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An Assessment of the Distribution of Public-Sector Educational Investment in Pakistan: 1970-71 – 1982-83

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Planning documents for the Seventies emphasized the importance of primary education and the curtailment of the mushrooming growth at the higher level. Our review suggests that this policy has had only partial success in implementation. Viewed in the context of educational planning theory and the evidence available for Pakistan, the policy is found to be sound. While the benefits of a correct distribution of investment within the educational sector are self-evident, resource constraints have been leading to an overall underinvestment in the educational sector. We show that Pakistan's public-sector education is highly subsidized and so to supplement the limited resources devoted to it, we recommend, as a possible solution, a selective application of user charges.

Two important questions pertaining to educational investment are: "Is the absolute level of investment adequate when gauged by some specified criteria?" and "Is the existing investment being sensibly directed?" Both these questions are addressed in this paper, with more emphasis on the latter, since the answer to the former may need little effort in establishing. The stated educational policy, the investment pattern and their change over time are first identified. Both are then viewed from the vantage point of the main educational planning tools.

We find that the priority accorded to the educational sector has been low, especially with regard to primary education, and there is little reason to believe that in the face of serious resource constraints this situation will change much.

A suggested alternative is one of having the upper levels of the educational sector selectively recoup, through user charges, part of the expenditure it incurs.

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I. EDUCATIONAL POLICY[1]

Several themes run through the entire educational planning process in Pakistan. Our concern here will be to identify those that highlight important changes in priorities between levels of education. A noticeable change in the educational thinking reflected in recent plan documents, particularly the Sixth Plan (1983–88) documents, is the recognition that the base of the educational pyramid needs broadening; i.e. there is an emphasis on primary education.[2] From 1974 to 1981, twelve new universities and three new campuses for existing universities were established. This time span covers the non-Plan period (1970–77) as well as the Fifth Five-Year Plan.[3] In fact, the Fifth Plan did take note of the rapid expansion of higher education and stated the intention to check it and emphasized the primary level instead.[4] The recognition of the importance of universal literacy and of the major role of primary education in this regard goes back to the earlier plans.[5] However, the high degree of determination to bring about this structural change in educational investment is new.

Primary education has also been recognised as important because it can be a first step in providing equality of opportunity and a larger base for drawing talent into higher education. Why, despite this realization, was there a greater emphasis on the higher level? One reason is social pressure. Higher education is viewed as prestigious in itself and also as a means of social betterment.[6] The demand for regional balance in its provision, a sensitive political issue, made the proliferation of universities almost inevitable. Two apparently novel policy features in the Sixth Plan are induction of the private sector into greater participation in the educational process

[1] Although we rely on the Five Year Plans to identify the stated educational policy, these plans themselves were often based on the outcome of other activity related to educational planning. These include the First Educational Conference (1947), Commission on National Education (1959), the Commission on Students' Problems and Welfare (1966), Proposals for the National Education Policy 1972–80, (1972), and the National Education Policy and Implementation Programme (1979). The Action Plan developed by the Federal Ministry of Education (1984) is the latest in these series of policy documents.

[2] See the Sixth Plan [17 p. 338].

[3] The Fourth Plan allocation was made for East and West Pakistan combined, and it was therefore scrapped. Until 1978, Annual Plans and Annual Development Plans were utilized by planners.

[4] See the Fifth Plan [15, Chapter 20, pp. 5–8].

[5] See for example the Third Plan [19, p. 187] and The Fourth Plan [16, p. 146].

[6] Mark Blaug *et al.* [2, pp. 54-55] explain the mushrooming social demand for higher education in terms of a dynamic surplus model. As jobs relating to one educational level become hard to find owing to surplus at that level, students seek a competitive educational edge by acquiring a higher level of education. Thus, there is an inflation in educational demand for higher and higher levels. They also posit that since the parents of students seeking higher education are politically powerful and its clients politically turbulent, it has been difficult to redirect expenditure away from the higher to other levels.

and utilization of "user fees" to recover costs.[7] We will discuss the latter issue in Section IV. In the next section, the picture that emerges from an analysis of some of the secondary data pertaining to the educational sector is presented to see the extent to which the planners' concerns and statements in the last decade are reflected in the numbers.

