OCCASIONAL PAPERS

(11)

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NIEPA Occasional Paper

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The Editorial Board acknowledges with gratitude the comments of the referee(s) of the paper.

The opinions expressed in the Paper are those of the author and do not necessarily represent the views of the Editorial Board or of the NIEPA.

INTER-STATE VARIATIONS IN FINANCING OF EDUCATION : A REGIONAL PERSPECTIVE

C.B. Padmanabhan

Abstract

There has been many efforts for removal of inequalities in Indian education and it is well known that complete equality has not yet been achieved, even some of glaring inequalities have not yet been wiped out. In fact, there is a certain lopsidedness in approach for removal of inequality in so far as inequalities of a socio-economic nature are concerned which receive relatively more attention than other inequalities. Not that socio-economic inequalities have been wiped out, far from it. But another kind of inequality of a spatial nature- a regional one-has not received even that much attention.

The monograph under consideration is an effort to focus attention on regional dimension of inequality or spatial dimension which is borne out in the absence of rational criteria for allocating resources among different states of country or within a state. Every state has a number of district and allocation to such districts is not based on the needs of individual district. Consequently, there is a great deal of inequality even in such a basic matter like per capita expenditure on education. The present monograph has described the situation in this respect and suggested solutions for overcoming this problem of inequality by way of changes in planning methods.

Inter-State Variations in Financing of Education : A Regional Perspective

One of the important ways in which inequalities in educational opportunities arise is by the distribution of access to facilities for gaining entry into primary, secondary or collegiate institutions. There are glaring imbalances of educational development in different parts of the country. To remove such inequalities, the Education Commission of India 1964-66 had advocated deliberate policies of equalisation of educational opportunities and educational development in the different districts of the country. Five other sources of inequalities were identified by the Kothari Commission and all the steps to be adopted for overcoming the inequalities called for greater concern for financing of education both in the magnitude and the manner of release to different parts of the country- state, districts, block or tehsils and different institutions.[1] The object of this paper is to focus attention on the inter state and intra state variation in financing, wiping out such disparities is an essential pre-requisite for reaching the goal of equality of opportunity in Indian education. A regional perspective is advocated in order to bring about reduction in such inter state and inter district disparities in educational financi g. By this is meant an approach based on the determination to develop different regions within the country and wiping out regional imbalances. The science and techniques of regional development are adequately developed to be able to take care of such problems.

The question of equality of opportunity and equality in Indian education has been debated and discussed quite extensively. There are several problems like equity and in terms of what is to be equalised - resources available for Indian education in terms of per capita expenditure or per student expenditure for different levels, of trained teachers or pucca building i.e. inputs o process of education or outputs from the system? Is it equalisation of facilities for education or equality in the distribution of results?[2] Further, Elementary Education and effective literacy have not yet become universal and under such circumstances should we not focus atention on effective universalisation and removal of illiteracy? Equalisation for what - of expenditure or fiscal efforts and fiscal capacity. Further what is the unit upon which attention is to be focussed - student or region, or tax payers or family or socio-economic groups? It is the contention of this paper that there has been a lop sided emphasis in pursuit of equality in socio-economic groups like SC, ST

and girls and a relative neglect of a regional approach to equalisation of educational opportunity though the Kothari Commission has highlighted it as the very first source of inequality and emphasised the need for widest dispersal of educational facilities. Indeed, one cannot deny that there has been adoption of such approaches here and there but by and large the adoption of a regional approach to financing of education is conspicuous by its absence. We emphasised the need for such a regional, spatial approach to financing of education.

The main concern of this paper is with the narrower ideal of fiscal equalisation which assert 'that state programme of school support should furnish each child with a minimum of educational opportunities and that the tax burden for the support of these schools should be borne by individual in relation to their ability to pay'.[3]

(Stranger & Haig 1923)

In any such study on fiscal equalisation of educational opportunity the focal points of research will have to be inequalities of expenditure, tax effort, and fiscal capacity.

However, in India, states only have the tax levying powers of taxes apart from the centre and therefore we have not been able to consider the effort and fiscal capacity in regard to regions like district except local bodies to some extent.

In the first part of this paper, we shall indicate the extent of disparities in educational financing among the states and districts. In any effort for planning for reducing disparities it is necessary to know (a) how the disparities have evolved in the past (b) what are the current trends in disparities (c) how are such disparities related to disparities in development in general. We have looked at the trends in the last 5 years and scrutinised the inter district disparities for 1970-71 and 1976-77 as they have evolved and what has happened to regional disparities. We have tried to measure them with the help of statistical techniques like standard deviation and co-efficient of variation, incidentally to show the disparities are not neutral to the choice of measurement method. In the second part, we have discussed methodological issues like what constitute a region, difference between analytical and programme regions and methods of measuring disparities. The third and concluding part has discussed policy conclusions and recommendations for action in order to reduce and wipe out regional disparities in financing of Indian education. The data

sources are mainly the publications of Ministry of Education, Government of India.

I

States in India vary regarding the financing of education. First of all, on the basis of per capita budget expenditure in 1983-84, the average for the country was Rs. 112.2 and it ranged between Rs. 49.5 for UP to Rs. 166.1 for Manipur, Rs. 142 for Himachal and Rs. 130.4 for Kerala. Secondly, as a percentage of th revenue budget the average for the country for the states was 24% and the range was 36.2% for Kerala and 12.7% for Sikkim. Thirdly as a percentage of state domestic product it ranged between 3.1% for Haryana to 7.2% in Kerala. (Table No.1).

