PART - 1

INTRODUCTION

CHAPTER - I

OUTLINING THE ISSUES

The view that education, like other factors and inputs of development, contributes to economic growth in several ways, through inventions and innovations as much as through the dissimination of skills, technical and managerial, is being increasingly emphasized by economists.

That education entails cost is not something new. But as long as its contribution to growth process was ignored, the study of its cost was regarded as a mere budgetary problem of allocating public expenditure between one item of public consumption and another. The study of education by economists suffered from the same neglect as was the lot of public expenditure.

It is now increasingly realized that expenditure on education is, like any outlay on creation of assets for the future, an important investment expenditure with significant influence on the growth process. A new interest has been aroused in the questions relating to allocation of resources to education and to allocation of resources within

the broad relam of education among various types and levels. In the sense that education creates a stock of knowledge to be used over the future it was always an investment but in the sense that it is an important reproductive stock it has taken on new importance.

Indian Plans do show the basic awareness of the importance of education in securing rapid economic growth.[1] In the allocation of these resources, expansion of educational facilities is not ignored. Whether the priorities laid down in the Plans in the sphere of education and the achievements actually recorded conform to the larger goals is a matter for examination.

Although all expenditure on education should, strictly speaking, be treated as investment, it is usual to make what we should call an accounting distinction between current expenditure and capital expenditure. Current expenditure includes expenditure on salaries of staff, academic and administrative, and on maintenance of workshops, laboratories

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1 "Education is the most important single factor in achieving rapid economic development and technological progress and in creating a social order founded on the values of freedom, social justice and equal opportunity"..... "It is one of the major aims of the Third Plan to expand and intensify the educational effort and to bring every home within its fold, so that from now on, in all branches of national life, education becomes the focal point of planned development". See The Third Five Year Plan, p.573, Chapt.XXIX.

and buildings. On the other hand, capital expenditure is that incurred on buildings, furniture and equipment. In India, however, another distinction is made between direct and indirect expenditure on education,[2] and this seems to cut across the earlier distinction between current and capital expenditures. Though a less meaningful distinction, in our study we feel compelled to follow it because it is not possible to re-arrange the available statistics on the basis of current and capital expenditures.

Let us also talk of the distinction made by economists[3] between 'direct cost' of education (which is not to be

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2 "By direct expenditure is meant expenditure directly concerned with the maintenance of an institution, viz., salary of teachers and other recurring expenditure; while indirect expenditure means all expenditures on inspections and directions, buildings, furntirure, scholarships and other miscellaneous items. Its nature is such that it cannot be apportioned to each type of institution". See Statistical Abstract of the Indian Union 1962, New Series: No.11, p.569. Central Statistical Organization, Dept. of Statistics, Govt. of India.

3 (i) See Rudolph C. Blitz - 'The Nation's Educational outlay', pp.147-169 Chapt.10 of "Economics of Higher Education" (ed.) Selma J. Mushkin. U.S. Dept. of Health, Education and Welfare. Office of Education, 1962.

(ii) See Fritz Machlup - 'The Production and Distribution of knowledge in the United States', Princeton, New Jersey, Princeton Univ. Press, 1962.

(iii) See T.W. Schultz - 'Capital Formation by Education', The Journal of Political Economy, Vol.LXVIII, No.6, Dec.1960.

confused with the distinction made in India between direct and indirect expenditure) on the one hand and 'opportunity cost' on the other.

The latter is a much wider concept and includes transfer cost which in the case of education would mean the earnings foregone by students by taking to education instead of going in for employment. Even 'direct cost' can be said to be much wider in that it includes not only the current and capital expenditure incurred by educational institutions, public or private, but also by students or their parents on such items as purchase of books, equipment etc. and on transportation of students to and from schools and on study tours.

To what extent is the concept of 'opportunity cost' valid in a country like India? In the present phase of its 'under-development', the country carries a large burden of underemployment. It is variously estimated at between 20 per cent to 30 per cent of rural working population. It is also said to exist in the urban sector alongside sizeable open unemployment. In such circumstances, are we justified in arguing any transfer earnings to youngmen of working age who choose to go to school instead of joining the vast multitude of unemployed people?

Individually, each of these entrants may reckon the full earnings forgone as a cost but socially the earning forgone may be zero. Of course, here one has to make allowance for the factor of education.As a person adds on to his educational qualifications, both his chances of joining employment and the likely emoluments increase.And this might happen without at the same time ruining some one else's prospects. This should be the case to the extent that the educated and skilled people fall into a non-competing group distinct from the other group comprising unskilled workers. This raises the question: at what level of different types of education does a person pass on from one group to another to be assigned a positive transfer earning? How much would this transfer earning be? Would it be as high as full private wage forgone or less?

