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Education and economic crisis

- the cases of Mozambique and Zambia

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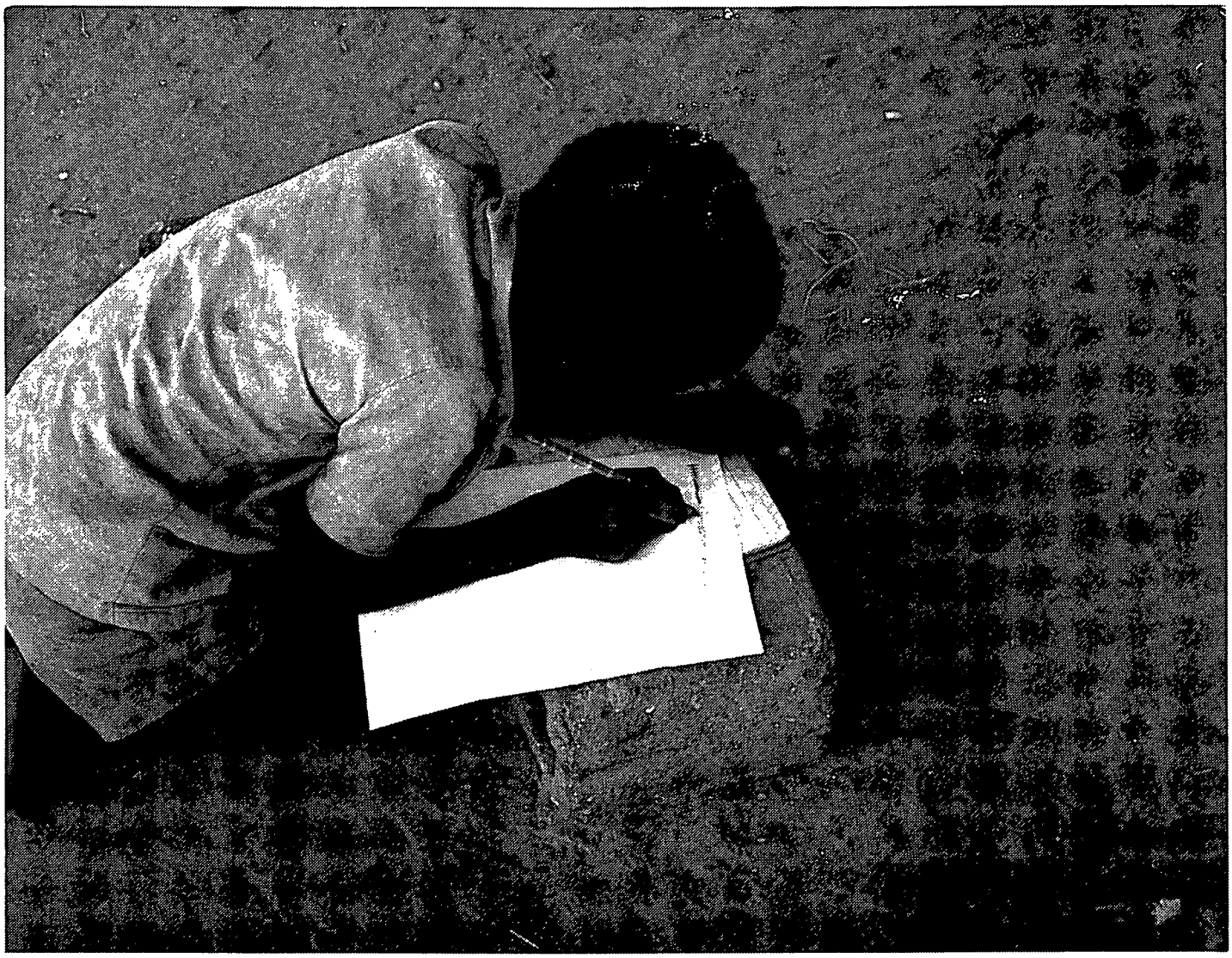
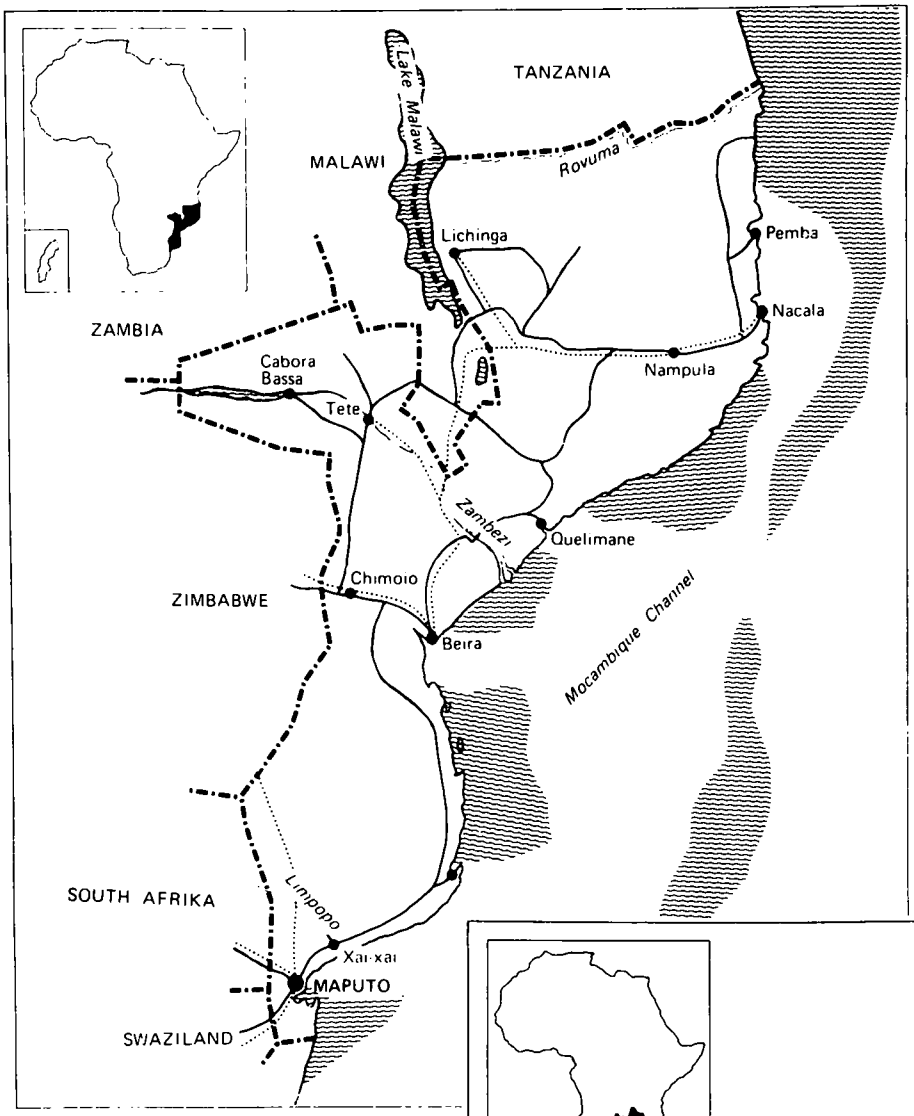