Such inter-state disparities in educational financing can be looked upon and has been looked upon in many ways. They can be viewed as responsible for inter state variations in educational development itself. But this would call for assumption regarding the relationship between financing and its impact on educational development. Does more financial allocation lead to faster and greater educational development(OECD).[4] Indeed to certain extent lack of finance is likely to result in inadequate development of education. But while the need for more finance for quantitative educational development is easily accepted, the urgency for more resources for better quality education is not so easily accepted. This is because the influence of cost of finance is not yet quite clear.[5]

Therefore in studying the inter state disparities, in financing vis-a-vis inter state disparities in educational development itself, one has to identify the very role of finance factor in influencing educational development.

A second approach to the study of inter state disparities in educational financing is in terms of efforts and abilities of the state. The efforts are measured in terms of per capita, percentage of revenue budgets and percentage of SDP. It is not so clear as to what constituted ability of a state or country to finance education.[6] It is tempting to regard national or state per capita income as indicators of ability. In recent years there has been many research efforts to study the relationship between income and the educational expenditure. One of the earlier efforts has concluded that 'educational expenditures do not appear to be uniquely related to income. Income is clearly as perhaps the major determinent but it is

not the sole determinant or educational expenditure. Difference in planning or manner of financing or any other of a number of factors may in fact be operative and of more importance than if there were a unique relationship between income and educational expenditures'.(Blaug).[7]

As the SDP's for all the states and the country have grown though at different rates, one can find a positive correlation between percentage of GNP devoted for education and growth of GNP. Of course they are not related as cause and effect. However, when one considers the percentage of GNP and per capita GNP, cor elation co-efficient will not be found very high. In 1974 for 120 countries it was only 0.55. This implies that for an equivalent per capita GNP one can find efforts for educational development twice or thrice as much. There is agreat freedom of choice for countries with same per capita GNP and efforts will depend not only on GNP per capita, but also on mobilisation efforts which will in turn depend upon acceptance of objectives like reducing regional disparities.

There have been other studies which have tried to take note of factors influencing efforts & abilities like the one by Indian education commission which identified the natural handicaps or advantages affecting the developm nt of education as density of population, urbanisation, population of backward classes, traditional opposition to girls' education, population of ch ldren to be educated to, population in 15-50 age group and hitorical circumstances. Yet another approach is to look at the variations in the inter-state social consumption and explore the determinants of such variations.[7]

Whatever approach one may adopt, the need for removing disparities will be hardly denied. In the seventh plan of India great concern has been expressed at the persistence of regional imbalances and the need for wiping out such imbalances and improving the quality of education, special mention is made of the nee' for regionalisation of financial policies in different sectors. Resources available for education in the country or any region within the country can be human, material or financial though financial resources are basic. Since very often resources are regarded as proxy to the quality of education, their distribution among regions is of great significance in considering regional disparities. The resouces which should be taken note of for this purpose are pupil teacher ratio, percentage of qualified teachers, other indicators of availability, condition and use made of financial and other resources.

Table No.1 shows the per capita budgeted expenditure for India and the states. Though the average included UT's figures also, problems of UTs are not considered in this paper. A look at the position for different states shows that in 1983-84, per capita expenditure on education ranged between Rs. 22.3 for Lakshadweep to Rs. 49.5 for U.P. For India as a whole, the per capita expenditure was Rs. 81; - a figure which was exceeded in all UTs and 18 states though for 6 states it exceeded national average by less than Rs. 10.

In 4 states of Bihar, Karnataka, Madhya Pradesh, and Uttar Pradesh which are educationally backward - per capita expenditure was less than national average. Uttar Pradesh has the lowest per capita expenditure on education.

We may also note the way in which the government expenditure on education has changed on the basis of percentage of revenue budget. Between 1979-80 and 1983-84, it has recorded a fall from 26.7% to 24% as is indicated in Table No.2.

Yet another indicator for comparing the different states in regard to disparities in educational expenditure is the percentage of GDP in the context of total government expenditure as percentage of SDP e.g. Kerala has only 22% of SDP as total state budget and yet it spends 7.2% of SDP while J&K has 51.2% public sector outlay and yet 7.2% of SDP only as expenditure on education and training. Table No.2 has given the position for different states.

In order to study the inter-state disparities in a meaningful way Table No. 3 has tried to compare the position between 1976-77 and 1983-84 for different states. An analysis of this kind will be one of the required steps needed to identify the underlying factors leading to inter regional disparities. One can identify three such factors - historical or non-uniform distribution of national resources or man made social political and economic factors.

A perusal of Table No. 3 shows that the per capita expenditure for the states in the country has gone up from Rs. 40.7 to 112.2. The minimum expenditure has gone up from Rs. 17.7 to 49.5 in UP. The maximum has gone up from Rs. 100.3 in 1976-77 to Rs. 180.2 in 1983-84. The maximum minimum ratio has gone down from 5.7 to 3.6. Though the standard deviation has gone up from 22.9 to 52.4, the co-efficient of variation has gone down from 56.3 to 46.7.

Table No. 3 shows an increase in the national mean of per capita expenditure at current prices, the absolute differences between what one may call the most favoured state and the least favoured one has increased from 82.6 to 151.3. But there is a considerable drop in the maximum minimum ratio from 5.7 to 3.6. The range of variation and maximum minimum ratio can only take care of values of the states at either end and of the distribution thus ignoring the differences between the values of other states.

Hence the above measurements are inefficient in measuring disparities and other measures give a more precise account of each states deviation from the mean. From the point of regional disparities, it is necessary to see how each states' per capita expenditure has deviation from the means.