II. EDUCATIONAL INVESTMENT

Several approaches have been adopted in this section to uncover the educational policy implicit in educational investment. Firstly, the distribution of educational investment by level is reviewed. Secondly, the utilization rates across these levels of education are computed since governmental instruction could be instrumental in the actual utilizations. Thirdly, based on these utilizations are the actual target achievement rates and these are reported next. The implicit assumption in the analysis is that the distribution of expenditure identifies the priorities; the utilization rates and target achievements can reflect the realization of these priorities and, therefore, the educational policy being promoted by conscious direction in the present or the inertia due to past decisions. The data are available by provincial disaggregations and therefore the analysis reflects only this level of detail.[8]

The distribution of actual development expenditure across different levels of education may be interpreted as reflecting the priorities given to each level in the education system.[9] This can potentially be based on certain social or economic criteria. In practice, political considerations or, as earlier stated, inertia could be behind the set of numbers reported in Table 1.

These numbers show that a structural change in development expenditures over the Annual Plan (also known as non-Plan period) and the Fifth Plan period did take place. Viewing the situation in the Annual Plan (1972-73 – 1977-78) period, one can note that the heaviest emphasis is on secondary education in the Punjab, on technical in Sind, and on primary in the NWFP. Baluchistan's emphasis was diverse. Secondary education was also emphasized in the NWFP and Baluchistan. During the 1978–83 period, the expenditure on primary education and also, to a lesser extent, on secondary education shows a dramatic rise in all provinces. In fact, apart from Baluchistan (where secondary education drew the largest funds), primary

[7]For the policy issues in the Sixth Plan, see [17, p. 357]. For the earlier mention of these proposals, see the Second Plan [18, p. 341] and the Fourth Plan [16, p. 151].

[8]The unprocessed data and a description of the sources will be made available by the senior author on request.

[9]Development expenditure includes mainly construction costs for new buildings or improvement of existing facilities (e.g. classrooms, workshops, libraries, teachers' accommodations). This is distinguished from non-development or recurring expenditure which provides for teachers' salaries and supplies.

Table 1

Average Percentage Distribution of Development Expenditure on Education

Education Categories		Punjab		Sind		NWFP		Baluchistan	
		1972-73 to 77-78	1977-78 to 82-83	1972-73 to 77-78	1977-78 to 82-83	1972-73 to 77-78	1977-78 to 82-83	1972-73 to 77-78	1977-78 to 82-83
Primary	a	13.2	29.3	10.5	30.3	22.2	46.5	10.5	19.7
	b	(8.9)	(14.0)	(8.9)	(9.8)	(12.0)	(4.4)	(9.2)	(7.2)
Secondary	a	21.0	24.7	11.3	21.7	17.8	23.8	25.0	29.7
	b	(7.1)	(11.2)	(6.5)	(5.5)	(7.2)	(6.8)	(31.0)	(10.3)
Teachers	a	6.8	4.8	1.7	7.3	2.0	3.7	7.8	13.5
	b	(1.6)	(3.2)	(2.2)	(5.6)	(0.9)	(1.5)	(2.4)	(8.6)
Technical	a	14.8	11.8	32.3	14.2	8.7	6.5	3.8	3.5
	b	(5.1)	(5.0)	(8.7)	(10.9)	(2.7)	(1.6)	(7.5)	(4.6)
College	a	9.8	8.0	12.0	14.8	17.5	10.7	23.0	15.0
	b	(2.6)	(3.0)	(6.0)	(3.9)	(4.9)	(3.3)	(13.6)	(7.3)
University	a	11.0	–	15.3	–	16.5	–	27.2	–
	b	(3.3)	–	(5.6)	–	(6.1)	–	(26.9)	–

Continued –

Table 1 – (*Continued*)

Scholarships	a	15.3	8.8	9.7	4.3	6.7	4.2	0.5	0
	b	(4.7)	(4.0)	(6.3)	(0.8)	(4.6)	(1.0)	(1.2)	0

Sources: [9;13;14].

