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SUBSIDIES TO HIGHER EDUCATION : THE EQUITY ISSUE

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PREFACE

The Centre for Multi-disciplinary Development Research (CMDR) is a social science research institute in a moffusil area of Karnataka and is sponsored by the Indian Council of Social Science Research, New Delhi. The Centre aims at undertaking analytical studies of conceptual and policy significance on the socio-economic and cultural issues using multi-disciplinary perspectives and state level and micro level information.

As a part of its publication programme, the Centre has initiated a CMDR Monograph Series, consisting of both invited contributions and the research studies completed at the Centre.

We are happy to present the 6th in the monograph series under the title 'Subsidies to the Higher Education : the Enquiry Issue' written by Dr. B.Siva Reddy. The author examines in detail with data from Andhra Pradesh, how the subsidies in the field of higher education have favoured relatively privileged section of the society. He also questions the contention that higher education can be an instrument for an upward mobility because of an inequitable distribution of the subsidies in higher education.

CMDR expresses its thanks to Dr. Siva Reddy for contributing this useful and analytical paper to the CMDR monograph series.

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SUBSIDIES TO HIGHER EDUCATION : THE EQUITY ISSUE

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I. INTRODUCTION :

In the context of the liberalisation of Indian economy one of the most frequently debated issues is subsidies. The frequently heard policy suggestion in the context of new economic policies is the reduction in the level of subsidy to the maximum wherever possible. The suggestion has acquired renewed significance in India in view of the severe resource crunch and understandably, the rapid growth of subsidies over the years.

The term subsidy has been interpreted in several ways and there is no consensus as to what constitutes the subsidy. Generally, the term subsidy refers to the payment made by the government to fill the gap between the prevailing market price and price paid by the buyer of a good or service. Government subsidies refer to .... "the difference between the cost of delivering various publicly provided goods or services and the recoveries arising from such deliveries" (Mundle and Rao, 1991 : 1157). Subsidy may also refer to the grant of money by parliamentary sanction for meeting the needs and objectives of the state and in this context public expenditure as a whole may be designated as subsidy (Prakash, Nimisha and Anuradha, 1992 : 2).

The Government may provide more explicitly subsidies to such goods of masscomsumption as rice, sugar, kerosene. Further, explicit subsidies may be given to producers of such intermediate inputs as fertilisers, irrigation. the subsidies may be implicit like losses of departmental enterprises and provision of such infrastructure facilities and social services as transport, health, and education.

However, unlike in economic services the term cannot be exactly and comprehensively defined and measured in education. Owing to its unique nature of being both consumption and investment. It is difficult to distinguish between consumer's and producer's subsidy in education. Some have even opposed to the very idea of using the term subsidy in education (Sharma 1992). It is difficult to define clearly the costs, inputs and outputs in education and hence traditional principles cannot be applied to evaluate the performance of education sector. However, these

unique features of education cannot prevent from subjecting subsidies to critical scrutiny.

That education subsidies should be subjected to critical scrutiny is obvious : they account for about 23 per cent of total subsidies and 3.25 percent of GDP in India. The beneficiaries received about Rs. 9576 crores of education subsidies while paying only 1.3 per cent of the total cost of education (Mundle and Rao, 1991 : 1159). Yet the enrolment rates are low. Due to population growth and high private rates of return the demand for education and hence pressure to increase subsidies is high and growing. As a consequence of the macro-economic problems budgetary constraints on education subsidies are tighter today than in the 1950's when many subsidy programmes were put into place or were greatly expanded. Further, after four decades of planned experience the original justifications for subsidies may not apply with their original force or may not have proved sound. Hence there is a need to review the subsidies to education (Knight and Sabot,1990).

As far as elementary education is concerned, there is not much controversy about subsidizing it. It is generally agreed upon to finance it through public funds. State should bear the responsibility of not only financing but also ensuring quality and equality in elementary education. While most feel the necessity to continue subsidies to education, there is a general feeling that subsidies to higher education should be rationalised. There is a controversy over the relevance of original justification of subsidies to higher education in the light of the past experience and recent macro-economic changes in India.

The study proposes to examine the relevance of the traditional justification of subsidies to higher education, mainly, on the equity grounds in the light of the past experience, in one of the states - Andhra Pradesh. In the next section we present some evidence on the equity in higher education subsidies in Andhra Pradesh. Though the evidence is confined to only one state, it may throws some light on the equity issue confronting the Indian higher education system. In Section III same problems and policy issues associated with the higher education subsidies are briefly discussed. the last section summarises the findings and draws some conclusions.