Standard deviation and co-efficient of variations give precise measurement of the deviation of each states from the mean. We have given the same weightage to each region, but some states are larger than others and we have to take into account the fact that the theoretical educational expenditure which depends upon state income may be more than in others, we have not done this.

The S.D. has risen from 22.9 to 52.4 but the means for the country has risen from 40.7 to 112.2. Therefore, in order to compare the states we found the co-efficient of variation which has gone down from 56.3 to 46.7. This shows that the dispersion of the ranges for different states relative to the country has narrowed down though the S.D. has gone up from 22.9 to 52.4.

In order to ascertain the extent of regional disparities we have to look at the position within every state by districts or by blocks or talukas which has been done below. Table No.4 to 16 show the per capita institutional expenditure, the range between the highest and lowest per capita expenditure among the different districts, the ratio between the highest and lowest per capita expenditures' standard deviations and co-efficient of variations for the states of Tamil Nadu, Punjab, Andhra Pradesh, Assam, Rajasthan, Bihar, Kerala, Karnataka, Maharashtra, Gujarat and U.P. For states like Tamil Nadu, Punjab, Assam, Kerala Karnataka, Maharashtra, co-efficient of variations have gone down from 54.4, 42.1, 45.0, 27.0, 45.8 and 33.4 to 52.4, 39.1, 41.6, 14.0, 36.7, and 29.0 respectively. For Gujarat it has remained at 41.4% for 1970-71 and 1976-77. For Andhra Pradesh, Rajasthan, Bihar, coefficient of variation has gone up from 31.8, 44.0 and 47.0 to 51.3, 48.3 and 50.3.

In all the states, the average per capita expenditure has gone up from 20.04, 20.82, 32.4, 13.85, 14.77, 7.96, 26.81, 16.68, 25.02, 19.56 Rs. to 56.74, 61.3, 90, 54.81, 51.12, 50.4, 53.9, 77.67, 42.38 and 48.95 between 1970-71 and 1976-77 for Tamil Nadu, Punjab, Andhra Pradesh, Assam, Rajasthan, Bihar, Kerala, Karnataka, Maharashtra and Gujarat respectively.

In order to understand and appreciate better inter-state variations in educational expenditure, Table No. 17 has disaggregated total revenue receipts into own tax revenue, non-tax revenue, transfer from centre and the total non-plan educational expenditure is also given for the different states. It has looked at educational expenditure from different points of view as a percentage of states own tax revenue of sales tax only and of total non-plan revenue expenditure. The largest percentage of states own tax revenue is spent on education by Assam and lowest is by Haryana and the average is 47.2%. For the country out of sales tax, 17.6% of sales tax is spent on education by Assam and only 42.9% of sales tax by Maharashtra. Average for the country out of sales tax is 69.9%. Out of total non-plan revenue expenditure, 24.4% is on education for the country as a whole. 19.2% was for Haryana and 35.1% for Kerala. Capital expenditure for 15 states varied from 110.15 for Kerala to Rs. 46.72 for U.P. 15 big states are in the above position while 7 small states - special category states like Andhra Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Nagaland, Sikkim & Tripura are in a different position. Such an analysis will reveal states which need more assistance for educational financing. Also Table No. 19 shows the inter-state variations on the basis of tax income for educable population which is more helpful as a measure of educational effort.

Methodological Issues regarding definition of region methodology, for measuring disparities. When the states were chosen for considering inter-state variations in educational financing between 1976-77 and 1983-84, it was found that the mean per capita expenditure, difference between the maximum and minimum, the range the ratio between maximum and minimum as well as standard deviation have gone up from 40.7 Rs. 100.3, 17.7, 82.6, 5.7, 22,7 to 112.2, 49.5, 180.2, 131.3, 3.6 and 52.4. The standard deviation has increased. The co-efficient of

variation for the country as a whole has gone down from 56.3 to 46.7 thereby indicating that the regional disparity in educational financing has gone down.

However, when the comparison is made of the states on the basis of per capita expenditure in districts, the position is different.

Though for many states co-efficient of variations has gone down for Andhra Pradesh, Rajasthan, Bihar, CV has gone up from 31.8, 44.0 and 47.0 to 51.3, 48.3 and 50.3. For Gujarat it has remained at 41.4 between 1970-71 and 1976-77 when the position at the block level is considered, it is different.

This raise the question for consideration of a region, should it be a state or district or tehsil.

For purposes of analysis of disparities, we can use units ranging from households, the tehsils or blocks or revenue or educational districts to the state of the country. These are analytical regions which have to be separately identified from programmed regions which are meant for purposes of action for removal of disparities.

Further, it is necessary to clarify the very goal of reduction of disparities - does it mean that every institution on block or district should have the same amount of expenditure, does equal educational opportunity imply provision or access equally to education or equal distribution of the results of education. Also there is the question of which resource is to be equally distributed teachers, or equipment.[9] In the present strategy for educational development in India, provision of facilities has been given a prominent place. Accordingly even though, it is recognised that UEE involves provision of facilities universal enrolment and universal retention, in actual practice universalisation does not even envisage retention in operational terms. The norms envisage a primary school within an easy walking distance of 1 km. from the homes of children and a middle school within a distance of 3 kms. from homes of children. The IV All India Education Survey found 964, 064 habitations in the country with population between 110 to 5000 and above. The provision of primary and middle schools has been given below :

1. Primary schools/sections are available within a distance of 1 km. in respect of 98.83% population for 773,997 habitation.

2. Primary schools/sections are also available within a distance of 1.1 to 2 km. in respect of another 124,679 habitations.

