# Chapter V

## Assessment of States' Resources

5.1 In making our recommendations regarding tax devolution and grants-in-aid to the States, we are required under our terms of reference to assess the resources of the States for the five years commencing on 1st April, 2000 and their requirements for meeting the plan and non-plan revenue expenditure, keeping in view the need for generating surplus for capital investment and reducing fiscal deficit.

5.2 In order to help us in this assessment, we sought information from the States and the Union government on their receipts and expenditure from 1987-88 onwards and the forecast for the period 2000-05 on an year-wise basis. In response, the States have furnished their pre-devolution forecast of plan and non-plan revenue receipts and expenditure. The assumptions underlying the forecasts, however, vary widely across the States, based as they are on varying anticipations of the growth of Gross State Domestic Product (GSDP), inflation and the likely response of revenues and expenditure. A summary of the pre-devolution revenue receipts and plan/non-plan revenue expenditure consolidated for the 25 States and compiled from their forecasts are given below:

**Table 5.1: Pre-devolution Forecast - All States**
**(Revenue Account)**

*(Rs. in crores)*

| Sl. No. | Item | 1999-2000 | | 2000-01 | | 2004-05 | |
|---|---|---|---|---|---|---|---|
| | | B.E. | % to G.D.P. | | % to G.D.P. | | % to G.D.P. |
| 1. | Revenue Receipts | | | | | | |
| | i) Tax Revenue | 103648 | 5.37 | 108801 | 4.98 | 162224 | 4.56 |
| | ii) Non Tax Revenue | 18379 | 0.95 | 24799 | 1.14 | 30491 | 0.86 |
| | iii) Non-Plan Grants | 1711 | 0.09 | 1691 | 0.08 | 2265 | 0.06 |
| | **Total (i-iii)** | **123738** | **6.41** | **135291** | **6.20** | **194979** | **5.48** |
| 2. | Revenue Expenditure | 240557 | 12.45 | 315251 | 14.44 | 501670 | 14.09 |
| | Plan | 42889 | 2.22 | 48665 | 2.23 | 76012 | 2.14 |
| | Non-Plan | 197668 | 10.23 | 266586 | 12.21 | 425657 | 11.96 |
| 3. | Surplus/Deficit on Revenue Account | -116819 | -6.05 | -179960 | -8.24 | -306691 | -8.62 |
| 4. | Non-Plan Revenue Surplus/Deficit | -73930 | -3.83 | -131295 | -6.01 | -230678 | -6.48 |
| 5. | Estimated G.D.P. at Current market Prices | 1931819 | | 2182956 | | 3559252 | |

For computing the ratios to GDP in the above table, nominal GDP growth has been assumed at 13 per cent per annum consistently with what has been assumed for assessment of the Centre's resources.

5.3 The forecasts and the resulting revenue gaps indicated by the States present an alarming picture. In the aggregate they show a rise in the pre-devolution deficit on non-Plan revenue account from 3.83 per cent of Gross Domestic Product (GDP) in 1999-00 to 6.48 per cent in 2004-05. In part, this results from the projection of non-Plan revenue expenditure (NPRE) at a growth rate much lower than that of revenue. As a proportion of GDP, NPRE is projected to go up from 10.23 per cent of GDP in the base year (1999-00) to 11.96 per cent by the terminal year 2004-05, growing at the rate of 16.6 per cent per annum against a trend growth rate (TGR) of 16 per cent over the twelve years, 1987-1999. Tax revenue, on the other hand as a proportion of GDP is shown to decline from 5.37 per cent of GDP to 4.56 per cent by the terminal year, the underlying growth rate being only 5.7 per cent in the forecast period, as against 14.8 per cent observed during 1987-1999. The projection of non-tax revenues also follow a similar pattern, indicating a decline from 0.95 per cent of GDP in 1999-2000 (B.E.) to 0.86 per cent by 2004-05.

5.4 If restructuring of public finances to restore balance in the budget is to take place, it is imperative that the trends depicted in the States' forecasts are reversed. Our assessment of the resources of the States is intended to indicate how this can be achieved, keeping in view the needs and also the capabilities of the States judged by their potential and past performance. In making the assessment, while taking note of the trends and the likely growth of GDP in the coming five years as well as other relevant factors, we have followed as far as possible, a normative approach. The intention is to apply some rules uniformly to all States with appropriate variation wherever needed to take account of factors that unavoidably affect their revenue capacity and expenditure needs. In the allocation of Central revenues among the States, both equity and efficiency demand that the revenue requirements of every State are assessed on the basis of some

objective norms instead of relying on what they project, and after due consideration of their limitations and needs in each case.

5.5 As indicated in Chapter II, the essence of the normative approach in assessment of revenue capacity lies in estimating the revenues, a State can raise by exercising its powers under the Constitution with 'reasonable' effort. To minimise the scope for any subjective judgement, `reasonable' in this context may be taken to mean an average effort, the average being the level at which the States in general have been observed to be performing in revenue raising. On the expenditure side, the normative approach would imply in essence that the expenditure requirements of each State will be worked out broadly on the basis of the average expenditure per capita that a State has to incur on the revenue account to provide public services at a `reasonable' level, after allowing for cost differentials among them arising from factors not within their control, such as terrain, age-profile of the population, varying rates of inflation and other relevant factors.

5.6 The normative approach serves to ensure inter-State equity in that no State can obtain a larger share than what is warranted by the deficiencies of its revenue base attributable to its backwardness or low income level or other factors that have a bearing on its taxable capacity but are beyond its control. Nor can any State expect whatever expenditure it may choose to incur, regardless of what might be justifiable normatively, to be underwritten without question by the Finance Commission. For various reasons it is not possible to implement the normative principle all the way. The heterogeneity of the States in their endowments and present levels of development pose problems in setting up standards which can be applied uniformly even after making suitable allowance for their specific situation. Then there are acute data problems as well. Nevertheless, as far as possible, we have introduced some elements of the normative principle in our assessment of the revenues and expenditure of the States for the five year period for which we are required to recommend tax sharing and grants-in-aid.