II. DISTRIBUTION OF HIGHER EDUCATION SUBSIDIES IN ANDHRA PRADESH :

Since the formulation of the state in 1956 the higher education system expanded very rapidly in terms of institutions, enrolment and finances ; and, in relation to other levels of education and the state economy (Shiva Reddy, 1990). This expansion is manly due to public financing of education. State government expenditure increased

TABLE - 1

PERCENTRAGE DISTRIBUTION OF SUBSIDIES AND ENROLMENT IN HIGHER EDUCATION AMONG INCOME GROUP IN ANDHARA PRADESH, 1980-81

Household Annual Income (Rs.)	Subsidy %	Enrolment %
1	2	3
Below 3000	13.3	12.3
3000-4999	14.4	14.4
5000-8999	24.4	25.6
9000-14999	18.1	19.8
15000-and above	29.8	28.0
All	100.00	100.00

Note: Figures in paraenthesis are, respectively, total subsidy and enrolment in higer education.

Source : Shiva Reddy (1990).

from Rs. 13 million in 1956-57 to Rs. 2821 million 1992-93. the proportion of children in the age-group 16-23 attending colleges, though increased in the last three decades, is only 7 percent today.

Those attending higher education institutions come from very few families. A recent study on education in rural areas of the state suggests that about three-fifth of the families have no children in the age-group 16-23 years and hence no question of receiving any higher education subsidy. Only 8 percent of the families have children in the age-group and all the seats in colleges are occupied by children belonging to these 8 percent families. The remaining on-third of the families have children not attending college (Siva Reddy and Sanjeeva Reddy, 1990 : Table -1). This suggests that subsidies in

higher education accrue to very few families. The average income of these families is 2.3 times the state average annual household income (Shiva Reddy, 1990 : Table 5).

In 1980-81 state government subsidies to higher education amounted to Rs. 808 million. They accounted for 27 percent of total education subsidy and 1.5 percent of state domestic product. In per pupil and per capita terms the higher education subsidy was Rs. 1642 and Rs. 117 respectively. Further, we have examined the distribution of these subsidies among socio-economic groups. While income measures the economic status, social status is indicated by caste. These two are, generally, the two important factors determining the education. Some special programmes are also devised on the basis of

economic position or caste. For the purpose of special treatment government has classified the castes into four groups : Scheduled Castes (Scs), Scheduled Tribes (St/Ts), Listed Backward Communities (LBCs) and Other Communities (OCs) or Forward Communities (FCs). Special provision is made for the first three groups which constitute the backward communities (BCs).

Subsidies to higher education are classified under two heads General (GS) and Specific (SS). GS is one which is enjoyed by all students irrespective of economic or social groups to which they belong. SS, on the other hand, is mainly, aimed at students belonging to lower socio-economic sections and hence, enjoyed by only a section of students. In 1980-81, about 22 percent of higher education subsidies is of specific type. From the equity point of view as GS does not discriminate the students on the basis of their socio-economic background. The SS not only covers tution fees but also other educational expenses (Shah and Srikantiah 1984 : 31)

Some evidence on the distribution of higher education subsidies among income groups is presented in Table -1. For the purpose of comparison the distribution of enrolment is also given.

Slight difference in the two distributions may be noted from the table. While the subsidy is more than the enrolment for both the lowest and higher

income group, it is otherway for other income groups. The difference in the two distributions can be attributed to the predominance of SS for some groups.

Comparison of subsidies distribution with the distribution of income or population would have brought light on the redistributive effect of higher education subsidies. But due to lack of data it is not clear about the impact. But given the prevalence of greater income inequality, it may not be exaggerating to say that public subsidies on higher education are more equally distributed than the distribution of income. However, the share of poor in the higher education subsidies may not be proportional to their share (about on-third) in state population.

We now present some evidence on the distribution of subsidies in higher education among social groups (Table-2).