3. For 65,988 habitation primary schools/sections are available at a distance of 2 km.

4. For 78.85% of population middle schools/sections are available.

5. For another 180,051 habitations middle schools at a maximum distance of 5 km.

6. For the remaining 139,642 habitations middle schooling facility is available at more than 5 km.

Assuming that the goal is the distribution of equal educational opportunity four important basic strategies have been identified by some writers:

1. educational resources to allow every child to reach his potential;

2. unlimited subsidy for higher education;

3. a minimumm amount of achievement normally by every person; and

4. a parity of achievement by disadvantaged school groups.

On the question of effective UEE in India, it is recognised that there are three basic elements viz., universal provision of schooling facilities, universal enrolment and universal retention and some other countries have included successful completion also as an integral part of universalisation. Experience has so far shown that enrolment of children is relatively easy, but it is their retention in the elementary education cycle till they complete class 8 that creates difficult problems. The progress has not been satisfactory due to the fact that the infrastructure is not adequate in quite a few states'.[12]

(P.12 C.A.B. meeting, 1985)

For the country as a whole drop out at primary stage has been 63.1% and at middle stage 77.1%. Only in 6 states and UTs at primary stage drop out has been controlled to below 50% as against 63% for the country as a whole.

Tamil Nadu	47.2
Punjab	45.3
Haryana	41.6
Andaman & Nicobar Islands	40.0
Assam	38.7
Pondicherry	30.9
Himachal Pradesh	0.8
Lakshadweep	21.5
Chandigarh	20.5
Delhi	17.4
Kerala	6.2

In UEE, equalisation of accessibility is prominently envisaged in terms of the distance children have to travel for attending primary schools middle schools and high schools.

But of equal relevance is the concept of economic accessibility based on the idea that children are unable to attend schools due to financial difficulties and they spring from the inequalities of a socio-economic nature.

Measurement of such economic accessibility raises problems because it calls for information concerning cost of schooling as such (fees, if any) other costs to the family (school supplies, transport, school meals boarding accommodation and opportunity cost of staying on at schools).

In India with a large population below poverty line opportunity cost is a decisive factor because in the country side the child labour is contributing to real output and for the poor families such foregone earning have great utility.

In adopting a regional approach to wiping out inter-state disparities in educational financing, the above methodological issues have to be resolved and the present practice for removing regional imbalances in educational financing modified. We shall first refer to the present practice and then take up for consideration some of the above issues.

In a federal country like India, the problem of regional disparities can be resolved through the federal government financing regional development. Through federal fiscal transfers government can equalise the resources among the different regions. Such transfers take the form of devolution of taxes and tuition grants, grant-in-

aid, loan, subsidies etc. The policy instrument for this purpose is (1) statutory transfers through Finance Commission of India (2) non-statutory transfers through Planning Commission. It is well known that, by and large, educational financing is not given any special consideration under the above framework except the latest Finance Commission of India which gave special award for educational backwardness by recommending grants for reduction in the number of single teacher schools and those without pucca buildings to the national minimum. At best these can only take care of macro and meso region. The problem of disparity at micro region has also to be taken care of through appropriate financial transfers e.g. wherever local bodies exist, there has to be transfer to them in appropriate ways through state level commissions for assisting local bodies. All these pre-suppose the acceptance of the need for reducing regional disparities in educational financing. At present, states are divided into special and non-special category which are further sub-divided into Group A and Group B. From the point of view of availability of resouces for development eight Indian states - Assam, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Nagaland, Sikkim, Tripura are considered special category states despite their postion on the basis of per capita income. The non-special category states are further divided into 2 groups Group A - Punjab, Haryana, Maharashtra, Gujarat, Karnataka, West Bengal, Kerala, Tamil Nadu - Group B - Andhra Pradesh, Rajasthan, Orissa, Madhya Pradesh, Uttar Pradesh and Bihar.

Are the above regionalisation arrangements adequate to take care of regional imbalances in financing of education. We can distinguish between analytical and programme region. For the purpose of giving central financial assistance to the states, the above is the programe region. There are two respects in which the above classification can be made to take care of requirements for reducing regional imbalances in education and they are (1) taking into account the educational financing part in these states and (2) considering the situation within the states by the states themselves and appropriately adjusting their financial policies. It is in this context that analysis of the position regarding educational development by districts or blocks or tehsils became quite relevant. There has to be increasing use of the idea of analytical regions to diagnose the situation e.g. we have noted the position in Karnataka among the districts and within districts among tehsils. Out of 175 talukas, 69 were developed, 30 average, 56 extremely backward, and 22 highly backward in education. In the above categorisation financial factors have not been included in the study which has identified backwardness in education.

Having decided on what is a region, the next question is which resources to equalise:

a. which characteristics of students are most closely associated with learning;

b. which region has more students with those characteristics;

c. what it is that planners can do about it?

III

The foregoing sections have brought out the existence of a great deal of disparities in educational financing on the basis of per capita expenditure in districts. There has not been substantial reduction in such disparities between 1970-71 and 1976-77. Even per student expenditure at primary and middle schools show a great deal of variations from one state to the other among the different districts. In order to realise one of the major objectives enshrined in seventh plan of reducing regional imbalances, it is necessary to adopt specific policies directed to reducing them.

The following are some of the specific steps to be adopted by the state governments:

1. In planning of education in the states and setting up targets for enrolments, very often there is a tendency to regard what is given in the five-year plans of India at national level as firm targets. This should not be the case. The Plan targets are not operational targets and they have to be laid down by the states on the basis of the situation in different localities. Thus, the 7th Plan has said that the state level targets are derived from macro aggregate targets and they should be converted into micro level targets by taking into account the existing strength in schools, the catchment areas and the number of children yet to be enrolled. Only with this kind of micro planning within a macro planning framework, there can be effective plan implementation.

