	26.05	35.75	2.20	3.00
Orissa	312.00	382.79	103.88	123.27	42.64	59.80	25.22	30.08	3.67	4.03
Punjab	589.67	753.69	146.46	220.58	84.11	105.08	34.70	48.15	2.23	2.90
Rajasth a n	348.64	421.47	111.00	134.24	50.91	63.17	42.00	51.65	1.62	1.46
Tamil Nadu	396.86	442.76	119.55	157.21	57.69	75.65	32.91	35.98	2.65	2.92
Uttar Pradesh	276.25	323.30	73.56	87.69	37.36	47.69	19.05	23.12	1.22	1.47
West Bengal	300.35	360.72	112.68	128.26	53.47	68.73	26.80	29.54	1.11	2.54
Average	363.24	440.36	108.31	139.25	54.30	69.71	27.81	34.47	2.28	2.73
		12322111		********		*******		********	********	9222222222

Table 2.5Average Annual Real Per Capita Expenditure(Revenue + Capital) on Selected Heads by States

Note: The figures reported above were derived for each year first and then averaged.

Source: As quoted above.

Table 3.1Per Capita Plan Expenditure: 1980-85

State	Agri & Allied		IRDP \$	NREP \$	DPAP \$	DDP \$	Flood	Social & Community Services		& Public		Housing #	Soc. Welf & Nu Welf of all B'ward class #	#	Total
Andhra Pradesh		34.8	13.6		 3.9	0.0	 162 . 8	159.4		 9.8	26.0				 594.
Assam	70.7	29.1	11.6	9.2	0.0	0.0	85.5	123.4	48.0			11.4	7.1	2.3	632.
Bihar	17.3	38.9	13.7	14.2	1.9	0.0	148.8	62.9	22.8			6.3	4.8	1.3	416
Gujarat	77.4	40.6	10.8	8.2	4.4	0.7	293.6	196.8	18.4	22.1	49.6	41.8	28.2	3.7	1122
- Haryana	93.7	41.3	12.3	7.6	2.8	3.3	326.4	208.8	53.3	35.6	72.4	20.2	12.5	3.4	1196
Karnataka	46.7	37.2	8.4	17.2	7.5	0.0	143.6	151.7	25.6	16.5	47.8	28.5	13.2	5.7	707
Kerala	58.3	50.2	9.1	14.5	0.0	0.0	120.7	145.6	36.8	16.8	36.7	23.3	9.9	5.8	639
Nadhya Pradesh	42.1	37.1	14.2	14.8	2.7	0.0	195.0	126.6	25.9	17.7	36.5	11.4	22.0	3.2	731
Maharashtra	50.8	59.7	8.2	14.8	4.4	0.0	225.8	283.7	26.5	20.9	100.3	22.7	10.5	3.6	1025
Orissa	38.7	51.9	16.8	10.7	2.8	0.0	166.8	80.2	25.2	12.5	16.9	7.0	5.5	2.3	586
Punjab	82.8	36.3	12.3	6.4	0.0	0.0	168.0	180.7	33.2	30.4	48.8	30.4	18.3	0.9	1112
Rajasthan	27.2	35.4	11.2	8.8	3.9	6.3	158.3	121.6	38.2	15.7	53.2	7.9	2.2	1.7	612
Tamil Nadu	68.3	74.2	12.6	11.9	3.2	0.0	48.8	221.6	31.7	22.1	64.6	31.7	27.5	20.5	733
Uttar Pradesh	33.2	42.6	14.9	13.1	1.6	0.0	124.2	102.4	22.7	16.9	29.1	16.6	9.7	1.2	580
West Bengal	29.0	37.4	3.5	14.1	1.8	0.0	56.4	134.8	37.3	17.0	11.7	8.9	8.8	4.4	440
Himachal Pradesh	227.1	72.4	17.8	15.4	7.3	1.2	91.5	348.3	73.0	52.9	148.6	38.0	13.3	7.1	1543
Jannu & Kashmir	135.6	173.7	23.8	17.7	8.6	4.4	216.3	462.7	83.6	123.9	161.3	32.2	8.1	2.1	1512
Manipur	232.2	53.9	30.3	2.8	0.0	0.0	376.8	552.9	134.5	56.3	228.4	50.3	45.4	4.6	1792
Meghalaya	228.3	128.7	26.1	7.1	0.0	0.0	50.5	505.0	97.3	91.9	227.1	53.7	6.4	9.8	1799
Nagaland	337.0	292.0	46.1	16.9	0.0	0.0	130.6	870.1	162.4	169.9	219.8	157.5	12.1	39.3	2895
Sikkim	933.6	73.8	20.7	16.0	0.0	0.0	176.2	1157.7	477.5	147.5	300.6	78.4	49.7	40.4	4561
Tripura	244.3	104.8	15.2	13.3	0.0	0.0	169.3	424.7	131.3	42.4	77.9	35.9	66.5	35.0	1402
All States	46.5	45.9	12.0	13.0	2.9	0.5	151.7	155.4	29.8	19.3	43.2	19.8	14.2	5.5	708

Included in Rural Development.
 #. Included in Social Services.