Notes: 1. Columns do not add to one hundred because the miscellaneous category has been left out.

2. The distribution of total expenditure for countries at an equivalent level of development between primary, secondary and high levels was 55.5 percent, 29.1 percent and 15.4 percent respectively in 1975. See World Bank [25, pp 122-123].

– = Data not available.

a = Average for the period.

b = Standard deviation.

education ranked the highest in the rest of the provinces in terms of expenditure with the secondary education following it.

In all cases, there has been a fall in expenditure on technical education. For Sind this fall is so significant that it appears to have accommodated a rise in all other levels of education, including college education. College education shows a decline in expenditure in all other provinces. Finally, in all cases, the percentage of funds devoted to scholarships shows a marked decline. This would indicate a trend towards less regard for the equity objective to the extent that scholarships are earned by bright but poor students.[10]

Since expenditure on universities became a federal responsibility from the onset of the Fifth Plan period (1978–83), the trend of expenditure at this level over the two plans could not be shown in Table 1. Hence, in Table 2, we have presented university expenditure as a percentage of total development expenditure on education for the Fifth Plan period to examine whether development expenditure on universities was indeed curtailed.

Table 2

University Expenditure as a Percentage of Total Development Expenditure on Education

Years	University Expenditure (Million Rupees)	Total Development Expenditure on Education (Million Rupees)	University Expenditure as % of Total Development Expenditure on Education
1978-79	35.8	262.9	13.6
1979-80	78.2	282.6	27.7
1980-81	161.8	973.6	16.6
1981-82	245.3	1286.4	19.1
1982-83	280.6	1551.2	18.5

Source: [13].

[10] Approximately only 30 percent of scholarships are supposedly earmarked specifically for deserving students from poor families. The rest are disbursed solely on a merit basis (source prohibits quotation). In addition, about 75 percent of the expenditure on scholarships benefits students in institutions of higher learning [1; 25, p. 178].

Table 2 does not help to conclude that university expenditure has been curtailed since there has been a percentage increase for the Fifth Plan over the Annual Plan period. Note the Annual Plan average expenditures of 11.0 percent and 15.3 percent for the two provinces (Punjab and Sind) which have the largest number of universities.

Utilization is defined as the percentage of allocated expenditure that was actually used. It can exceed one hundred since funds can be reallocated after they have been allocated. It is possible to determine, by examining utilization rates, if any level in any province was being consistently neglected. Table 3 shows utilization rates over the last decade to have been fairly high and in general to have improved over the plan periods in all the provinces. This improvement is most notable for Baluchistan.

Also notable are Punjab's relatively low as well as declining utilization rates at the primary level. Since Punjab is the most populated province, this finding assumes more weight. Its performance in secondary education improved marginally, but for teachers' education this improvement was more impressive. However, in both cases, its utilization rate remained around 80 percent, which was below 90 percent or more at these levels for the other provinces.

Utilization rates at the university level were only available for the Annual Plan period. These indicate that expenditures were consistently higher than allocations, perhaps suggesting that reallocations were made for this level because of political pressures after priorities had been determined. This may also be true in general for high utilization rates in Baluchistan.

Having observed high utilization rates in almost all provinces, it would be meaningful to see to what extent these high utilization rates showed up in the achievement of physical targets in educational plans. For this purpose, a rough comparison of the relative success in target achievement in all the Five Year Plans was undertaken. The earlier Plans are included for comparative reasons because it was not possible to ascertain targets for the Annual Plan period.

Table 4 clearly shows that achievements at higher levels of education (colleges and universities) have generally exceeded the targets in all the Plans, including the Fifth Plan. This is reflective of the vast expansion of institutions of higher education in the past. It is also consistent with our earlier findings showing an emphasis on higher education.