In fact once the state level plans have been drawn up, the resources available for that plan would also have been indicated in the 5 years plan in order to ensure that adequate resources needed should be available. Therefore, any plan before its implementation must be tested for financial feasibility. For this purpose, a state plan should be disaggregated into 5 components viz:

a) As a horizontal disaggregation of the global plan i.e. decomposition of the plan into its major regional elements;

b) As a vertical disaggregation of the plan in terms of the time periods involved in its gradual realisation;

c) As a functional (partial) disaggregation of the plan into components which represent problem areas such as vocational training, or imigration of skilled manpowers, etc.

A regional break down consists in the simultaneous allocation of a state's educational objective to a number of territorial units. This process can be considered as and essential intermediate step between the formulation and realisation, of the state's plan. At this stage ofdisaggregation, one may conclude that the targets laid down in the states' plan are not attainable under the conditions laid down in the plan like the total cost of the plan.

If the resources needed are less than the resources available, one of the following will have to be done :

a) The targets may have to be scaled down;

b) Additional resources may have to be mobilised wherever possible.

c) Efforts should be made to make-effective use of available resources wherever slack exists.

2. In this context, the proposed regionalisation in financial policies contained in 7th plan approach document, or the proposal to decentralise and creation of a spirit of autonomy for educational instiutions contained in NEP 1986 should be highlighted. What does decentralisation imply? Education in India is in concurrent list and centralisation versus decentralisation is not the real issue, rather it can be conceptualised at shared control - a synthetic position whih sees neither of the traditional roles of power enjoying monopoly over all educational decision.

Shared control implies shifts of responsibilities in either direction to entitites best equipped to perform them. This is very much applicable to financial responses for education in general and compulsory education in particular.

The purposes of sharing control are varied, multi-dimensional and complex and they are (a) ability for speedier decision making (b) equalising opportunities (c) adopting the educational content to the beneficiary needs (d) encouraging greater community participation.

Under such a scheme of shared control, resource management can function effectively with resource allocation by the states and financial management at the regional level. At local level, there can be mobilisation of additional resources with such a scheme of shared contol NEP 1986 resolve of effective UEE. can be achieved.

In this connection, the role of local bodies in undertaking and mobilising resources for financing elementary education & adult education deserves special mention. Local bodies occupy an important place in the fiscal structure of India as Table No. 18 shows. With appropriate inter governmental transfers, allocation to districts can become need based. removal of illiteracy and making UEE effective should be given a prominent place in the strategy for financing because they influence positively the course of developmenet.

There is going to be District boards of education and District Institution of Education & Training at district level which can strengthen the process of planning at district level. Such district boards will participate in planning co-ordination monitoring & evaluation. The DIET according to NPE 1986 will be able to provide in service training to teachers and for these working in non-formal and adult education.

2. Normative Approach : As the NPE 1986 has stated, there has to be a long-term planning and management perspective of education and its integration with the country's developmental and manpower needs right from macro up to institutional level. Only with such a long-term perspective, there can be constant improvement in the process of education in all its aspects. In particular for improving the allocation & Utilisation processes of resources such long-term perspectives are imperatives.

Already there are norms regarding workload of teachers, building, etc. but they are quite unrealistic in many respects. The grant giving formulas do not encourage the effective use of available resources. Norms should be based on surveys of the actual condition that exist in different schools on the one hand and on the actual needs of different schools on the other. The primary schools in India are not well- equipped according to IV All India Educational

Survey and studies have shown that school conditions are responsible atleast partly for dropouts. It is, therefore, appropriate that NPE 1986 should have envisaged a phased drive symbolically called operation blackboard to improve primary school by providing at least 2 reasonable all weather large rooms and toys, black-boards, mats. etc. community will be involved fully and school buildings will be provided under other beneficiary oriented programmes like NREPL & RLEGP funds.

On the basis of norms worked out as indicated above, total requirements of all the areas in terms of physical financial and staff needs should be worked out to prepare a perspective plan for the state and district. Requirements of resources for each district should be on the basis of norms included in the perspective plan and field staff and local committees should participate in the plan formation. It is found that most of the states follow a similar pattern of districts planning proces with minor variations in the sectoral outlays communication to the districts in most cases is a matter of state level initiative with district level support.

At the block level it is little more than a rather disjointed exercise in implementing such schemes through a multiplicity of departments. Maharashtra, Gujarat, Jammu & Kashmir, Uttar Pradesh, Karnataka have arrangements for making allocations to the districts and such practices should be followed by other states. Defining the scope of district planning bodies and their composition in regard to the methodologies adopted for allocation of resources and budgeting procedure this should be improved taking the needs of the districts. There are unique features and subtle differences in their pattern for the above states, some of the details in the pattern are so unique that this cannot be treated as replicable models. Local variations will have to be there.

Some of the states like Gujarat are earmarking for each ditrict for micro level planning e.g. in Gujarat 55% of the entire state plan is allotted for district level schemes. From out of 55%, 30% are to be used for normal state schemes prepared by the District Planning Boards and approved by the state level departments, 20% are earmarked for planning and implementation by the district planning boards and district staff. The remaining 65% not allotted for district level schemes is planned for at the state level as before.