Basic data source: Planning Commission.

(Rs.)

Table 3.2Per Capita Plan Expenditure: 1985-90

	Agri- culture	Rural Develop-	IRDP and Allied	NREP/ JRY \$		Special Area Pro-	•	Social Services		Hedical & Public		Housing		Soc. welf		Total
		ment	Programs	\$		grannes					Supply #	*		B'ward gr.		
Andhra Pradesh	44.9	70.9	24.8	25.9	4.7	0.0	239.9	284.9	48.6	23.5	52.1	59.6	23.0	71.0	2.3	972.
Assam	159.4	50.5	18.8	14.5	0.0	3.9	137.7	277.1	116.1	49.3	59.0	21.1	5.8	13.1	9.2	1083.
Bihar	55.1	74.2	22.3	32.9	2.2	4.7	229.0	125.4	47.5	24.3	23.3	14.1	1.9	9.0	4.5	758
Gujarat	107.2	45.7	18.7	15.6	4.6	0.0	289.8	303.7	36.1	26.2	77.4	34.9	19.5	32.5	64.8	1323
Haryana	155.3	47.9	17.4	10.8	2.2	7.0	401.3	441.6	108.7	41.5	76.7	37.5	10.8	146.3	14.6	1679.
Karnataka	71.9	74.3	19.3	22.4	7.0	0.0	181.4	218.4	32.6	26.1	47.4	33.5	6.1	27.1	36.1	884
Kerala	102.7	46.2	16.9	22.4	0.0	1.3	121.6	157.0	24.2	19.2	52.1	20.1	7.4	9.8	22.2	758.
Madhya Pradesh	73.7	49.0	20.6	19.4	2.6	0.0	240.0	194.4	69.3	26.9	39.5	12.2	13.6	26.5	4.3	977
Maharashtra	106.5	275.8	39.2	21.9	5.5	1.2	369.0	421.5	56.9	47.0	197.6	46.5	43.2	17.7	3.9	1809
Orissa	123.3	94.1	29.7	26.9	4.5	0.0	277.9	211.7	89.9	25.5	36.3	14.8	18.6	15.3	6.9	1129
Punjab	152.6	38.4	12.7	8.9	0.0	8.2	184.9	223.5	53.7	33.4	48.8	32.5	24.1	20.9	6.6	1817
Rajasthan	49.8	43.7	18.2	17.3	2.9	0.6	166.9	180.8	77.8	30.7	50.5	11.2	3.0	3.3	2.7	771.
Tamil Nadu	125.6	53.4	21.1	25.1	2.7	0.0	65.1	407.7	62.9	27.9	102.2	44.3	38.3	53.7	72.4	1152
Uttar Pradesh	85.9	75.1	24.3	27.0	2.5	3.1	159.9	173.1	42.8	34.4	29.7	25.7	16.6	16.4	5.0	859
West Bengal	47.1	49.8	18.6	17.0	1.9	12.1	74.7	178.3	47.7	19.8	17.5	17.3	52.0	12.0	4.2	701
Himachal Pradesh	469.1	101.4	23.6	21.2	0.0	0.0	147.2	612.3	206.8	86.3	193.1	61.0	28.5	24.5	10.0	2641
Jammu & Kashmir	323.9	88.5	19.6	38.3	7.9	168.3	242.4	881.8	208.0	136.9	267.1	82.0	147.0	16.5	15.6	2907
Manipur	412.4	113.8	38.4	32.9	0.0	0.0	589.0	935.6	311.9	89.5	277.3	83.9	52.0	48.1	18.5	3313
Meghalaya	527.8	87.6	34.0	15.8	0.0	59.0	75.9	850.7	265.0	99.3	259.6	145.0	41.7	11.2	23.7	3305
Nagaland	712.5	373.2	54.3	20.4	0.6	91.1	147.6	1381.4	354.1	178.8	295.2	215.1	194.7	16.3	82.4	4909
Sikkim	1252.7	121.3	27.5	36.1	0.0	0.0	253.8	2303.6	1122.1	207.3	657.1	117.9	66.5	60.0	62.1	7530
Tripura	480.3	209.1	48.2	21.8	0.0	80.8	245.8	889.1	360.5	93.7	133.9	65.0	45.8	111.9	73.6	2843
All States	96.1	80.1	22.9	22.9	3.1	4.6	202.4	257.0	62.4	32.3	63.3	29.9	21.9	26.7	15.6	1093

\$. Included in Rural Development. #. Included in Social Services.

Sasic data source: Planning Commission.

(Rs.)