5.7 We have applied the normative approach in two stages: first, by introducing some normative elements in computing revenue and expenditure of the base year and next, by moving the base year figures forward to derive revenue and expenditure estimates for 2000-05 by applying appropriate growth rates stipulated on the basis of some reasonable norms. Salient points of our assessment exercise for States' resources are set out in the following paragraphs.

**Base Year Assessment: 1999-2000**

5.8 In estimating the resources of the States for the five years, 2000-05, our first concern has been to set the base from which the projections are to be made, i.e. figures of revenue receipts and expenditure for each State for the base year 1999-00. The simplest way of going about it would be to proceed on the basis of the estimates furnished by the States in their budgets, i.e. budget estimates (BE) figures in the 1999-00 budget and wherever available, revised estimates (RE). It is however, well known that often there are significant variations between BE/RE figures and the actuals. That apart, it appeared to us that it would not be appropriate to project future revenues and expenditure taking either BE or RE figures as the base. This is because the budgets or even actuals for a year reflect receipts and expenditure as they emerge from the structure of tax and non-tax revenues on the revenue side and composition of expenditure in actual operation and not what a State can be expected to raise in revenue or spend on a normative basis after allowing for its handicaps. Hence, the budget figures of the base year or even the actuals, if available, require some modification to set up the base year figure. This modification has been made by us partly on the basis of past trends and partly by using certain objective norms. Unless the BE/RE figures of the base year are adjusted normatively, the assessments made by the Finance Commission lose their efficacy in inducing prudent fiscal behaviour and every time a new Finance Commission is appointed, the actuals of the base year are presented as a *fait accompli* with little regard for what the previous Finance Commissions had considered a reasonable budget scenario for individual States. The rules of adjustments or modifications followed by us in deriving the base year figures of revenue and expenditure, item-wise, are indicated below.

**Tax Revenue**

5.9 For setting up the base year figures of tax revenue of a State normatively, there are two possible approaches. The first one is to estimate the potential of revenue for each tax individually it can raise under the Constitution taking into account the variations in the respective tax base in the given State as compared to the general or average pattern and applying the average rate of tax to the base. This is known as the representative tax system approach. An alternative way is to estimate the taxable capacity of a State taking the aggregate revenue from all taxes that a State can raise under its Constitutional powers and setting up relationship between tax revenue and variables that influence the tax base and other factors that determine the tax yield but are beyond the control of the State.

5.10 While in principle the representative tax system approach is preferable, it was not possible for us to adopt this method because of severe data problems regarding the individual tax bases and complications arising from heterogeneous tax practices across the States and the varying impact of exogenous factors on their taxable capacity. For instance, the restrictions imposed by the Central Sales Tax Act, 1956 on the States' powers of sales taxation in respect of commodities declared to be goods of special importance to inter-State trade or commerce impact differently on different States, depending on the composition of their output and the variations are not easy to capture in the absence of reliable data on inter-State trade. Then again, while State excise duties yield substantial revenue in most States, there are States like Gujarat where full prohibition is in vogue, and Tamil Nadu where partial prohibition is in force. Also, there are taxes which are levied and collected in some States by local governments like octroi for which complete information is not available with us. We, therefore, opted for the aggregate tax revenue approach instead of looking at the taxable capacity of the States, tax by tax.

5.11 For this purpose, we had commissioned a study at Indian Statistical Institute (ISI), Calcutta. Applying the regression approach, the study set up a model to estimate the relative contributions of variables which might be considered as significant determinants of taxable capacity of a State such as the per capita SDP. A number of variables were identified in this regard, and along with some selected dummy variables, regression equations were estimated obtaining statistically reliable results. However, the reliance on a large number of variables and dummies raised questions as to which of them could be considered to be within the control of the States and which were not. There are also acute data problems as reliable information regarding the identified explanatory variables were not available. Figures of per capita State incomes, for example, are simply not computed. What we have is data on State domestic product whereas it is well known that taxable capacity is determined to a great extent by levels of per capita income. Data on several of the explanatory variables also are dated. Further, the results were rather sensitive to the assumptions regarding the combination of variables as was evident from the alternative formulations. Hence, we proceeded on some broad judgements to determine the taxable capacity of the States.

5.12 Keeping in view the limitations mentioned above, for estimating the tax revenues of the States for the base year normatively, we first worked out the trend growth rates (TGR) of the total own tax revenue of each State over the period 1987-99 and then applied the TGR so derived to the actuals of 1998-99. We have not gone by the growth rates of individual taxes because of the varying tax practices among the States as mentioned above and the possibility of substitution among different tax handles.

5.13 Having derived the base year tax revenue figures in this way, we worked out the tax-GSDP ratio (hereafter *tax ratio*) of each State for the year 1999-00. The States were then divided into two groups, viz., special category and general or non-special category. The tax ratio of each State was compared with the average ratio of the respective groups. Where the average tax ratio of a given State fell below the relevant group average, we made upward adjustment in the ratio on the reasoning that all States should try to move towards their group average over a period of time. The adjustment we have in view is intended to reduce the gap between a State's tax ratio and the average ratio of the group. Keeping in view their relative revenue capacity as reflected in their per capita GSDP, where the per capita GSDP of a State fell below the average per capita GSDP of the respective group of States by more than 15 per cent, we adjusted the tax ratio of the State in question by 10 per cent of the difference between the tax ratio of that State and the average ratio of the group in question. Where, however, the per capita GSDP of a State was not less than the relevant group average by more than 15 per cent, that is to say, the State's per capita GSDP is close to the group average, the tax ratio was adjusted by 30 per cent of the difference between the tax ratio of that State and the average ratio of the relevant group on the reasoning that States should be able to have tax ratio approximating to their group average. For example, with the group average of tax ratio at 7 per cent, the tax ratio of a given State at 6 per cent, if the per capita GSDP of the State happens to be 85 per cent or more of the average of the group, the tax ratio of that State for the base year is taken to be 6.3 per cent (6 plus 30 per cent of 7 *minus* 6). For the special category States, the upward adjustment in the tax ratio for the base year has been restricted to 10 per cent of the difference between the tax ratio of a State and the group average in all cases. The effect of this normative adjustment for States which were below the respective group averages in their tax ratio is given in Annexure V.1.