Districts with low per capita income and heavy drop outs should be entitled for special assistance for improving school quality. There may be districts which have high per capita income and resources

but have high drop out rate-evidentaly shortage of resources may not be responsible for drop out or there may be districts with low resources but good performances. This strategy will ensure that the goal of special assistance will be specific and easily measured. Special assistance to a region should not be confused with general assistance for all regions, an equity strategy consciously directed to one area but not another.

Lastly, efforts must be made to ensure that every institutions has a minimum level of expenditure at least for primary schools in spite of the resource constraints of that region or state. In order to ensure that adequate resources are mobilised by the wealthy districts and enough resources transferred to backward districts, there has to be the division of a state into blocks depending upon their levels of per capita income. The block or division will be the one with the highest per capita income which will mobilise local resources and getting matching grants from the state and the last block will receive special assistance from the state and even from the centre.

Table No. 19 shows that state government and their expenditure is more than the sum of central and local governments. The importance of state government has grown more at the cost of centre rather than local due to the devolving of funds to the states. Local governments occupy an important place though their importance has fallen due to States taking over many of the functions. There is need for increasing the importance of local bodies and transferring more resources from the greater decentralisation at the local body level. The foundations for decentralised development planning must be built on the basis of clearly democratising the functions that are not effectively performed at each level - village, block or district from these that must be entrusted to higher levels for technical and organisational reasons. Of course financing can be done by the centre, state or local bodies because financing and administration are separate.

Ideally the representative index for each state would be 1. To reduce the inequalities, one of the three following could be done :

1. to maintain the total percentage participation rate but effecting a redistribution to achieve an index of one for each district or state;

2. raise the total participation by 10% with no change in the index for each state or district; and

3. raise the total participation rate say by 10% with no change in index for each state or district.

In this manner the state can work out the targets for each state and districts. States differ regarding the area and the size of population. Uttar Pradesh has 16.21% of total population while Bihar has another 10.21% Maharashtra has 9.17%, Madhya Pradesh has 7.06%, while Kerala has 3.71.% only. On account of such uneven redistribution of population, there is the possibility of schools being either over-populated or less than viable for enrolment and thus equity is maintained. There has to be pre-planning for the location of institution. This is particularly needed for Elementary Schools. For this purpose we can calculate the percentage of population in each state and district, then we can calculate the percentage of total enrolment in each, represented by enrolment and the rank order of the states and districts from the highest to the lowest.

Table No. 1

Per capita budgeted expenditure for different states

States	1979-80	1980-81	1981-82	1982-83	1983-84
Andhra Pradesh	44.8	47.0	62.6	74.1	85.8
Assam	39.8	43.7	50.4	53.2	82.2
Bihar	30.6	30.4	40.4	51.2	69.2
Gujarat	53.7	59.7	70.7	76.0	83.5
Haryana	56.4	56.5	72.5	80.0	94.9
Himachal Pradesh	92.4	97.1	112.4	120.1	142.0
J & K	72.8	77.5	86.3	88.9	128.7
Karnataka	53.8	55.1	60.9	74.5	80.8
Kerala	83.7	83.6	101.8	119.5	130.4
Madhya Pradesh	35.1	32.6	42.6	49.4	56.7
Maharashtra	62.1	65.6	72.5	83.9	96.8
Manipur	95.3	120.5	128.3	150.6	166.1
Meghalaya	59.5	76.2	83.7	97.3	108.5
Nagaland	155.4	160.2	180.4	206.5	269.7
Orissa	40.5	42.0	48.5	57.1	121.2
Punjab	72.9	74.2	82.7	100.0	121.2
Rajasthan	53.4	44.1	51.1	64.7	83.1
Sikkim	133.9	100.0	15.5	142.2	180.2
Tamil Nadu	55.5	54.2	61.9	74.6	88.8
Tripura	66.4	76.7	83.8	93.5	146.1
Uttar Pradesh	34.3	36.5	35.4	40.5	49.5
West Bengal	47.9	52.7	56.2	75.5	3.2
All India	48.7	49.9	57.7	68.2	81.0

Table No. 2

States	% to total budget SDP	% of Education budget to GDP SDP	% of Education Training GDP SDP	Year
Andhra Pradesh	19.9	4.0	5.1	1983-84
Assam	18.1	4.0	4.4	1983-84
Bihar	17.1	4.2	4.7	1983-84
Gujarat	16.7	3.2	3.8	1982-83
Haryana	14.5	2.6	3.1	1983-84
Himachal Pradesh	29.2	6.0	6.5	1983-84
J & K	31.2	6.1	7.2	1982-83
Karnataka	20.7	4.0	4.8	1982-83
Kerala	22.0	6.4	7.2	1983-84
Madhya Pradesh	18.6	3.2	3.9	1983-84
Maharashtra	16.2	3.1	3.7	1982-83
Manipur	42.8	9.9	11.0	1983-84
Meghalaya	47.4	6.8	7.4	1983-84
Orissa	22.7	3.7	4.3	1982-83
Punjab	12.3	2.7	3.1	1983-84
Rajasthan	16.1	3.7	4.1	1983-84
Tamil Nadu	23.2	5.0	6.0	1982-83
Tripura	12.2	6.1	7.0	1980-81
Uttar Pradesh	13.9	2.9	3.3	1983-84
West Bengal	16.3	-	-	1982-83
All India	33.4	3.4	4.2	

Table No. 3

Comparisons of Disparities in per Capita Expenditure at state level

	1976-77 (Rs.)	1983-84 (Rs.)
National Means	40.7	112.2
Minimum	17.7	49.5
Maximum	100.3	180.2
Range	82.6	131.3
Maximum/Minimum Ratio	5.7	3.6
Standard Deviation	22.9	52.4
Co-efficient of Variations	56.3	46.7