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Table 4.1 Education Statistics – Statewise

State			eracy R	ate (%)			Shar			pend o			Pupil-		Per Cent		Per Cent			<u>hools wit</u>
		1981			1991			1980			1988-89							(Primary)		
	Male	Female	Total	Male	Female	Total					Second.		1978	1986	1978	1986	1978	1986 	(%)	Water (%
ndhra Pradesh	46.8	24.2	35.7	56.2	33.7	45.1	45.3	29.9	24.7	44.7	30.1	25.2	50	44	29	37	97	97	85.5	36.1
ssam	N.A.	N.A.	N.A.	62.3	43.7	53.4	53.3	33.1	13.6	61.0	26.4	12.6	33	36	21	25	65	63	79.0	20.4
ihar *	46.6	16.5	32.0	52.6	23.1	38.5	64.2	14.5	21.3	57.4	19.7	22.9	41	60	15	18	92	93	78.9	52.9
ujarat	65.1	38.5	52.2	72.5	48.5	60.9	55.4	29.0	15.6	54.8	31.3	13.9	53	61	39	45	97	9 9	98.8	64.2
aryana	58.5	26.9	43.9	67.8	40.9	55.3	38.5	41.7	19.8	40.6	39.3	20.1	39	53	35	44	9 9	9 9	94.0	73.6
arnataka	58.7	33.2	46.2	67.2	44.3	56.0	55.2	21.7	23.1	52.2	28.3	19.5	55	48	27	33	87	91	98.4	53.3
erala	87.7	75.7	81.6	94.5	86.9	90.6	55.1	28.7	16.2	52.8	28.5	18.8	41	40	56	61	91	94	96.0	74.6
adhya Pradesh	48.4	19.0	34.2	57.4	28.4	43.5	46.2	33.5	20.3	43.3	37.7	19.1	36	39	18	22	85	69	89.9	36.7
laharashtra	69.7	41.0	55.8	74.8	50.5	63.0	47.7	35.8	16.5	58.2	23.4	18.4	44	42	34	38	88	90	91.2	51.5
rissa	56.5	25.1	41.0	62.4	34.4	48.5	42.4	37.5	20.1	59.5	23.9	16.7	34	39	9	16	76	88	91.0	28.3
unjab\$	55.5	39.6	48.1	63.7	49.7	57.1	37.7	49.0	13.4	33.4	48.0	18.5	41	40	54	53	98	9 9	93.4	90.7
ajasthan	44.8	14.0	30.1	55.1	20.8	38.8	54.4	31.3	14.4	52.4	32.9	14.7	59	55	18	23	92	84	92.9	58.0
amil Nadu	68.0	40.4	54.4	74.9	52.3	63.7	49.4	27.0	23.6	48.6	36.1	15.3	42	56	42	40	100	100	94.3	84.9
lttar Pradesh	47.4	17.2	33.3	55.4	26.0	41.7	49.7	32.2	18.1	52.4	34.6	13.0	39	41	18	21	95	95	83.0	56.9
lest Bengal	59.9	36.1	48.6	67.2	47.1	57.7	39.2	39.4	21.5	38.2	44.6	17.1	36	41	21	20	51	64	88.5	59.9
							1		N.C.		N.C.	N.C.	41	44	27	31	86	87	88.4	50.8

Share of public expenditure data relate to 1980-81 and 1987-88.

27

Survey, NCERT, New Delhi, 1980 and 1989.

2222228885555555		*===							\$222222	#22233322	
State	Infa						<u>h (%)</u>		Number of		
	Rate	-	Insti tior		Tra	ined	Other		Person: Hospita	-	
		· •	1983		1983	1988	1983	1988	1980	1988	
Andhra Pradesh	 77	81	 30	32	 16	18	 53	49		1722	
Assam	94	91	15	17	8	10	77	73	2177	1796	
Bihar	99	91	10	13	11	20	79	67	3069	2918	
Gujarat	106	86	20	22	29	31	51	46	1052	1024	
Haryana	91	82	14	17	62	63	23	20	1854	2086	
Karnataka	71	80	26	30	23	26	51	44	1239	1372	
Kerala	33	22	61	85	13	6	26	9	587	395	
Madhya Pradesh	125	117	15	10	13	13	72	77	3403	2 868	
Maharasht ra	7 9	59	32	34	11	13	57	54	922	798	
Orissa	126	122	6	8	13	15	81	77	2583	2423	
Punjab	80	67	6	6	62	74	32	19	1173	1257	
Rajasthan	10 9	96	3	4	14	17	83	79	2102	2100	
Tamil Nadu	88	68	38	47	19	20	43	33	1211	1194	
Uttar Pradesh	155	118	4	4	20	23	76	73	2513	2786	
West Bengal	84	77	28	28	6	8	66	64	1207	1187	
Himachal Pradest	n 80	74	21	21	13	2 2	66	57	1268	1231	
Jammu & Kashmir	71	69	7	14	23	19	70	67	1502	957	
INDIA	105	91	19	21	18	20	63	59	1408	1357	
33888888333388888	*****		*****	*****	*****		*==2::	* = = = = = =	8222223	83372283	
#. Per 1000 live	birt	hs.		5	Source	a: Hea	alth B	Conom	ics Cell	L, NIPFP.	

Table 4.2Health Indicators – Statewise

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