**Non-Tax Revenue**

5.14 The main components of non-tax revenue of the States are interest receipts, revenue from forestry and wildlife, irrigation rates and royalty on minerals. It was noticed that these are heterogeneous in nature, and are not amenable to a uniform treatment across the board. Hence, we have proceeded to estimate the base year figures of each major item individually in most cases. Separate norms were applied for different items of non-tax revenues, namely, interest receipts, dividends, revenue from forestry and wild life, irrigation rates and royalty on minerals. The basis of derivation of the base year figures, item-wise, is indicated below:

i) Interest receipts have been estimated separately for interest from loans and advances and interest from others. Interest from loans and advances has been estimated on the basis of TGR applied to the actuals of 1998-99. For others, the estimates are based on the average realisation in the three preceding years. Interest accruing from the irrigation department has been excluded from non tax revenue receipts and expenditure as these are merely contra entries.

ii) For dividends and other miscellaneous receipts under general services, the average realisation in the three preceding years is taken as the base.

iii) Receipts from forestry and wild life, and royalty on minerals were estimated for the base year in the same way as dividends i.e., on the basis of average of three years.

iv) In the case of receipts from irrigation, TGR based estimates or BE for the base year, whichever is higher was adopted.

v) Lottery receipts constitute a significant source of non-tax revenues in some States. No clear trend was discernible in the receipts from lotteries and the gross receipts vary widely from year to year. Hence net receipts of 1998-99 was taken for the base year, whenever the lottery receipts occur.

vi) For rest of the items under general, economic and social services, receipts for the base year have been estimated by projecting the 1998-99 actuals with the TGR.

5.15 In the present exercise, non-tax revenues have been estimated on the lines indicated above with one more change. In the case of some States, user charges as a proportion of their revenue expenditure (excluding interest and pension) were found to be unduly low as compared to the average of the group of general category States. In order to give a clear message that all States should make at least average effort to recover a part of the cost of providing public services as reflected in their revenue expenditure, we have adjusted the ratio of non-tax revenue to revenue expenditure of such States (excluding interest and pension benefits) in order to reduce their gap as compared to the group average by 50 per cent. This rule has, however, been applied only to States belonging to the general category.

**Revenue Expenditure**

5.16 As in the case of revenue receipts, considerations of both equity and efficiency require that the revenue expenditure of the States also be estimated on a normative basis. Ideally, an equitable system of federal transfers should bring about a measure of parity in the capacity of the constituent units to provide basic civic services to all citizens at a reasonable or at least a minimum level. The determination of the relative revenue capacity of the States on a normative basis is intended to serve this purpose. Variation among the States in the capacity to provide civic services, however, can arise also from difference in needs such as a large proportion of the aged or children in the population, or morbidity, and also because of variations in the unit cost of providing public services stemming from terrain (hilly tracts), and so on. Hence in designing an equitable system of transfers, it is necessary to complement the assessment of relative revenue capacity with an assessment of expenditure needs.

5.17 Determination of expenditure needs on a normative basis is, however, more problematic than that of taxable capacity. The reason is that differences in the level and composition of expenditure can arise from variation in the levels of income and consumption and also from the preferences or choices of the people regarding the services they desire from the government sector. One way of getting over these problems would be to look at the differentials in the per capita revenue expenditure of different States in the services which are basic to governance and are usually common among all States. For instance, the three functional categories of services into which the expenditure of government are usually classified, namely, general services, social services and economic services, contain major heads, such as, interest, pensions and police under general services, and expenditure on elementary education, rural primary health, family welfare and other social welfare activities under social services. An attempt could be made to examine the differences in the per capita expenditure needs of different States for the services under these heads derived normatively and see how the actuals fall short of the norm-based needs. The differences multiplied by the population of the State would then serve as the base for determining revenue needs for purposes of equalisation transfers.

5.18 We commissioned a study at the Institute of Social and Economic Change, Bangalore, to work out the revenue expenditure needs of the States based on the normative approach. The study provided estimates of revenue expenditure of the individual States for the main items excluding interest payments, pensions and a few other items. The estimates were derived by fitting regression equations with selected explanatory variables. Although, the equations satisfied the standard statistical tests, it was not possible for us to use the results mainly for the reason that in several cases the estimates were way out of alignment with the actual expenditure and since we are not starting from a clean slate, imposition of norms derived statistically would be too disruptive. Besides, the expenditure needs of a State for purposes of equalisation should be viewed in juxtaposition with, or as supplement to revenue capacity equalisation transfers and not in isolation. There were also conceptual as well as data problems as in the case of taxable capacity estimation. For instance, for police expenditure, information which could help to quantify the requirements of States having insurgency problems was not available. The only option available to us, therefore was to impart elements of the normative principle in estimating the revenue expenditure of the States in the base year in a limited way as indicated below.

5.19 Keeping the normative principle in view as far as possible, for estimating non-plan revenue expenditure of the States for the base year i.e., 1999-00, we proceeded in three steps. The first step was to look at the figures arrived at by applying the TGR on the actuals of 1998-99. Where the TGR turned out to be negative, the average of the three years, 1996-99, was taken for the year 1999-00. It was noticed that revenue expenditure of all States had grown at a fast pace during the nineties. However, some restraint became visible in the provision of expenditure under certain major heads of accounts recently. It was therefore decided as a second step that if the TGR based estimates happened to be higher than the BE of a particular major item, the BE would be adopted. The TGR based estimates were retained for others. In other words, in the second step, the TGR based estimates projected from 1998-99 or the budget estimates for 1999-00, whichever was lower, was taken.