More than half of the subsidies went to Ocs who constitute about 40 percent of the population. For SCs and STs the share in subsidy is more than enrolment due to predominance of specific subsidy directed at these sections. Inequality in the distribution of subsidy as measured by gini coefficient is less than enrolment inequality. This is due to more SS per pupil belonging to BCs (Table-3). Due to low participation rates in higher education the per capita general subsidy is less per Bcs than for OCs. Of the total education subsidy, the

TABLE -2

PERCENTAGE DISTRIBUTION OF SUBSIDIES AND ENROLMENT IN HIGHER EDUCATION AMONG SOCIAL GROUPS IN ANDHRA PRADESH, 1980-81

Social Group	Subsidy	Enrolment	Population
1	2	3	4
SC	18.60	9.90	14.90
ST	1.90	1.20	5.90
LBC	27.90	31.70	4.00
OC	52.40	57.20	39.20
ALL	100.00	100.00	100.00

Source : As in Table -1.

share received from higher education is 62 percent for OCs, 25 percent for LBCs, 23 percent for SCs and only 9 percent for STs (Column 8 of Table-3). Thus Bcs as a whole benefited less from higher education than from school education in terms of subsidy.

It is interesting to know which are the income groups within a given social group within an income bracket that received higher education subsidies (Table-4). The proportion of subsidy received by lowest income bracket is more among Bcs than among Ocs. Similarly among the poor Bcs are getting more subsidy than Ocs and among the rich Ocs are getting more subsidy. However, on the whole, relatively economically and socially better - off sections getting more benefits from subsidised higher education. But when compared with social distribution of income, the subsidies of higher education may be more equally distributed as most of the poor belong to BCs.

TABLE -3

PER PUPIL AND PER CAPITA HIGHER EDUCATION SUBSIDY BY SOCIAL GROUP IN ANDHRA PRADESH 1980-81

Social Group	Per Pupil (Rs.)			Per Capital (Rs.)			Share of Higher Education in total subsidy
	General	Specific	Total	General	Specific	Total	
1	2	3	4	5	6	7	8
SC	1419	1672	3.91	71	83	154	22.6
ST	1128	754	1822	32	21	53	9.4
LBC	1019	385	1404	55	21	76	24.7
OC	1416	99	1515	128	9	138	62.6
ALL	1286	356	1641	87	24	112	26.7

Source : Same as in Table -1

TABLE -4

PERCENTAGE DISTRIBUTION OF HIGER EDUCATION SUBSIDY AMONG INCOME AND SOCIAL GROUPS IN ANDHRA PRADESH, 1980-81

Social Group	Household Annual Income					
	Below Rs. 3000	3000 4999	5000 8999	9000 14999	15000 above	All
1	2	3	4	5	6	7
SC	28.83	25.20	24.83	8.09	12.08	100
ST	35.24	-	21.01	22.83	21.01	100
LBC	17.20	14.33	27.91	15.49	25.04	100
OC	4.55	11.13	22.64	22.84	38.81	100
ALL	13.26	14.40	24.44	18.11	29.77	100
	(13.90)	(16.90)	(21.74)	(11.38)	(12.06)	(100.00)
SC	41.83	32.54	18.88	8.41	7.54	18.6
						(21.95)
ST	5.01	-	1.62	1.13	1.33	1.89
						(5.35)
LBC	35.15	26.97	30.94	23.49	22.80	27.1
						(29.28)
OC	17.99	40.52	48.54	66.97	68.33	52.41
						(43.41)
ALL	100.00	100.00	100.00	100.00	100.00	100.00
						(100.00)

Note : Figures in Parenthesis are corresponding figures for all levels of education
Source : Same as in Table -1.

Higher education consists of both general and professional streams, and includes inter mediate, graduate and post-graduate levels. The difference in the costs, subsidies between them may, sometimes, be as wide as between higher and school education. With this view some evidence on the distribution of enrolment by type and level of higher education among income groups is presented in Table-5. Compared to general education, majority of students in professional courses belong to richer sections. Similarly, proportion of students from high income brackets increases as one moves from intermediate level to graduate level and from graduate level to postgraduate level. Very few from poor families attend professional and technical courses.

i)   Some family and labour market characteristics of higher education are presented in Table-6. The table throws light not only on the present benefits (subsidies) but also the future benefits of higher education.