We have pased the above questions only to show how much more problematic it is to calculate opportunity cost of education in India than, say, in the U.S.A.[4]

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4 The main problem in the U.S.A. and other industrially advanced societies in calculating the income forgone of students is to provide for short-term unemployment that they might experience from time to time. From the long-run point of view, however, they can and do assume full employment (see R.C. Blitz., Op.Cit.). But in an under-developed economy where even a reasonably long period of say 25 years, does not hold out a prospect of full employment, the social cost of keeping young people in schools rather than job cannot be anything but negligible.

In this study, ours is a much more pedestrian task of studying the outlay on education* and its financing in India. Outlay on education comprises public and private expenditure incurred on education. It is assumed that all public expenditure on education is recorded. But this is not so for private expenditure. Not all private expenditure is recorded.

Public expenditure is defined as the expenditure on education incurred by the various government bodies in India. On the other hand, recorded private expenditure comprises the expenditure incurred by private persons on fees - tuition, examination and hostel - and by private endowments.

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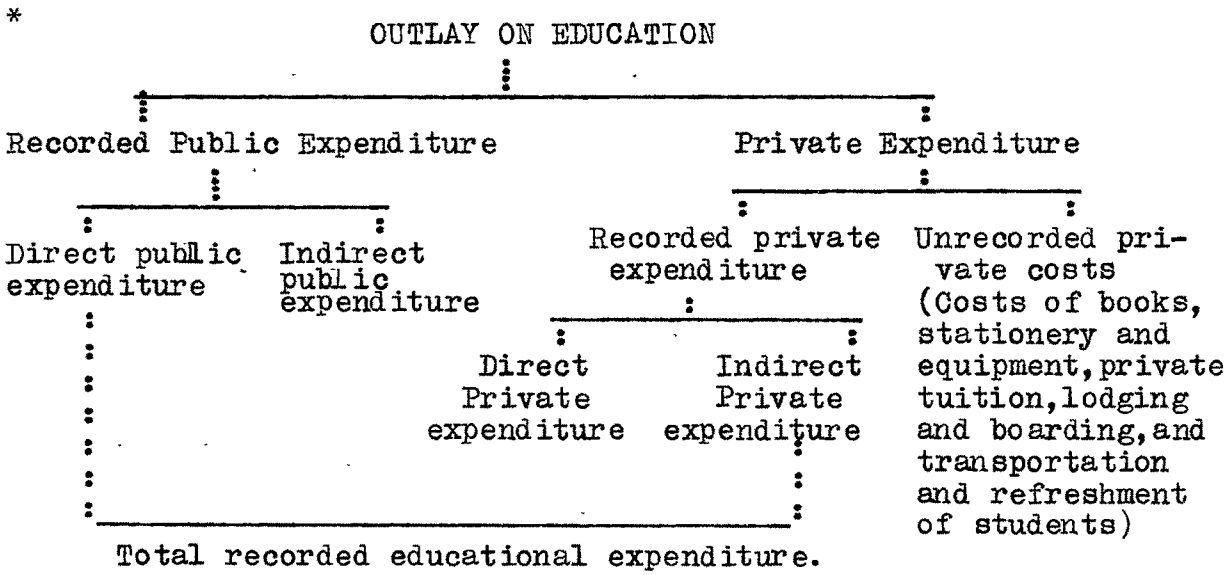

Public expenditure and recorded private expenditure together constitute total recorded educational expenditure in India. Statistics pertaining to total recorded educational expenditure are readily available in a published form. But even there the limitations of the available data are such that one has constantly to make adjustments on the basis of various assumptions. The main limitations from which our data suffer are explained in the paragraphs to follow.

1. We referred above to the division of total recorded educational expenditure between direct and indirect expenditures in India. Indirect expenditure on education in India includes items of both current and capital nature. Expenditure on buildings is classified as indirect and no distinction is made between expenditure on maintenance and upkeep of buildings on the one hand and expenditure incurred on construction. Likewise, expenditure on equipment and furniture is not given separately but appears to be clubbed with several other items as "miscellaneous" expenditure. Provision for depreciation whether for buildings or for capital assets figures under neither direct nor indirect expenditure.

2. Statistical information relating to indirect expenditure is not available according to the levels and types of education. So, level wise and type wise analysis of indirect expenditure is not possible. Such a break-up according

to level and type is available only for what is termed as direct expenditure. This, no doubt, accounts for nearly 75 per cent of the total recorded educational expenditure.

But it is difficult to say what the ratio between direct and indirect expenditure is for each level and type of education. In the absence of any information we have to content ourselves with the analysis of only direct expenditure for various levels and types.

3. Another important limitation of our study stems from the fact that the available data on the progress of expenditure are given in terms of current prices. But when we want to appraise the progress in real terms the problem of adjusting the available data creates difficulties.

It could be argued that if the purpose is to arrive at some measure of the real increase in expenditure on education, correction of current price figures should not be made in terms of wholesale price changes or even cost of living changes.After all these indices do not correctly reflect the weightages of various items of expenditure entering education.[5]

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5 In this context the observation made in the Robbins Report on Higher Education is relevant: "There is no accurate method of expressing the expenditure on higher education in terms of constant prices, because no price indices are available which properly correspond to the individual components of this expenditure".