5.20 However, it was noticed that in many States expenditure under the heads of account relating to pensions and interests were unduly high, whichever way they were estimated, whether by using the TGR or by adopting the BE. Considering that the upward revision of pay and pensions would have been carried out by 1998-99, the growth of pensions in the year 1999-00 was limited to 15 per cent over the actuals of 1998-99. Similarly, interest payments for 1999-00 were estimated by projecting the 1998-99 actuals by 15 per cent on the reasoning that the States should exercise some check on the growth of their borrowings and no one should expect that whatever commitments they may make on account of interest liability will be accepted by the Finance Commission for purposes of assessment of their revenue needs. To go by the actuals of interest payments in all cases would be unfair to States which have been more prudent in the matter of borrowing. We have, therefore, made another adjustment in the interest liability in the case of States whose interest payments as a percentage of revenue receipts were found to be higher than their respective group average. Thus, for

States whose interest payments as a proportion of revenue receipts as indicated above did not exceed the group average, the estimates arrived at by the rule TGR/BE whichever was lower, were not disturbed. However, for States for whom the ratio was above the group average, only 80 per cent of the excess was accommodated in our assessment. Annexure V.2 provides details of the compression carried out in respect of interest payments for various States.

**Projections for 2000-05**

5.21 After firming up the base year figures in the manner indicated in the preceding paragraphs, we proceeded to make projections for our reference period namely, 2000-05 by applying appropriate growth rates and by relying on certain reasonable norms. The growth rates also have a normative thrust, oriented to the restructuring scheme. The method followed for projecting revenues and expenditure of the States from the base year is described briefly below:

**Tax Revenue**

5.22 The tax ratio of the Centre and the States registered a decline during the nineties. In the case of the States the decline has been less pronounced but all the same, the sluggish growth of States taxes contributed to their revenue gap. This trend can be reversed only with determined effort by the governments to raise more revenue through taxation.

5.23 In our discussion on restructuring we have indicated that the improvement in the tax ratio for all the States considered together over the five year period under consideration should be of the order of 1.15 percentage points of GDP. With an underlying growth rate of GDP of 13 per cent, this translates into a growth rate of about 17.5 per cent in the tax revenues. However, rather than applying a growth rate of this order uniformly across the States we considered it desirable to allow for reasonable inter-State variation in the tax revenue growth rate depending on differences in their potential revenue base. In particular, we took into account the differential constraints arising from variations in the rate of growth of GSDP among the States and also their existing tax ratios relative to their past. The tax revenue growth rates for the projection period were derived by using prescriptive tax buoyancies ranging from 1.1 to 1.35. The States were then grouped according to GSDP growth-rate (12, 13 and 14 per cent) as also with respect to the tax buoyancies. A State was placed in a higher or lower growth rate category depending on the constraints to growth they may face as reflected by respective TGRs of GSDP. Further, the States were placed in a higher or lower buoyancy group depending on whether, compared to their own past, they improved or deteriorated in terms of the tax ratio. For this purpose, a comparison was made between the average tax ratio over 1994-95 to 1996-97 to the corresponding average ratio over 1987-88 to 1989-90. A State, where the tax ratio is low compared to its own past, signifying deterioration in the recent years, was put in a higher tax buoyancy group with the expectation that it should be able to improve its position back to where it was in terms of the tax ratio. A State, which showed improvement in its position, was placed in a lower buoyancy group so that it was not penalised for showing a better tax effort. But since the buoyancies we have prescribed are all above 1, (1.10, 1.20,1.30, 1.35), all States also will be required to make efforts to raise their tax ratios from the present levels. In the case of special category States, all of them were placed in the lowest buoyancy group except for three, which were put in the next higher buoyancy category. Annexure V.3 provides information on cluster of States in three groups, prescriptive buoyancies and buoyancy based growth rates.

**Non-Tax Revenue**

5.24 A basic source of weakness of government finances in the States (as at the Centre) is the poor return on the capital invested and negligible recovery of cost of services rendered by the government by way of user charges. The total investment made by the States in Government companies and statutory corporations in the form of equity and loans stood at Rs.1,16,368 crore as of 31.3.1997. These investments yield very little to the State's exchequer in the form of dividends, interests or profits. As for user charges, only 2.13 per cent of the revenue expenditure on social services is realised by the States. In the case of economic services, the recovery rate is somewhat better, mainly because of royalty from minerals and receipts from forestry. But these are more in the nature of taxes rather than user charges. There can be no enduring solution to fiscal problems of the States unless government investments yield a reasonable return and the rate of recovery of the cost of public services through user charges shows some appreciable improvement. Studies show that recovery rates can be enhanced substantially in the case of non-merit goods and the implicit subsidies flowing through governmental activities can be reduced.

**Interest and Dividends**

5.25 Coming to specific items of non-tax revenues, interest from loans and advances received by the States is, on an average, around 3 per cent on the outstanding amounts. The loans and advances are extended out of the borrowed funds only and the borrowings have to be serviced from return on investments made out of them. Hence it is proposed to set a norm of 9 per cent return by way of interest on loans and advances in order to narrow the gap between the ratio of return and cost of funds. However, to allow some time to the States to come up to this level of interest realisation, we postulate the norm set by us to be achieved over a five year period so that the 9 per cent rate is realised by 2004-05. Accordingly, interest receipts from 2000-01 have been estimated in such a way that the gap between the current level of realisation and the targeted level for 2004-05 is closed each year on a proportional basis. For States which are already realising 9 per cent or more as interest on loans and advances, the estimates furnished by them have been adopted. For dividends, we have set a norm of at least 2 per cent on equity or the actuals/RE in 1999-00 whichever is higher for the year 2000-01. Thereafter dividends have been projected to grow to 5 per cent by 2004-05 on the basis of proportional increase every year.

