AFRICAN JOURNAL OF EDUCATIONAL PLANNING AND POLICY STUDIES

(AJEPPS)

VOL. 3, NO. 1
JUNE 2007

EDUCATIONAL PLANNING UNIT
DEPARTMENT OF EDUCATIONAL MANAGEMENT
UNIVERSITY OF IBADAN, NIGERIA

ISSN 1595-6377

CONTENTS

African Journal of Educational Planning and Policy Studies 3: 1: 71 - 81, June, 2002

GOVERNMENT EXPENDITURE ON NIGERIAN PRIMARY SCHOOL EDUCATION: BENEFIT INCIDENCE APPROACH

Adenegan, K.O., Yusuf, S.A. and Sodipo, M.A.
Department of Agricultural Economics,
University of Ibadan, Ibadan.

Abstract. *Human resources development is a key factor in economic development. Primary education represents the springboard for human resource development. Given the avoided pledge of government on public primary education, this study examined the benefit incidence of government expenditure on primary school education in Ibadan North Local Government Area of Oyo State, Nigeria. Data were collected with the aid of structured questionnaire administered on one hundred using systematic random sampling procedure. These data were analyzed using headcount (poverty) index and benefit incidence analysis. The result, of the study showed that on the basis of two-thirds of the mean per capita household expenditure of ₦3307.00, about 24 percent of the respondents were core poor, 23 percent were moderately poor while the remaining 43 percent were non-poor. The enrolment share in public schools of these poverty groups was 26.9 percent for core poor, 32.9 percent for moderately poor and 40.2 percent for non-poor. Further, the results showed that average household spending on each child (₦3, 428) was more than government unit subsidy at ₦1632.78. The costs incurred by households were on transportation, feeding, purchase of books and stationeries, uniforms as well as non-tuition fees. It was revealed that households within the study area utilised public schools (94.0 percent) than private schools (6.0 percent). In conclusion, non-poor households benefited more (40 percent) from government subsidy than the core poor households (27 percent).*

Introduction

Education is a long, complex and difficult process whose beginning can be traced to the commencement of the individuals' life and only with the aid of his power to learn. According to UNICEF (1982), education in general and primary education in particular is the pivot on which the development of any nation revolves. It cannot bring about economic growth in itself but it is indeed a vital

factor. It accelerates growth process, and serves as an essential complement to other factors (World Bank, 1992). Education is very important, in that it provides men and women with skills; knowledge and attitude necessary for them to fit into the society. It also provides the people with vocational training to make them self- supporting citizens of the society as it affords them the ability to criticize the society and offer solutions to some existing problems.

Educational services are usually divided into primary, secondary and tertiary levels with primary education required at the early stage of life (Ivor Morrish, 1983). Primary education is very crucial in the educational system because it is the only formal education that most of today's Nigerian children can ever hope to receive. Further, the quality of primary education plays a great role in determining the quality of all higher levels of education. UNICEF (1981) describes primary school as the centre for educating children between 5 and 11 years of age. It is the stage at which the seeds of most mental and emotional dispositions are sown. The Federal, state and local governments spend a considerable share of their available financial resources on education as depicted in Table 1.

Table 1: Expenditure on Social Sector 1995-1999 (₦, Million)

Sector	1995	1996	1997	1998	1999
Education: Fed. Govt. Allocation	12,728.0	15,350 0	16,840.0	23,668.1	2,7713.5
Percentage of Annual Federal Budget	13.0	10.8	11.5	9.6	11.1
Health and Nutrition: Fed. Govt. Allocation (N million)	5,060.9	4,838.0	7,343.0	11,291.9	13,737.3
Percentage of Annual Federal Budget	5.2	3.4	5.0	4.6	4.5

Source: Central Bank of Nigeria, Annual Reports (Various Issues)

Problem Statement

The establishment of public primary schools is a form of public spending by the government, aimed at improving the living standard of the people hence improving the country's productive wealth. Government spends on primary education but the households to which the benefit of this expenditure and subsidy are targeted still incur-out-of packet expenses to obtain education. Laujouw and Ravallion (1995) state that most poor people do not have access to private schools because they are expensive and so rely on public schools, which in actual fact is not free.