Table No. 3A

Inter-State Variations in Educational Expenditure as Percentage of Budget Revenue

State	1979-80	1980-81	1981-82	1982-83	1983-84
Andhra Pradesh	24.9	25.2	26.6	26.9	23.2
Assam	30.7	27.8	27.5	27.5	28.1
Bihar	31.4	29.4	28.8	30.0	33.2
Gujarat	29.5	23.2	24.4	23.1	22.2
Haryana	21.2	19.9	21.3	21.0	21.3
Himachal Pradesh	24.2	25.5	20.1	23.0	17.9
J & K	23.8	18.9	18.0	14.8	18.9
Karnataka	25.9	21.9	22.6	23.5	21.1
Kerala	38.7	38.5	37.2	36.1	36.2
Madhya Pradesh	25.8	18.4	22.0	20.3	18.2
Maharashtra	23.7	22.1	21.8	21.3	21.3
Manipur	21.1	22.9	18.7	14.3	20.3
Meghalaya	17.9	17.9	17.7	1[illegible].8	14.6
Nagaland	14.6	14.9	14.5	14.5	14.7
Orissa	23.9	1.5	24.4	25.6	26.7
Punjab	18.1	25.6	25.6	27.3	26.7
Rajasthan	25.2	22.5	25.3	26.9	28.4
Sikkim	10.4	11.9	12.5	12.7	12.7
Tamil Nadu	29.3	28.2	26.1	26.4	26.0
Tripura	25.0	19.2	21.2	18.8	18.5
Uttar Pradesh	27.1	26.0	21.8	20.6	21.9
West Bengal	24.5	25.9	25.4	26.8	26.5
All India	26.7	24.5	24.5	24.3	25.0

Table No. 4

Inter-district Variations (Andhra Pradesh)

		1970-71	1976-77
1.	Per Capita Expenditure	32.40	90.00
2.	Range	24.60	75.80
3.	Ratio between highest and lowest	4.10	6.30
4.	Standard Deviation	5.41	14.92
5.	Co-efficient of Variation	31.80	51.20

Table No. 5

Inter-District Variations
(Assam)

	1970-71	1976-77
Per Capita Expenditure	15.85	28.65
Range	10.77	38.16
Ratio between highest & lowest	-	-
Standard Deviation	6.25	22.90
Co-efficient of variation	45.00	41.60

Table No. 6

Inter-District Variations
(Bihar)

		1970-71	1976-77
1.	Per Capita Expenditure	7.96	20.40
2.	Range	14.20	40.40
3.	Ratio between highest and lowest	3.80	5.00
4.	Standard Deviation	3.75	10.27
5.	Co-efficient of variation	47.10	51.00

Table No. 7

Inter-District Variations
(Gujarat)

		1970-71	1976-77
1.	Per Capita Expenditure	19.36	48.96
2.	Range	30.08	66.80
3.	Ratio between highest and lowest	4.70	4.10
4.	Standard Deviation	8.12	20.42
5.	Co-efficient of variation	41.40	41.40

Table No. 8

Inter District Variations
(Jammu & Kashmir)

		1970-71	1976-77
1.	Per Capita Expenditure	NA	35.70
2.	Range	NA	26.00
3.	Ratio between highest and lowest	NA	2.00
4.	Standard Deviation	NA	8.35
5.	Coefficient of Variation	NA	23.30

Table No. 9

Inter-District Variation
(Karnataka)

	1970-71	1976-77
Per Capita Expenditure	16.68	34.26
Range	31.36	30.76
Ratio between highest/lowest	4.70	1.06
Standard Deviation	7.51	12.62
Co-efficient of variation	45.80	36.70

Table No. 10
Inter-district Variations
(Kerala)

		1970-71	1976-77
1.	Per Capita Expenditure	26.81	68.30
2.	Range	26.10	36.60
3.	Ratio between highest and lowest	2.60	1.50
4.	Standard Deviation	7.35	9.62
5.	Co-efficient of Variation	27.00	14.00

Table No. 11

Inter-District Variations
(Manarasntra)

		1970-71	1976-77
1.	Per Capita Expenditure	25.02	42.38
2.	Range	35.10	52.50
3.	Ratio between highest and lowest	3.60	3.00
4.	Standard Deviation	8.48	12.41
5.	Co-efficient of variation	33.40	29.00

Table No. 112

Inter-District Variations
(Orissa)

		1970-71	1976-77
1.	Per Capita Expenditure	11.49	26.96
2.	Range	5.40	25.00
3.	Ratio between highest and lowest	3.00	2.50
4.	Standard Deviation	3.66	10.06
5.	Co-efficient of variation	31.70	37.00

Table No. 13
District-wise Variations
(Punjab)

			1970-71		1976-77
1.	Per Capita Expenditure		20.82		61.30
2.	Range	Max.	37.90	Max.	114.70
		Min.	16.80	Min.	34.30
			Average		Average
3.	Ratio between highest and lowest		2.30		3.00
4.	Standard Deviation		8.76		20.02
5.	Co-efficient of variation		42.10		9.10

Table No. 14
Inter-district Variations
(Rajasthan)

		1970-71	1976-77
1.	Per Capita Expenditure	14.77	31.12
2.	Range	29.70	-
		9.70	NA
3.	Ratio between highest and lowest	3.00	5.30
4.	Standard Deviation	6.39	15.05
5.	Co-efficient of variation	44.00	48.30

Table No. 15
Inter-district Variations
(Tamil Nadu)