There has simultaneously been a shortfall of targets at the primary and secondary levels in all the plans, including the Fifth Plan, in terms of both institution availability and enrolment increase. This could be partly because, in spite of the conscious efforts to meet the additional demand for primary and secondary school teachers, their training capacity target achievement dropped to 22 percent in the Fifth Plan from 78 percent in the Third Plan. However, the targets for the number

Table 3

Mean Utilization Rate of Provincial Development Expenditure by Level of Education

(Percentages)

		Punjab		Sind		NWFP		Baluchistan	
		1972-73 to 77-78	1977-78 to 82-83	1972-73 to 77-78	1977-78 to 82-83	1972-73 to 77-78	1977-78 to 82-83	1972-73 to 77-78	1977-78 to 82-83
Primary	a	81.0	78.2	96.5	98.7	90.0	106.5	66.3	97.5
	b	(69.2)	(46.0)	(123.5)	(52.2)	(23.3)	(16.8)	(61.6)	(48.3)
Secondary	a	84.0	84.7	71.7	91.2	75.5	94.7	77.2	98.5
	b	(23.4)	(17.6)	(47.4)	(6.0)	(32.0)	(14.3)	(63.5)	(17.2)
Teachers	a	80.7	85.8	49.8	90.5	102.0	91.2	83.8	189.5
	b	(22.9)	(21.9)	(40.6)	(34.9)	(14.2)	(17.8)	(29.7)	(158.5)
Technical	a	82.7	112.2	82.3	93.5	123.0	118.3	158.5	93.7
	b	(33.3)	(46.0)	(29.9)	(11.7)	(49.1)	(42.9)	(333.3)	(97.0)
College	a	77.8	106.3	92.5	97.8	81.7	97.5	72.2	147.5
	b	(74.6)	(16.4)	(29.0)	(27.9)	(23.4)	(15.4)	(17.8)	(97.0)
University	a	137.0	–	111.2	–	113.8	–	422.4*	–
	b	(74.6)	–	(56.7)	–	(45.1)	–	(525)	–

Continued –

Table 3 – (*Continued*)

Scholarships	a	95.3	98.0	92.7	101.8	80.2	92.5	0	0
	b	(11.4)	(3.2)	(9.9)	(3.2)	(39.8)	(35.7)	0	0

Sources: For expenditures, see Pakistan [9; 13; 14]; for allocations, see [12].

– = Data not available.
a = Mean
b = Standard deviation.
* = The high standard deviation in this case reflects the large expenditure on the University of Baluchistan.

Table 4

Average Percentage Achievement of Physical Targets by Level of Education in Five-Year Plans of Pakistan

Level of Education	First Plan (1955–60)		Second Plan (1960–65)		Third Plan (1965–70)		Fifth Plan (1978–83)	
	I	E	I	E	I	E	I	E
Primary	76	60	96	70	42	53	83	50
Secondary	87	81	50	87	72	57	58	67
Teacher Training	–	–	112	124*	62	78*	98	22*
Technical	–	–	85	153	80	95	80	90
College	–	–	137	–	104	–	111	101
University	–	–	100	–	120	–	100	77

Sources: Five-Year Plans [15; 16; 17; 18; 19].

Note: The numbers in the table are arrived at by dividing actual achievements of institutions and enrolments by those targeted in specific plan periods.
I = Institutions E = Enrolment Increase
*The training capacity of teacher training institutions.

of teacher training institutions have been achieved successfully. Thus staffing, materials, or other bottlenecks resulted in a high degree of underutilized capacity. Finally, a declining trend is evident in target achievement for technical education which parallels the declining expenditure on this level.

It is of course possible and likely that low target achievement may simply reflect ambitious target-setting rather than low priorities. This is very likely the case at the school level where the pressure to achieve universal literacy comparable with that in some other developing countries may make planners overstate their goals.

The evidence we were able to muster on the successful implementation of the Fifth Plan policy shows a mixed outcome. While there is some success in reallocating more investment towards the primary level, this appears not to be at the expense of university education. In the next section, the validity of the Fifth Plan policy and its continuation into the Sixth Plan is appraised.