**Royalties**

5.26 Royalties on major minerals, crude oils and natural gas are dependent on production and the rates fixed by the Government of India. However, to keep pace with inflation, a growth rate of 5 per cent has been adopted for projecting revenues from royalties on major minerals.

**Irrigation Receipts**

5.27 The other important item of non-tax revenue is receipts from irrigation charges. Irrigation rates at present are nominal in many cases and cover only a fraction of the operation and maintenance (O & M) expenditure. Ideally, the target should be to fix irrigation rates in such a way that the receipts cover not only the maintenance expenditure but also leave some surplus as return from capital invested. We recognise that this objective cannot be achieved immediately. Hence, we propose to moderate the targets for increase in irrigation receipts in the following manner:

**Table 5.2: Projected Return from Major and Medium Irrigation Projects**

| Sl. No. | Range of Revenue Receipts from Major and Medium Irrigation Projects per hectare | Projected increase per year (%) | Remarks |
|---|---|---|---|
| 1. | Below Rs.150 | 25 | Subject to a minimum of Rs.80 per hectare in 2000-01 |
| 2. | Rs.150 to 250 | 15 | — |
| 3. | Above Rs.250 | 10 | — |

**Forestry & Wildlife**

5.28 Receipts from forestry and wildlife have been declining, not only as a proportion of total non-tax receipts but also in absolute terms. Several States have urged that the scope of raising more revenue from this is dwindling because of fast depleting forest resources and also due to court rulings relating to felling of trees and transportation of timber. We have had occasion to peruse the relevant court orders on the subject. We found that the court directives and orders restrict only indiscriminate felling of forest trees without a duly approved scientific plan. The forest policy of the Centre also points in this direction. On these considerations, we do not find any justification for keeping the freeze on the receipts from forestry at the 1999-00 level and instead we have assumed a growth of 5 per cent per year in forestry receipts over the estimates for 1999-00.

**Lotteries**

5.29 Some States derive substantial amounts of non-tax revenue from lotteries. In view of the national policy to discourage lotteries, we have taken the base year figures of receipts net of expenditure as the likely revenue from the lotteries for all the years.

**User Charges**

5.30 In all cases of user charges, a 25 per cent step-up per year over the base year has been assumed in our estimates of revenue receipts. We feel that this step-up is essential if the implicit subsidies are to be reduced.

**Return from Public Sector Undertakings**

5.31 Paragraph 5(vi) of our ToR requires us to consider the need for ensuring reasonable returns on investments of the States in irrigation projects, power projects, transport undertakings, departmental undertakings and public sector enterprises. The need to obtain reasonable returns from investments made by the States in these entities has been underlined in Chapter II. In conformity with this objective, we have postulated a higher return in the form of dividends and interests and these have been incorporated in our estimates for revenue receipts during the forecast period. We are aware that a 5 per cent dividend on equity and 9 per cent interest on loans and advances are not adequate to meet the cost of borrowings of the States. However, keeping in view the current realities, it would be unrealistic to postulate a higher return. Besides, an element of subsidy in the interest on loans cannot be eliminated altogether, since some of the investments also yield a social return such as investments to uplift backward areas or on roads to connect rural areas. Our norms of receipts from non-tax revenue sources seek to strike a balance among all these considerations. Details of estimated net return on the investments by the States in the power and transport sectors are given at Annexures V.4 and V.5 respectively.

**Non-Plan Revenue Expenditure**

5.32 For projecting the revenue expenditure of governments in different States over the five year period, starting from the base year, we had two alternatives: (i) adopt uniform growth rate for all the three functional categories of government services, and apply the rates uniformly to all States, or (ii) work out differential rates for different categories namely, the general services, the social services and the economic services with appropriate variation as between States.

5.33 The justification for adopting differential rates for different categories of services is that the proportion of the two main components of the revenue expenditure namely, salaries and other than salaries, vary considerably as between services. For instance, the salary intensity of general services in most States is higher than that of the other two services. The two components also grow at varying rates. Considering the net impact of normal attrition (3 per cent), increments (2.7 per cent) and inflation protection (5 per cent), salary bill growth may reasonably be taken at 5 per cent per annum. This growth allows for one per cent fresh recruitment against 3 per cent retirements. Non-salary components determine

the quality of public services in the social sector as in the case of health and education etc and should be expected to grow at least at the same rate as GDP. In order to allow for improvement in the level of these services, we have assumed an increase of 2 per cent over the GDP growth in social services that is 15 per cent growth per annum. For general services, the growth for non-salary components is assumed at 7 per cent and for economic services, at 11 per cent. Seven per cent growth in the non-salary components of general services is assumed to take care of inflation (5 per cent) and population growth (2 per cent). For economic services, we assume an 11 per cent growth in non-salary components in view of the growing involvement of private sector in many areas of economic activity including infrastructure, and the diminishing role of the public sector.

5.34 As will be seen, we have worked out an appropriate growth rate for each category of services taking into account the salary intensity and the varying rates of growth of the two major components of revenue expenditure i.e. salary and non-salary. In this process, we have tried to introduce a normative element in the salary growth by grouping the States under broad bands of salary intensity and bringing them down nearer to the average of the respective group.

**Interest**

5.35 In the case of interest payments, we have assumed a growth rate of 10 per cent which is markedly lower than the trend growth rate. A lower growth rate has been adopted to bring interest growth in line with the normative approach. In our view the States have to exercise restraint in the matter of borrowing and rely more on revenue resources for expenditure. It is time it was realised that there has to be a check on the borrowings and thereby on interest payments if the finances are to be brought in order.