Owing to the fact that public primary schools are provided by the government, it is difficult to measure how much benefit the users attach to them and how much benefit they derive from them. Sometimes no price is charged, but this does not mean the service is not valued, even when prices are charged, the price paid does not necessarily reflect its value to the beneficiaries. The enormous government investment and the high drop out rate in public schools become imperative for a study of this nature to be carried out.

This study therefore focuses on the benefit incidence of public educational spending across socio-economic groups in Ibadan North Local Government Area of Oyo State, in Nigeria. Specifically, the study seeks to categorize respondents into the different poverty status, as well as, determine household spending on education to derive benefit from public spending.

Benefit-Incidence analysis is an approach to measure the welfare impacts of public spending programmes. The analysis `pays' to those households using a particular service, the cost of providing that service. A benefit incidence analysis / study starts by ranking individuals households into groups typically based on some form of welfare quintiles such as deciles by some chosen measure of current welfare. It then draws on information on individual (household) level utilization or participation in the publicly provided programme under study to tally up number of beneficiaries in each group. Those numbers are then multiplied by the government unit cost of provision (net of fees).

Benefit-incidence studies do not explain why incidence outcomes are what they are. The policy implications are therefore limited and general rather than specific. In a study conducted by Laujouw and Ravallion (1995), primary education is found to be progressive because the poor as defined by per capita income/consumption, tend to have more primary school age children. Yet, the

per capita normalization ignores size economics in household consumption. Allowing for these may well averse the conclusion.

The World Bank twin studies by Meerman (1979) and Selowsky (1979), used benefit incidence approach to examine public spending in Malaysia, and Colombia respectively. Demery et al (1996) carried out a benefit incidence study of primary education spending counting the number of children attending schools in each welfare groups (total number of enrolment) defined as population quintiles of individuals ranked by per capita expenditure and multiply that number by public cost of providing one year of primary education.

Van de Walle (1992) in a study revealed that the 'rich' spend more per capita on education not because they have more children but due to the amount spent on each student, thereby exceeding the government subsidy while to the poor, the subsidy is a very important source of financing, rising to over 90 percent of the total cost. According to the study reported in the World Bank Policy Paper (1993), households contribute substantially to service provision despite the large government subsidies involved, but contribution varies by income groups.

Typically, individuals in better off household benefit from significantly higher spending than their poorer counterparts. These inequalities can dominate the incidence of public spending. Secondly, the burden of these costs especially, to low income households can discourage the use of the services and lead to poor targeting of government subsidy.

Methodology

Study Area

This study was carried out in Ibadan North Local Government Area of Oyo State. The Local government is one of the 5 Local Government Areas in Ibadan city metropolis. The local government area has a population of 300,939 inhabitants with 151,838 males and 149,101 females (NPC, 1991). The local Government has 63 primary schools, 23 secondary schools 1 women Training centre, and 1 tertiary institution.

Source of Data

Both primary and secondary data were employed for the study: primary information was collected through the use of structured questionnaires.

Secondary information was collected from the Local Government Education Authority on government expenditure and unit subsidy of providing primary education to the people. One hundred households were interviewed for this study, using the multistage stratified random sampling method of all households in the local government area.

A stratum of homogenous population that had primary school pupils was chosen, from which, a systematic random sampling technique was used to select 100 households, by interviewing every fifth respondent in the different quarters due to the absence of a defined sampling frame of all households in the local government area.

Analytical Technique

The benefit incidence analysis was carried out on the basis of the poverty status of the respondents. The poverty status of the respondents was based on the headcount index using Foster, Greer, Thordecke (1984) poverty measure. The FGT is given by:

$$P\alpha = n^{-1} \sum_{i=1}^{q} \left(\frac{Z - y_i}{Z} \right)^{\alpha}$$

(1)

where α takes on the value 0, 1 and 2

P	=	Poverty status of the respondents
Z	=	Poverty line
y_i	=	Per capita expenditure of each poor household
n	=	Sample Size
q	=	Number of household below poverty line.