TABLE - 6

CHARACTERISTICS OF HIGHER EDUCATION IN ANDHRA PRADESH

Type/Level of Higer Education	Average Family Income (Rs.)	Average Education level of family (years)	Private Costs (Rs. / Per year)	Special subsidy (Rs. / per year)	Total Subsidy (Rs. / per year)	Average Annual Earnings (Rs.)	Private Rate of Returns	Average
1	2	3	4	5	6	7	8	9
Intermediate	10936	6.6	931	209	375	5319	5.53	
Graduation					924			32
B.A.	10326	7.6	1494	479		8635	11.00	
B.Sc.	15217	7.9	1761	513		8183	13.00	
B.Com	12729	8.0	1556	5.7		8291	12.00	
Post-Graduation					4741			33
M.A.	18061	8.4	2431	1672		10047	5.00	
M.Sc.	12124	8.7	2574	1795		12233	5.00	
M.Com.	15403	9.1	2215	1470		10194	5.00	
Tech.& Professional								
M.B.B.S.	43220	12.2	2912	1368	4838	17112	16.00	41
B.E.	19827	10.2	23.6	1364	2838	14932	18.00	29
Ag.B.S.C.	31570	11.9	2480	1473	3683	14470	10.00	28
B.Ed.	17830	8.3	1912	368	3238	8783	7.00	15

$r_{23} = 0.24$ (n=11) ; $r_{24} = 0.67$ (n=13) ; $r_{26} = 0.66$ (n=7) ; $r_{27} = 0.87$ (n=11) ; $r_{28} = 0.38$ (n=6) ; $r_{37} = 0.15$ (n = 11) ; $r_{45} = 0.81$ (n = 13).

* Rough Estimates.

Source : Columns 1,2,3,4 & 5 caluculating are based on Field Survey 1980-81, Shiva Reddy (1990).
Columns 6,7, & 8 Neerada Reddy (1980), Tilak (1987).

There is also strong association kinds of higher education. In the balance of government subsidies (and regulation) the college places are determined by the ability to bear the costs. Family support plays on important role in higher education finance, and individuals growing up in families who don't value education or whose income is limited have restricted access to educational support (Mundel 1973 : 305).

ii) Education contributes to the reduction of income inequality. Higher education is believed to have sizable income effect and though the distribution of human capital earnings structure can be altered. Consequently

reduction of inequality in pay and through increase in the earnings component in total income the reduction in income inequality may take place. Since education is a strong determinant of earnings, investment that help to equalize educational opportunities may help to equalise incomes in future.

iii) Education contributed to upward and intergenerational mobility. social and economic mobility has long been an important focuss of commentary on Indian society. College graduates are, it is observed, most likely to experience high upward mobility. Education, by raising the overall level of income, may contribute to the reduction in the ab-group because the former may have more access to job opportunities through social contacts. Expansion of higher education among hitherto neglected will lead to decline in the earnings associated with each level of education. It is the low socio-economic groups who experience it more than their counterparts with better background because of their late entry into the labour market.

Expansion of higher education may not lead to increase in the volume of employment opportunities automatically. Infact the opportunities have been declining which is evident from data on the growth of educated unemployment.

Weaker sections are most likely to face serious unemployment problem as also the costs of waiting for better employment. Therefore, they are more likely to settle down for less paid and less secure jobs. This will cast doubt on the inter-generational mobility effect of higher education subsidies.

Further, there appears to be a contradiction between the objective of integenerational equity and income equity. One may not follow from the other : Infact they may move in opposite direction. Intergenerational mobility may take place but only at the cost of increase in income inequality or income inequality may come down but may reinforce intergenerational inequity, Therefore, the structure of subsidies aimed at equality of opportunity in higher education may not necessarily guarantee upward and integenerational mobility. Then subsidising higher education on mobility grounds is clearly unjustified. However, higher education is a necessary, though not sufficient, condition for upward mobility of children from less privileged backgrounds.

IV. CONCLUSION :

In this paper an attempt is made to examine some equity issues associated with higher education subsidies. In the state of Andhra Pradesh the subsidies have increased over the year. The equity in the distribution of subsidies in the state has been examined in several ways.

The subsidies have favoured relatively privileged sections. The specific subsidy favoured relatively less privileged sections but because of its small size total subsidy favoured better-off sections.

The subsidies to technical and professional education are higher than for general education. Further, subsidies are highly related to family economic position which in turn is related to educational level of the family members. Also high correlation is found between earnings and level of education, and between private costs and subsidy.

In the light of the above evidence the relevance of equity justification of higher education subsidies is discussed in Section _ III. There is a need to rethink on the equity justification of subsidies. The justification on the grounds of upward and intergenerational mobility is questionable both on theoretical and empirical grounds as is the justification on the basis of income redistribution effect. However, the indirect effects which are difficult to conceive may have favourable effects on both mobility and income equity. Therefore in the context of new economic policies there is a need to re-examine the traditional equity justification of higher education, more closely from all angles.

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