III. AN ASSESSMENT OF EDUCATIONAL STRATEGY

Three analytical techniques have been used to examine Pakistan's educational policy. Firstly, resources devoted to the education sector relative to the other sectors in Pakistan are compared with similar allocations by other South Asian countries. This therefore anchors the educational policy itself into a macro-context of resource allocation. Secondly, existing evidence on private and social rates of returns to education is used to gauge not only the importance of allocations to education *vis-a-vis* other sectors but also the allocations within the educational sector. Thirdly, existing evidence on manpower forecasting is mustered to see if it confirms the allocational prescriptions of the human capital model.

Table 5 presents the overall sectoral allocation to education and enrolment ratios by level for selected countries in the South Asian region.

Over the last decade, Pakistan's allocation to education as a percentage of the GNP increased slightly. However, at 2 percent of the GNP in 1980, it was still only one-half of the amount prescribed by UNESCO as the minimum acceptable [23]. In both 1970 and 1980, government expenditure on education in Pakistan, as a percentage of total government expenditure, ranked last among the South Asian countries. Clearly, priority to education has been low.

Low enrolment rate achievement is among the consequences of low expenditure on education. This can also be observed from the evidence presented in Table 5. For primary education, Pakistan's ranking declined from fourth in 1970 to fifth in 1980 for both sexes. Its position at the secondary level remained unchanged at fourth all around but for higher education its enrolment attainment declined from second to fifth for males and from first to third for females. The decline in higher education would not have been disturbing in itself, had there been a corresponding show of strength at the school level. To see why this is so, we turn to the evidence for Pakistan with regard to the various tools of educational planning theory.

Low priority to education may be justified if it can be shown that the social returns to education are much lower than those for the other sectors that draw larger allocations.[11] Evidence on rates of returns to education is conflicting. Thus on this basis little can definitively be said about education's place in sectoral allocations until findings of more research are in.[12] More can be said on this basis about allocations within the educational sector by juxtaposing private and social rates of returns for the different educational levels. So far, only Hamdani [5] has calculated both private and social rates of returns for Pakistan. These are reported in Table 6 .

[11] The large margin is emphasized because it is well known that many of the social benefits from education are not quantifiable. This is much less the case for the seven sectors for which development expenditure during the Fifth Plan was much larger than for education. See Pakistan [10, pp. 208].

[12] See Khan and Irfan [6, pp. 10–16] for a review of earlier evidence and updated estimates.

Table 5

Public Expenditure and Enrolment Ratios by Level for Education in South Asia: 1970 and 1980

Country	Enrolment Ratios												Pub. Exp. on Education			
	Primary Education				Secondary Education				Higher Education				As % of GNP		As % of total Govt. Expen.	
	Total		Female		Total		Female		Total		Female					
	1970	1980	1970	1980	1970	1980	1970	1980	1970	1980	1970	1980	1970	1980	1970	1980
Afghanistan	28	30	8	10	7	10	2	3	0.7	1.7	0.2	0.5	1.1	2.7	–	12.7
Bangladesh	52	63	34	48	19	15	8	7	2.1	3.0	0.4	0.9	1.1	1.5	3.6	7.0
India	73	70	56	61	26	28	15	18	8.1	8.8	–	4.5	2.8	13.2	10.7	11.6
Nepal	26	91	8	53	10	21	3	9	2.3	3.2	–	–	0.6	1.8	6.7	8.3
Sri Lanka	99	100	94	97	47	51	48	52	1.2	2.5	1.0	2.0	4.0	2.2	13.6	5.9
Pakistan	40	57	22	30	13	15	5	8	2.3	2.0	1.0	1.1	1.7	2.0	4.2	4.6

Source: UNESCO [24, Tables 2.1, 4.1, 5.1]. See source also for explanations about making data consistent for comparisons.

Table 6

The Returns to Education by Level for Rawalpindi City: 1975

	Private	Social
Incomplete Primary	7	5
Primary	20	13
Secondary	11	9
College	14	10
University	27	8

Source: Hamdani [5, p. 156].