**Pensions**

5.36 As regards pensions and other post retirement benefits it is presumed that the impact of pension revision has largely been absorbed by 1999-00 and the future requirements of expenditure would depend upon the net increase in the number of retired persons and the need to provide inflation protection in their basic pension. Considering these two dimensions, a 10 per cent growth per year in pension and the other retirement benefits over the base year has been considered reasonable.

**Subsidies**

5.37 Subsidies are provided by the States implicitly and explicitly. Our recommendations for raising the level of cost recovery in irrigation and other public services through higher user charges and returns on investments in public sector enterprises would serve to reduce the implicit subsidies substantially. As for subsidies provided explicitly through the State budgets, we do not have comprehensive information regarding the amounts involved. However, where we have been able to identify them, these have been taken as 'nil' for the forecast period. For departmental undertakings, we have not allowed for any loss, implying that, in our assessment, no subsidy will be extended to them from the State budget.

**Maintenance of capital assets:**

5.38 In making our recommendations, the ToR require us to take into account, among other considerations, the maintenance and upkeep of capital assets and the norms on the basis of which the amounts necessary for maintenance may be provided and also specify the manner of monitoring of such expenditure. It is a matter of concern that our capital assets are languishing because of poor maintenance. There has been a tendency to take up a number of new projects without making adequate provision for maintaining the existing assets. The poor state of our roads, irrigation projects, and government buildings bear testimony to the sad neglect of maintenance. This has happened in spite of the fact that successive Finance Commissions in the past have made liberal provisions for maintenance of capital assets in their assessment of revenue expenditure. The reasons for this state of affairs are: one, maintenance expenditure is usually classified as "non-plan" and thus these get a low priority in the budget allocations; two, the funds assessed by the Finance Commissions get diverted to other areas of expenditure as no specific fund is created for the maintenance of capital assets; and three, budget allocations, which as it is often fall short of the requirements, are used up largely in meeting salary expenditure and the running cost of establishment itself. All this needs to be changed but it cannot come about without an attitudinal change towards the priorities, budgetary allocations and monitoring of such expenditure. With this caveat we now proceed to indicate the norms of expenditure required for maintaining capital assets specifically for irrigation projects, roads and bridges and government buildings.

**Irrigation Projects**

5.39 In computing the admissible expenditure on maintenance of irrigation projects, the Tenth Finance Commission (TFC) had adopted a norm of Rs.300 per hectare for utilised potential and Rs.100 per hectare for the unutilised part. The Commission had also followed the past practice of enhancing the norms by 30 per cent for hill States. It had provided suitable increases in the norms in each year of the forecast period to insulate the expenditure against inflation.

5.40 In their memorandum on the subject, the Ministry of Water Resources have suggested a provision of Rs.450 per hectare for major and medium irrigation projects for the maintenance of the utilised potential and a provision of Rs.150 per hectare for maintenance of the unutilised potential. For the maintenance of utilised potential of minor irrigation projects the memorandum suggested a provision of Rs.225 per hectare and a provision of Rs.75 per hectare for unutilised potential. Further, Rs.300 per hectare for special repairs of existing irrigation systems and a step-up by 30 per cent for maintenance of utilised potential of projects located in hill States have been recommended by the Ministry.

5.41 We understand that it has not been possible to maintain most of the major and medium irrigation projects at the desired level primarily due to paucity in budget allocation. The Standing Committee on Agriculture in their report for 1998-99 drew the attention of the Union Government on the imperative need for giving high priority to maintenance of these assets. We have adopted the norm, of Rs.450 per hectare for the maintenance of the utilised potential and Rs.150 per hectare for unutilised potential in the case of major and medium irrigation projects as suggested by the Ministry. Considering the cost differentials for maintenance in the hill States, an additional provision of 30 per cent is being made in their case.

5.42 On the basis of the data obtained from the Planning Commission, the utilised and unutilised irrigation potential at the end of 1999-2000 has been worked out for individual States. We have assumed that the States whose unutilised potential in 1999-00 was less than 10 per cent of the total would be fully utilising their potential by 2004-05. States with unutilised potential between 10 to 25 per cent could be expected to reduce the unutilised part to 5 per cent and those with unutilised potential exceeding 25 per cent will reduce it to 10 per cent by 2004-05.

5.43 The TFC had provided Rs.150 per hectare for the maintenance of minor irrigation projects in respect of utilised potential. There was no provision for any unutilised potential. It had also recommended an additional 30 per cent allocation for hill states and hill areas of other States. We have adopted a norm of Rs.225 per hectare for the utilised potential in respect of minor irrigation projects with a 30 per cent step-up for hill States and hill areas as suggested by the Ministry.

5.44 While working out the requirements for the maintenance of irrigation projects, it was noticed that in some States the TGR based estimates are higher than the norm-based estimates. For the sake of better maintenance, we have not disturbed the higher estimates. An increment of 5 per cent per annum has been provided to take care of the possible price increase. Annexures V.6 and V.7 indicate provision for maintenance of major & medium irrigation projects, and minor irrigation projects, respectively.

**Roads & Bridges**

5.45 The TFC had estimated the requirements for maintenance of roads and bridges of the States on the basis of norms suggested by the Ministry of Surface Transport (MoST) and information on road length of different categories furnished by the States. The requirements of funds thus worked out was found to be rather high and therefore, the Commission had limited the total provision for all the States to twice the amount provided by the Ninth Finance Commission. The State-wise distribution was made on the basis of the average of their percentage share in (a) the all-State norm based aggregate expenditure and (b) the estimated all-States total expenditure in 1994-95. The provisions for individual States so worked out were suitably modified to ensure that each State got at least twice the amount provided by the Ninth Finance Commission. It was also ensured that the provisions were at least 20 per cent higher than the expenditure in 1994-95. The Commission thereafter provided a graduated increase in the expenditure each year without affecting the totals.

