Source:- Educational Expenditure Needs of Large Indian States: A Normative View
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I. Introduction:

Provision of basic education has been recognized as a social obligation of the State. Compulsory primary education for all children up to the age of 14 has been enshrined in the Directive Principles of State Policy in the Constitution. Though education is included in the concurrent list, the major responsibility of providing educational facilities rests on the state governments. But the vast differences in literacy rate, variation in enrolment and dropout rates among states in respect of primary, secondary and higher education levels, calls into question beyond the sincerity with which the states have been pursuing their social obligation. As can be seen from Table 1, the proportion of revenue expenditure spent on education across the 15 large states for the fiscal year 1997-98 is quite uneven (the same is the case with previous years also). The uneven nature might be attributed to the unequal level of development and presence of social pressure groups in these states. It may be necessary and useful in this context to take a normative view of educational expenditure, to assess the extent of disparities in respect of states' expenditure on education. In this context, there is a need to develop a conceptual framework and evolve an appropriate methodology to classify the states on the basis of the deviation of actual expenditure from its normative level in respect of provision of educational services.

In the absence of any yardstick to measure the extent of relative emphasis laid upon the provision of education by the state governments, the actual expenditures may be considered as a proxy. In other words, the higher (lower) the per capita expenditure on education, the higher (lower) is the emphasis the state lays upon provision of education. But such a view may be misleading when there are significant cost variations in the provision of educational services across

the states. Thus, to meaningfully assess of the relative position of the states, it is necessary to ascertain the cost of providing a 'standardized' unit of educational service across the Indian states. One such way is to treat each state as an independent entity and estimate educational cost functions separately for each state based on state specific-factors such as student-teacher ratio, enrolment ratio and infrastructure facilities. However, an exercise of this kind eludes the possibility of a common basis for comparison across the states. In this context, estimating an all-India average (normative) cost of providing a standardized unit of educational service might prove to be more meaningful [see Rao and Agarwal (1992)].

The present paper proceeds from the supply (cost) side and attempts to estimate the normative expenditure levels with regard to the expenditure on education for 15 large Indian states for the fiscal year 1997-98. Based on the normative expenditures, this paper proceeds further to make a comparative analysis of the normative and actual expenditure levels with the objective of classifying states on the basis of the relative emphasis laid on the provision of education. For a meaningful analysis, expenditure on education is categorized into three heads viz., primary, secondary and higher. The expenditure considered in this study relates to total revenue expenditure, which is the sum total of non-plan and plan revenue expenditures.

In order to get reliable estimates for the expenditure functions, cross-section data pertaining to 15 different states are pooled for six years from 1992-93 to 1997-98. Pooled data, which deals with both the inter-temporal dynamics and the individuality of the entities being investigated in the study, provides qualitatively superior estimates. The analysis involving pooled data allows comparison between dissimilar

heterogeneous units (in our case states). The inclusion of cross-section dimension adds a lot of variability to the pooled data, thereby reducing the extent of collinearity among the variables. In addition, the degrees of freedom are also greatly enhanced. For the above-mentioned reasons, pooled data significantly contribute towards producing more reliable parameter estimates [see Dielman, 1989]. In this exercise we have employed the panel data model in respect of group-wise heteroskedasticity, cross-group error-correlation and autocorrelation[1].

The rest of this paper is organized as follows: Section II, captioned methodology, discusses the selection of variables and panel data models. Section HI is devoted to a discussion of results. Finally section IV, provides some policy implications and concluding remarks. Pooled regression models employed in this paper are discussed in Appendix -I.