The estimates show that while the private rate of return for the primary level is lower than that for university education, the reverse is the case when comparing social rates of return. The ranking of the primary level switches from second to first while that for university education switches from first to last. The main reason for this ranking reversal is the much greater per unit subsidy to university education. The message for educational investment was for a greater emphasis on the primary level and a lower emphasis on the university level. Given that the subsidy structure for the educational sector has not changed (see Section IV), this message most probably is still valid.[13]

A confirmation of this prescription may be obtained from the often complementary technique of educational planning, i.e. manpower forecasting. Cohen [3] has developed a labour force matrix (LFM) with several uses. One of these is to provide a "check tool for manpower planning in the medium run" [3, p. 4]. The idea is to simulate on the basis of the Sixth Five Year Plan targets and thereby generate a target LFM for 1988. This is then compared with a simple projection of past LFM to the year 1988 [3, p. 8]. Cohen found that the Plan was a continuation of past structural trends in that the manpower imbalances resulting from the two simulations were very close [3, p. 11]. The labour force imbalances by level of education derived from these simulations are reported in Table 7.

[13] There are qualifications, though. Education is a stepping stone for both further training and career opportunities abroad. No allowance has been made for the social returns through either remittances or the social contribution of more highly trained personnel. This may well raise the social returns at the high level by a greater extent.

Table 7

Plan Simulations of Imbalances by Education for 1988

Education	Unemployment (in thousands)	National Imbalance (percentage)
Below Primary	618	2.75
Primary	–72	–2.22
Middle Secondary	69	2.96
High Secondary	217	10.48
Intermediate	92	14.56
Degree	52	12.41
Post Graduate	24	12.50

Source: Cohen [3, Table 5].

Cohen infers from these findings that the "labour market for lower skills and educational levels will continue to be tighter than for upper skills and educational levels" [3, p. 11]. Thus the manpower planning analysis for Pakistan does point in the same direction as the findings from the human capital model.

A study by the Manpower Division [11] uses a similar framework for estimating manpower imbalances for the terminal year of the Sixth Plan. Although the educational categorization is more aggregate, essentially the same message for policy can be derived. The findings show that there will be a 3.1-percent surplus for those who have attained primary, but less than the matriculation, level and an 8.4-percent surplus for those who have earned a degree or more by 1988.[14]

In the beginning of this section we argued that Pakistan was devoting too meagre resources to education. Given that, we attempted to determine whether these limited resources were being expended in a way consistent with the prescriptions of educational planning techniques and we found that a reallocation towards the primary level may be more optimal. In the next section we pick up the thread of the limited resources being allocated to education and see if the educational system itself can be relied upon to generate more resources through a system of user charges. Furthermore, we consider how such a tax may be distributed across the different levels of education.

[14] See [11, Table 23 in conjunction with Table 16].

IV. THE SUBSIDY ELEMENT IN EDUCATION AND USER CHARGES

The two main investments for achieving a more optimal distribution of educational investment are discriminative public allocations and discriminative user charges. In appraising user charges it is worth noting that our calculations show that the recuperation of public expenditure on education through user charges is very negligible in Pakistan. Education is primarily a matter of public subsidy.[15] The next step is to decide what level to set user charges at. One would need also to infer what the social and political implications of this tax would be. One possibility is to set them to recover the recurring expenditure. At the school level, this would provide answer to one problem that has been identified by educational administrators. This is that the capacity of the educational system has been constrained by an inadequate provision of recurring expenditure (a provincial responsibility) to match the federally assisted development expenditure.[16] Similarly, at the higher level, the lack of essential supplies and materials for research and teaching can constrain the optimum utilization of the capital infrastructure.

If all recurring expenditure was to be recovered through user charges, the average monthly fee at the primary level would be Rs 20, at the secondary level Rs 33 and at the higher level Rs 415.[17] These charges represent a quantum jump according to the average receipt structure currently in effect. The numbers are merely illustrative and would need to be varied by province, region or level within higher education.

Although it has been argued that the poor would disproportionately benefit from the wider access and quality improvements that user charges may bring about, this would be true if the fees, to begin with, were not prohibitive.[18] There is some evidence that this may be the case in rural areas.[19] Thus using a social criterion, one would want to exempt rural primary and secondary schooling from fees. In fact, given the higher social returns at the primary level and the considerably lower manpower imbalance (if not scarcity) up to the lower secondary level, all schooling up to the middle level could be exempted from user charges.