		1970-71	1976-77
1.	Per Capita Expenditure	20.40	38.74
2.	Range	4.50	4.00
3.	Ratio between highest and lowest	54.10	102.80
		1 .90	25.70
4.	Standard Deviation	10.90	20.30
5.	Co-efficient of variation	54.40	52.40

Table No. 16

Inter-District Variations
(Uttar Pradesh)

		1970-71	1976-77
1.	Per Capita Expenditure	11.70	28.35
2.	Range	50.00	51.40
3.	Ratio between highest and lowest	13.80	5.80
4.	Standard Deviation	8.21	14.35
5.	Co-efficient of variation	50.60	50.60

Table No. 17

Budgetary Position of States
1983-84

(Amount in Rs. lakhs)

	Revenue Receipts				
	Own Tax Revenue Total	Sales tax	Non Tax Revenue	Transfer from the Centre	Total
	1	2	3	4	5
Andhra Pradesh	96537	50538	30942	67856	195335
Assam	13567	9389	7789	33716	55072
Bihar	44149	29841	22924	83564	150437
Gujarat	87905	55487	29215	39394	156514
Haryana	36587	16746	17954	15318	69859
Karnataka	75752	39930	31637	41357	148946
Kerala	48677	30661	11826	32921	93424
Madhya Pradesh	64299	35278	47399	68302	180000
Maharashtra	182249	119671	70899	72050	325198
Orissa	20093	11400	12673	45541	78307
Punjab	54413	25533	15637	17863	87913
Rajasthan	44118	24998	26745	43449	114312
Tamil Nadu	114524	70152	19000	62727	196251
Uttar Pradesh	99210	5511	40475	125856	265541
West Bengal	76863	45006	15810	60640	153313
Total : 15 States	1059143	619544	400925	810354	2270422
Himachal Pradesh	5424	2225	4838	21436	31698
J & K	7144	2650	6103	24336	37583
Manipur	489	169	358	12120	12967
Meghalaya	950	489	638	10825	12413
Nagaland	946	527	1106	14137	16189
Sikkim	377	92	786	4445	5608
Tripura	838	410	1296	12395	14502
Total : 7 States	16168	6562	15098	99694	130960
Grand Total	1075311	626106	416023	910048	2401382

(Table No. 18 Contd....)

	Non-Plan Revenue Exp. on Edu. including Arts & Culture, Scientific Sector	Total	Col.(6) as % of Col. 1	Col. 2	Col. 3	Per Capita Exp. on Education
	6	7	8	9	10	11
A. P.	36197	157176	37.5	71.9	23.0	67.59
Assam	10529	52941	121.8	176.0	31.2	83.07
Bihar	36590	116546	82.9	122.6	31.4	52.33
Gujarat	28880	116458	32.9	52 0	24.8	84.72
Haryana	9435	49197	25.8	56.3	19.2	73.01
Karnataka	24249	110167	31.9	60.7	22.0	65.30
Kerala	28038	79793	57.6	91.4	35.1	110.15
M. P.	25664	119289	39.9	72.4	21.5	49.18
Maharashtra	51375	4930	8.2	42.9	19.4	81.83
Orissa	14182	55882	70.6	124.4	25.4	53.78
Punjab	17625	69623	32.4	69.0	25.3	104.97
Rajasthan	21409	90822	48.5	85.6	23.6	62.48
Tamilnadu	34531	159773	30.2	49.2	24.7	71.33
U. P.	51799	209117	52.2	94.0	24.8	46.72
West Bengal	36264	140914	47.2	80.6	25.7	
Total : 15 States	432767	1712628	40.9	69.9	24.4	
H.P.	5247	20684				
J & K	5460	33967				
Manipur	2430	8059				
Meghalaya	1242	7184				
Nagaland	1648	13271				
Sikkim	338	3286				
Tripura	2263	9899				
Total: 7 States	18628	96314	115.2	283.9	19.3	
Grand Total	451395	1868942	42.0	72.1	24.1	

Source : RBI Bulletin, November 1985

Table No. 18

Per Capita Budgeted Expenditure
(effort-unadjusted and Adjusted)
1981-82

Andhra Pradesh	74.1	168.2
Assam	53.1	117.7
Bihar	51.2	115.5
Gujarat	76.0	172.8
Haryana	80.0	172.3
Karnataka	174 5	172.9
Kerala	119.5	276.5
Madhya Pradesh	49.4	112.2
Maharashtra	83.9	195.1
Orissa	57.1	136.8
Punjab	100.0	239.9
Rajasthan	64.7	147.9
Tamil Nadu	74.6	180.5
Uttar Pradesh	40.5	93.6
West Bengal	75.5	85.9

Table No. 19
Government Revenue Expenditure in India
1960-61 and 1976-77

(Rs. in million)

Item	1960-61	1976-77
1. G.N.P.	140290.0	712310.0
2. Total Government Expenditure	18773.0	134430.0
a. Central Government	6815.0	43459.0
b. State Government	10043.0	79402.0
c. Local Government	1915.0	11569.0
d. Municipal	1030.0	6222.0
e. Panchangal	885.0	5547.0
3. Percentage of 2(a) to 2	36.3	32.3
4. Percentage of 2(b) to 2	53.3	59.1
5. Percentage of 2(c) to 2	19.0	14.5
6. Percentage of 2(c) to 2(b)	19.0	14.5
7. Percentage of 2(c)(d) to 2(b)	8.8	6.7
8. Percentage of 2 to 1	13.4	18.9
9. Percentage of 2(c) to 1	1.4	1.6

Source : Abhijit Data in IIPA Journal

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11. UNESCO IIEP - Gabriel Caonen & Ten Ngor Chau.

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