5.46 We have obtained norms for maintenance of roads from the MoST. The Ministry has suggested zone-wise norms for total maintenance and repair costs in different rainfall areas for all categories of roads with traffic intensity based on the Report of Sub-Committee on Norms for Maintenance, October, 1999. These norms are at the 1999-00 level of prices and divided into two categories viz. i) maintenance and repairs (normal) and ii) maintenance and repairs (special). The norms for hilly areas are given separately in the Report. The norms received from the States were incomplete and dated in respect of large section of roads. It was therefore, considered reasonable to adopt norms provided by the MoST with some modifications.

5.47 Maintenance expenditure as per the MoST norms for normal repairs have been worked out in the above manner for the base year. For comparison, maintenance expenditure on roads for the year 1999-00 has been worked out on the basis of trend growth rate as well. In the case of States whose expenditure as per the MoST norms in 1999-00 turns out to be too high as compared to the projected estimates for 1999-00 on the TGR basis, the normative provision for the base year 1999-00 was limited to 125 per cent of the actuals of 1998-99. In respect of the other States, the projected expenditure for 1999-00 was allowed to remain undisturbed. Having firmed up the base year estimates in this way, a 5 per cent step-up was provided in each year to take care of inflation. We have also provided 30 per cent step up for the hill areas in our estimates. Annexure V.8 indicates the provision for maintenance of roads and bridges.

**Buildings**

5.48 The TFC had considered three factors for determining the requirements for maintenance expenditure of buildings during the forecast period, 1995-00. These three factors are (i) the trends in actual expenditure on maintenance of buildings, (ii) the steep increase that had occurred in the costs involved and (iii) the poor state of upkeep of the State government buildings. Keeping these factors in view, the TFC had provided a step-up of 250 per cent by 1999-00 on the norms followed by the Ninth Commission for 1994-95. Provision for each year for their forecast period was worked out taking inflation into account within an upper and a lower ceiling.

5.49 In order to estimate the State-wise annual maintenance expenditure on buildings in 1999-00, we have made a comparison between the figures worked out on the basis of the norms of the Central Public Works Department (CPWD) and the State Government norms. For this purpose, we have collected information related to residential and non-residential buildings from all States under two categories namely, civil and electrical.

5.50 In deriving the estimates of maintenance expenditure on buildings for the base year (1999-00) State-wise, we have compared the estimates based on the CPWD norms and the State norms. The lower of these two figures was compared with the estimates derived for the year 1999-00 based on TGR. We have not disturbed the TGR based estimates, if they happened to be above the norm-based figures. In other cases, we have adopted the norm based estimates subject to a maximum of 25 per cent step up on the 1998-99 figure for the actual expenditure of the State to derive the base year estimate. Starting from the base, the requirements for forecast period was worked out with a step up of 5 per cent each year to allow for inflation. Annexure V.9 sets out the provision made for maintenance of buildings.

**Committed Liability**

5.51 We are required, as per the terms of reference, to consider, *inter-alia*, maintenance expenditure of plan schemes completed by 31st March, 2000. The TFC was also required to consider the liability on account of maintenance of plan schemes completed by 31st March, 1995. It was pointed out by the TFC that the transfer of maintenance of plan expenditure to non-plan account in the middle of the Eighth Plan was problematic. The reason was that as per the guidelines of the Planning Commission, maintenance of plan schemes taken up during a five year plan period continues to be on plan account till the end of that plan and a transfer of maintenance expenditure of plan schemes completed during a given plan period into non-plan account is done only in the first year of the next plan. Yet, keeping in view the terms of reference, the TFC had taken 30 per cent of the plan revenue outlay for the year 1994-95 in the non-plan revenue account of 1995-96 as committed liability for the general category States and Meghalaya. In respect of the special category States other than Meghalaya, the provision was higher at 40 per cent on the consideration that these States did not transfer maintenance expenditure of plan schemes completed during the Seventh Plan period into non-plan account during the Eighth Plan. The Eighth Five Year Plan continued up to 1996-97. The TFC, however, did not provide for incremental requirement of funds for plan schemes completed during the last two years of Eighth Plan i.e. 1995-96 and 1996-97. It felt that the Planning Commission might consider making provision for such schemes till 1999-00 under the plan as was done for the schemes of two annual plans of 1990-91 and 1991-92.

5.52 There are conceptual as well as operational difficulties in providing funds for maintenance of plan schemes completed by 31st March, 2000. First, expenditure on running these schemes will continue to be covered under plan till 2001-02. Any provision for maintenance of plan schemes for the year 2000-01 on the basis of completed schemes as on 31st March, 2000 will result in over-estimating the total non-plan revenue expenditure of the States for 2000-01 and 2001-02 as the States following the guidelines of the Planning Commission will count such expenditure on the plan side. Second, since the forecast period of this Commission goes up to 2004-05, the requirement of funds under non-plan revenue expenditure will not be covered fully for the years 2003-05 if the plan schemes completed during the years 2000-02 are not taken into consideration. Considering all these, it appears appropriate to us that maintenance requirements for plan schemes may be provided only from 2002-03, on the basis of the estimated expenditure on plan schemes in 2001-02. This will cover plan schemes completed by 31st March, 2000 also.

5.53 There are a number of operational problems in providing adequate fund for maintenance of plan schemes. No specific information is available about plan schemes completed by 31st March, 2000 or to be completed by 31st March, 2002. Also, it is not clear how many of these schemes will be in operation after completion of the Ninth Plan. Information was sought from the Planning Commission and also from the States in respect of requirement of funds for maintenance of such plan schemes. Some information was received from the States in this regard, but these related mostly to the expenditure requirements in 1995-96 and 1996-97. These requirements were implicitly covered in the projection of non-plan revenue expenditure put forward by the States for the forecast period as they formed an integral part of non-plan revenue expenditure in the budgets of the States from 1997-98 onwards. However, the information in respect of requirement of funds for transfer of these schemes either in 2000-01 or in 2002-03 was not provided by the States. It is also noticed that there was no definite trend in the non-plan revenue expenditure of the States in the past to identify an increase of expenditure on account of transfer of plan expenditure into non-plan expenditure for the maintenance of plan schemes at the end of each Five Year Plan. In view of this, we feel that the norms adopted by the TFC i.e. 30 per cent of plan revenue expenditure for general category States may be continued as there is no large structural change in the composition of plan revenue expenditure in the last five years.