At the higher level, the estimated monthly rate would be nominal for the wealthy, pinch middle income earners and be prohibitive for those from poor family

[15] Expressing subsidy as percentage of unit costs gives values of over 90 percent for all levels of education.

[16] See Ghafoor [4, p. 42].

[17] These estimates are based on the unit costs of education reported in Table 7.

[18] See, for example, Thobani [22, p. 17], who establishes an economic criterion for implementing user charges.

[19] Various studies point to poverty as the major cause of school drop-outs in rural areas. See, for example, Qamar and Khan [20, pp. 13–25] and Saqib and Asi [21, pp. 13–25]. The implicit urban to rural transfer of resources would be justified, as currently the educational infrastructure in the urban areas is far more developed.

backgrounds. The usual answer is that scholarships could be provided to poor but deserving students. Such recommendations, without taking the political reality of a country into account, are of course meaningless. It is quite likely that user charges would be politically unpopular across all income strata. The poor would fear, probably with justification, that the scholarships would be appropriated by those with influence while the more prosperous would be unhappy at the new tax, since no tax pleases.

Using the government unit-cost estimates for only recurring expenditure, it is apparent that over 30 primary level seats can be created by eliminating one seat at the higher level.[20] Using the same data source and a method recently devised by Mingat and Tan [7, pp. 300–302], we calculated that higher education drew 38 percent of the total educational resources while its total enrolment ratio was only 2 percent, whereas primary education, with a total enrolment ratio of 57 percent, only drew 34 percent of the total educational resources.[21] Such figures, as well as our earlier analysis, suggest that the government may need to face up to policies that they would otherwise rule out on a political criteria if the overall educational policy is to be given the right thrust.[22]

CONCLUSIONS

During the Seventies, educational planners had been emphasizing the importance of the primary level of education and the need to curtail the rampant growth of higher education. This thinking is also reflected in the recent planning documents that pertain to most of the Eighties. Using several indicators, we did ascertain that at least a part of this policy is being realized.

The distribution of educational investment does show a greater emphasis on the primary level. However, two qualifications are in order. Firstly, the target achievement rate for the primary level was not as high as at the other levels. Secondly, utilization rates for the Punjab, the most populated province, were the lowest at this level. University education, which was slated to be curtailed, still showed an increase in its percentage share of investment although that at the college level did

[20] [10, p. 181].

[21] This method entails multiplying the total enrolment at each level (using as much disaggregation within levels as data permit) by the unit public cost per student at that level and then dividing individual products by the sum of the products to get the proportion of resources drawn by each level.

[22] It should be mentioned here that the 5-percent *iqra* (education) cess on all imports announced in the 1985-86 budget (for 1984-85 imports this would have amounted to Rs 5 billion which is more than the amount budgeted for the education sector) could well postpone the making of some difficult choices. However, given the immense gap in Pakistan's current standing in education *vis-a-vis* the desired targets stated in planning documents, selectively raising more resources from within the educational sector is still a feasible policy.

decline. However, for the higher level, utilizations were very high, often greater than initial allocations, and the target achievement rates were also generally the highest.

Implementing a particular policy is good if the basic policy itself is appropriate. Enough empirical evidence, using the various techniques of educational planning, is not yet available for confident judgement. Tentatively, one may assert that the evidence for Pakistan does endorse the increased emphasis on primary education and the reduced emphasis at the higher level.

The higher level of education had the highest private rates of return for the Seventies. However, high private returns can result from a large subsidy to this level of education, thereby showing a much lower social rate of return. Our findings show that for Pakistan this is indeed the case at the university level. The inevitable consequence is an excess future supply of personnel with higher education and in fact this is suggested to be likely by manpower imbalance forecasts for Pakistan.

We found that very little of public sector educational investment is recovered, so that practically all of it represents a subsidy. We recommend a restructuring of the educational subsidy towards an increased emphasis on school education, particularly primary education, and a reduced emphasis on higher education, particularly university education. One method of doing this would be to selectively apply user charges at the higher level, exercising extreme caution so as not to let this exclude deserving individuals from poorer backgrounds.

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