This naturally raises the question: which are the important items of expenditure on education? The expenditure on teachers' salaries is the most outstanding item of direct expenditure. For all levels and types of education in India, teachers' salaries account for 72 per cent of total direct expenditure and 54 per cent of total expenditure (direct plus indirect) in 1960-61.

So, any variation in the salary per teacher is certainly much more significant than price changes in items like food, clothing, fuels, etc. which figure importantly in cost of living and wholesale price indices. On the basis of the trend in average annual salary per teacher, we can construct the salary-index and express the growth of expenditure in terms of that index.

There is still one snag in our reasoning so far. In adopting the salary-per-teacher index, we are applying the correction to the entire expenditure on education, whereas, strictly speaking, it applies only to that part of the expenditure which is incurred on teachers' salaries. Non-salary expenditure should, ideally speaking, be corrected in terms of price change relevant to those non-salary items on which expenditure is incurred. But sufficient information is

not available to construct a satisfactory index of prices for this purpose. We have, therefore, chosen to correct non-salary direct expenditure in terms of constant wholesale prices.

Under indirect expenditure, we considered it more appropriate to correct salary expenditure[6] in terms of constant salary, scholarships in terms of constant cost of living, buildings in terms of constant cost of building and miscellaneous in terms of constant wholesale prices.

4. From the government publications, we get information only about the total recorded educational expenditure. But we do not know how much is being spent on books, stationery and equipment, private tuition, lodging and boarding and transport and refreshment by students or their parents. Expenditure incurred on the above referred to non-tuition costs of education by private persons is termed as the unrecorded private expenditure.

If the purpose is to arrive at some estimate of the resources entering education, non-tuition costs borne by the

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6 'Salary expenditure' covers expenditure on 'direction and inspection' and on 'hostel charges'. Expenditure on 'hostel charges' is mainly a maintenance expenditure.

students need to be calculated and included before the proportion of national income devoted to education is worked out.

Also, if one wants to find out the burden of the cost of education on private persons, according to their economic status, costs both tuition and non-tuition, borne by students should be estimated.

To fill in the gap in the existing information we conducted a small survey locally to get an idea of the magnitude involved.

As shown earlier, the planners in India view education as an important factor influencing economic growth. Education in India is primarily the responsibility of the government. This raises a few interesting questions: What is the proportion of government expenditure (public expenditure) to total recorded educational expenditure? By how much this proportion increased or decreased? Also what is the contribution to educational finance from sources, not only within the government sector but also outside the government sector? And finally, whether the allocation of recorded expenditure between levels and types of education is in conformity with the goals set in

the plans?

Closely related to the growth of expenditure on education is the performance of various levels and of various types of education. But in adjudging performance one has to allow for both quantitative and qualitative factors. From the point of view of economic growth it is important that not only the stock of education should increase but also that the quality of the stock improves.

But how does one assess the quality of education? What should be the index or indices of the quality of education? Can we say anything about the change in the quality of education on the basis of our study of the progress of expenditure? An indirect index of quality of education frequently used is the cost per pupil. Cost per pupil is generally said to increase when either the teacher-pupil ratio rises (i.e. the number of pupils taken care of by one teacher declines) or when with the same teacher-pupil ratio the quality of teaching improves. The quality of teaching may be taken to improve when either the teachers are better qualified and trained than before or the teaching aids provided in schools and colleges are better and greater than before.

At every step in our appraisal of the performance during the period of reference chosen by us i.e. 1951 to 1961, we attempt to answer the above questions regarding the quality of education. Further, we attempt, wherever possible, international comparisons to obtain an idea of the extent of leeway to be made up and the directions in which it has to be made up.

From the outset, it seems advisable to make ourselves aware of the limitations of international comparisons.

These comparisons give one an idea of the 'State' of education in one country compared to that of the other countries. To have a comparative picture of the 'State' of education, one has to determine the indices on the basis of which the 'State' of education can best be adjudged, within the limitations of available information. Viewed in this manner, the first and the foremost index of the 'State' of education should be the proportion of school-age children actually attending schools and colleges. But this is a quantitative index only. Between two countries with the same proportion of school-age children attending schools, there could be a large disparity in the 'State' of education depending upon the quality of the instruction and training imparted. When it comes to appraising the quality of education,

one is naturally on somewhat uncertain grounds. How does one directly measure the quality of education? The similar question was raised earlier in the chapter and answered too.

For our purposes, we have decided to rely on rather a crude measure to adjudge the quality of education, namely the teacher-pupil ratio and the expenditure per pupil. International comparisons are meaningful, but upto a point only. Stretched beyond this point, they can be quite misleading. In making these comparisons, we are quite aware of these limitations.