The FGT measure is calculated by taking the proportional shortfall in expenditure for each poor person, raising the shortfalls to a power to reflect the concern for the depth of poverty, taking the sum of these for all poor individuals and normalizing the sum by the population size.

The degree of concern for poverty in this study was fixed at α equals zero. This gives the headcount index. The respondents are categorized into core-poor, moderately poor and non-poor, on the basis of the mean per capita household expenditure on basic needs. The relative poverty measure was used. The categories are as stated below.

Category 1: Those that spend less than $^1/_3$ of the mean household per capita expenditure on basic needs and referred to as the "Core Poor".

Category 2: Those that spent more than $^1/_3$ of the mean household per capita expenditure on basic needs but not more than $^2/_3$ of it. It is known as the "Moderate Poverty Group".

Category 3: These households spend more than the average expenditure the $^2/_3$ of mean per capita household expenditure on basic needs. The group is called "Non-poor".

Results of the Benefit Incidence Analysis

After grouping the households into the respective poverty groups, the specific benefit incidence accruing to each group from government spending on education was obtained as follows:

$$X_j = \frac{E_{ii}}{E_i} \frac{S_i}{E_i} = \frac{E_{ji}}{E_i} S_i \quad \ldots\ldots\ldots\ldots (2)$$

Where

X_j = Value of total education subsidy charged to group j

E_{ij} = Number of enrollments of group j at the education level i.

S_i = Government net spending

E_i = Total number of enrollments at primary level

i = Primary school level

E_j = Total number of enrolment of group j at the education level i

S_i/E_j = Unit subsidy of producing a school place at level i

Results and Discussion

This section presents the results and discussion arising from the study.

Average Expenditure of Sampled Households

The average expenditure of households on basic needs, both food and non-food items, which includes rent, electricity, water, clothing, fuel and education is given in table 2.

Table 2: Average Expenditure on Basic Needs

Item	Amount	% of Total Expenditure
Food	7943.4	39.4
Clothing	3092.6	15.3
Fuel	657.1	3.3
Housing	1623.9	6.0
Education	6857.0	34.0
Total	20174.0	100.0

Source: Field Survey, 1999.

The table revealed that the mean per capita household expenditure was ₦3307.00 i.e. on the average; each person is expected to spend N3307 in a month. This amount was arrived at since the study showed that the average household size is 6 persons. It is evident that food and clothing are the key basic items on which households devote about three-quarters of their total expenditure. On the basis of the classification made in the analytical framework, the classification of respondents by poverty group is shown in table 3.

Table 3: Poverty Status of Respondents

Group	Amount (₦)	Household
Core Poor	< 1102	24
Moderately Poor	< 2205	23
Non-Poor	> 2205	43
Total		100

Source: Field Survey, 1999.

From the table, about 24 percent of the respondents are chronically poor, spending less than ₦1102 per capita per household. In all, about 57 percent of the respondents belong to the poor group. This confirms the growing concern of the increase in the number of poor in the urban areas.

Determination of Household Use of Government Schools

This is to know the different categories of households that utilize government facilities provided and its effect, as well as, implication. Table 4 provides information on the enrolment level of pupils across poverty groups. All the households have a total of 265 pupils in the primary school. Out of this member, 94 percent are in the public primary schools while the remaining 6 percent are in the private primary schools.

Table 4: Household Total Enrolment Share

Group	Number of Pupils in Government Schools		No of Pupils in Private Schools		Total	
	Number	%	Number	%	Number	%
Core Poor	67	26.9	0	0	67	25.3
Moderately Poor	82	32.9	0	0	82	30.9
Non-Poor	100	40.2	16	100	116	43.8
Total	249	100	16	100	265	100

Source: Field Survey, 1999.

The results above testify to the fact that all enjoys government facilities. The first 2 categories make full use of these schools while even the non-poor also enjoy these services by government. About 60 percent of all pupils in the schools are children, from the poor households.

Beyond attending classes in school, the quality of education can also vary by the availability of materials, to the pupils. The composition of spending on the pupils by the different poverty groups is given in Table 5. From the Table, a core poor person spends only about 14.2 percent and 9.4 percent of what an average moderately poor and non-poor person spend on their wards

respectively. This is instructive given that all the household sends their wards to public schools.