5.54 As regards special category States, it is noticed that the per capita plan expenditure is much higher than the all India average mainly due to large plan grants from the Centre. They have also been diverting a significant part of plan assistance for meeting non-plan expenditure in consultation with the Planning Commission. Further, most of them have been incurring maintenance expenditure under their plan with the approval of the Planning Commission. Since we are providing adequate grants to these States to meet deficits on non-plan revenue account it should not be necessary to divert plan grants for non-plan purposes. These States can thus meet committed liabilities on the plan side, as done in the past, without any adverse impact on their developmental expenditure. Hence, no provision has been made in the case of special category States for non-plan revenue expenditure for committed liability arising out of plan schemes to be completed by 31st March, 2002.

5.55 A related issue is the estimation of revenue expenditure of the States under the plan till 2001-02. Neither the States nor the Planning Commission were able to provide any firm or reliable estimates of revenue expenditure under the Plans completed by the end of March 2002. In the absence of any specific information from these sources, the only

alternative was to arrive at plan revenue expenditure at the end of 2001-02 on the basis of trend growth rates for the period 1987-99 over the estimated plan revenue expenditure for the base year 1999-00. This projection is only for the limited purpose of estimating requirements of committed liability. The requirements for committed liability arising from the Ninth Plan in 2002-03, 2003-04 and 2004-05 for the general category States have been worked out at 30 per cent of the estimated plan revenue expenditure by the end of 2001-02. State-wise projection for maintenance of plan scheme likely to be completed up to end of March 2002 worked out for 15 States for the years 2002-05 is placed at Annexure V.10. These amounts do not cover additional liabilities arising out of maintenance of Centrally Sponsored Schemes (CSS). A large number of these continue as plan schemes from one Five Year Plan to another in some form. Some of them get terminated at the end of a given Five Year Plan. The requirement of the States for maintenance of C.S.Ss. under "non-plan", therefore, is considered to be not substantial. Further, the Ninth Five Year Plan has envisaged transfer of large number of C.S.S. to the States. When this happens, we presume that such transfer will be accompanied with transfer of funds as well. In view of these considerations, we have not provided any separate fund on account of committed liability for maintenance of Centrally sponsored schemes.

**Monitoring of Maintenance expenditure**

5.56 We are required, under our terms of reference, to recommend the manner of monitoring expenditure for maintenance and upkeep of capital assets and maintenance of plan schemes. We have provided reasonable sums for the maintenance and upkeep of capital assets and for maintenance of plan schemes. We have noticed that maintenance of capital assets in the past has been poor not because of lack of funds provided by the Finance Commission but because of lack of adequate budgetary provision within the overall resources available to the States. The TFC had examined the reasons for the poor state of maintenance of capital assets and it was noticed by them that the main reason had been the exhaustion of a large part of the provision for maintenance expenditure by spending on establishment, leaving little for maintenance *per se*. They further noticed that the information system in the States was not geared for providing data regarding the exact amount spent on maintenance and on maintenance related establishment. It was further noticed that though the respective work divisions entrusted with maintenance had the necessary details, these were not reflected in the accounts or in any other reporting system in a fashion which would permit easy monitoring. The TFC had, therefore, suggested changes in the system of maintenance of accounts in such a way that the expenditure on the works component and the establishment expenses get reflected separately and are easily accessible. The details of the re-designed accounting system on maintenance expenditure proposed by the TFC as explained in Appendix 3 of their report dwelt upon the need for providing the new sub-heads and minor heads in order to make the accounts more transparent. From the replies of the States furnished to us, it is seen that these new heads have not been introduced so far. Transparency in accounting is imperative. Hence, we endorse the suggestion of TFC in this regard.

5.57 For monitoring, the TFC had recommended the formation of a High Powered Committee chaired by the Chief Secretary, with Secretaries of the Departments of Finance, Planning, Irrigation and Public Works and the Chief Engineers of Works Department as members. It was further stipulated that this Committee may review every quarter the allocation and utilisation of the funds for maintenance and ensure that allocated funds are not diverted to other areas. From the expenditure on maintenance shown in the accounts, it seems that nothing much has been done in this direction as expenditure levels still continue to be far below the amounts provided in the estimates of the TFC.

5.58 We have made reasonable provisions for the requirements of maintenance of capital assets and for committed liability arising from completed plan schemes by the end of 2001-02. The States should make budgetary provisions each year to a level at least equal to the provisions for maintenance recommended by us. We are of the opinion that this can be achieved only if States themselves take initiative to fix priorities and to provide sufficient budgetary support for maintenance. In this context, we reiterate the recommendation of the TFC in regard to the monitoring by a high power committee. The functioning of this committee at the state level should be activated. Further, the budgetary provisions and expenditure for maintenance of capital assets and for committed liabilities on plan schemes may be assessed by the Planning Commission at the time of assessment of their resources and estimation of the balance from current revenues. Planning Commission may consider devising a suitable mechanism for this purpose.

5.59 The fiscal position of the States is under acute stress. We believe that a mere tinkering with tax rates here and there, or small increases in user charges and marginal cuts in expenditure cannot be a lasting remedy to the problem. Structural changes both in revenue raising and expenditure are called for. Details of these are discussed in Chapter II. We have assessed own resources of the States and their non-plan revenue expenditure, keeping these aspects in the background. In the process, we have introduced norms, though in a limited way, which are considered reasonable to achieve. The results of our assessment of States' own resources are indicated in Annexures V.11 to V.35.