Table 5: Average Household Spending on Education (₦/Pupil)

Group	School Fees	PTA Dues	Transp-ortation	Stationery	Text books	Bags	Total
Core Poor	15.67	90.75	39.7	144.63	112.69	6.9	550.8
Moderate	31.1	206.5	148.1	208.5	374.15	117.56	3868.7
poor	664.0	429.5	467.50	589.0	1183.3	1287	5864.5
Non-poor							

Source: Field Survey, 1999.

The data obtained from the local government headquarters showed that ₦67,064, 385 is spent on primary education per annum. The total enrolment for the schools is given as 40,799 pupils. This gives a unit subsidy of ₦1643.78 therefore for 249 pupils, in public school about ₦409,301.22 is expended by the government. Table 6 shows the share of total education spending accruing to the different households.

Table 6: Share of total education Enrollment and Benefit Incidence of the Different Households

Group	Number of Households	Number of Pupils	Benefit Incidence	Percentage Distribution
Core Poor	23	67	110133.26	27
Moderately	33	82	134789.96	33
Poor	43	100	164378.00	40
Non-Poor				
Total	100	249	409301.22	100

Source: Field Survey, 1999.

It is observed that the greatest percentage of government spending on education accrues to the non-poor group. The benefit incidence to this group is greatest due to the fact that they are mostly beneficiaries of the primary

education services provided by the government with many of their children enrolled in these schools. The non-poor had 40 percent of the total enrollment, the moderately poor' had 33 percent and `non-poor' had 27 percent. By implication, the benefit accruing to the three groups followed the percentage distribution of pupils in public schools across the groups.

Conclusion

In conclusion, the more the use of government provided services by a certain group, the greater the incidence of government subsidy accruing to the group.

From the study, it was revealed that the household spending on education differs according to their status. Government subsidy is also realized to be inadequate in the provision of public primary education making households pay a lot in using these services. The non-poor households spend significantly more per pupil than their poorer counterparts on all items. This suggests that the quality of the schooling of children in poorer households is certain to be far below that received by their fellow pupils from richer households. On the basis of the findings of this study, the following recommendation are made:

Recommendation

- Government should further provide the essential teaching materials to schools to ensure the equality of education to pupils from all walks of life, which will help redress the vast quality, differentials which exist between publics primary schools and privately owned schools,
- The `Learning' environment in the schools should be made more conducive for the pupils. One recognizes the effort of the government through the state Primary Education Boards (SPEB) and the recently introduced Universal Basic Education (UBE) programme. However, there is a need for more tangible results by these agencies if the poor must benefit from public spending.

References

Foster, Greer, Thordecke (1984). A Class of Decomposable Poverty Measures. *Econometrical* Vol. 52, pp761-766.

Ivor Morrish (1983). Development of Education. Oxford University Press, New York.

Laujouw, P. and Ravallion M. (1995). Poverty and Household Size. Economic Journal 105, 1415-1434.

Lionel Demery, Julia Doyton and Kalpana Mahra (1996). The Incidence of Social Spending in Cote D'Ivoire, (1986 – 1995. Poverty and Social Policy Department, The World Bank, Washington D.C. (Mimeo).

Meerman, J. (1979): Public Expenditure in Malaysia: Who benefits and why? Oxford University Press, New York.

Selowsky M. (1979). Who Benefits from Government Expenditure: A Case study of Columbia. Oxford University Press, New York.

UNICEF (1981): Handbook on Primary Education. Oxford University Press, New York.

Van de Walle Dominique (1992): The Distribution of Benefits from Social Services 1978 – 1987. Policy Research Working Paper (No. 871). Country Economics Department, The World Bank (March).

World Bank (1992): World Bank Policy Study 1992. Education Development in Africa. Washington D.C.

World Bank (1993): Indonesia Public Expenditure, Prices and the poor. Country Department III, East Asia and Pacific Region, Report No: 11293 - IND Washington, D.C. (August 31).

Adenegan, K.O. Yusuf, S.A. and Sodipo, M.A. work in the Department of Agricultural Economics, University of Ibadan, Ibadan.