SIDA

October 1987

MOÇAMBIQUE



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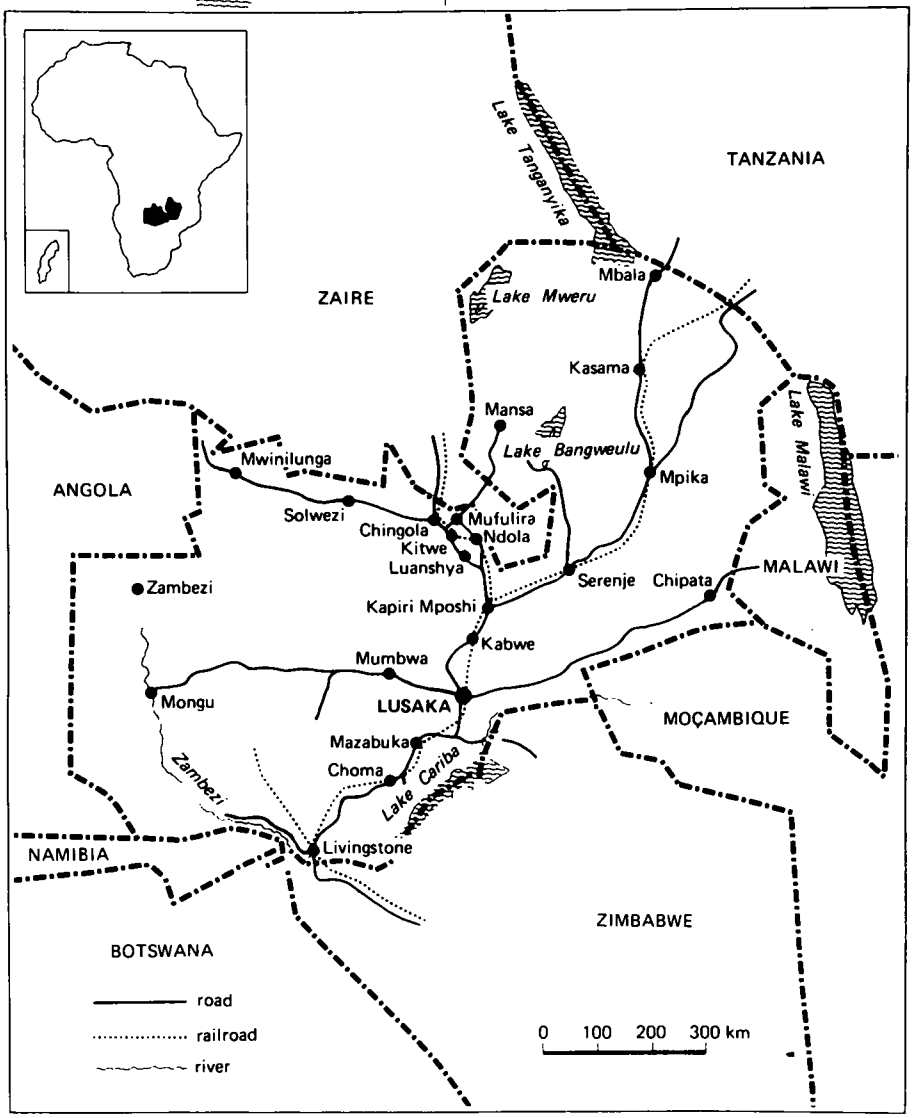

PART I

ECONOMIC CRISIS AND EDUCATION IN MOZAMBIQUE AND ZAMBIA

WHAT POLICY OPTIONS AND STRATEGIES?

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PREFACE

This study was commissioned by SIDA in the context of a growing situation of crisis in the education systems of various African countries, under the pressures of economic decline, natural disaster, and, in some instances, destabilization. It comes at an opportune time in both Zambia and, particularly, Mozambique, where the crisis has been especially accentuated, as SIDA and the concerned ministries in both countries are preparing to regulate the next three-year support agreement in the field of education. The study was carried out during two weeks in August in Mocambique and two weeks in September in Zambia.

The basic question to be addressed by the study was: can Sweden's support to education be redesigned in such a way that it would more effectively help the national government to cope with and overcome the ongoing crisis?

This implied both an in-depth analysis of the nature and effects of the crisis, as well as the proposing of some measures to surmount it, which could be implemented by the government and be given Swedish assistance. The study delegations were privileged to receive direct, concerned, and fully involved support from many Zambian and Mozambican authorities, notably the Ministries of Education, which aided them by freely providing information and by assessing our interpretation of the situation.

The report should be read as a concerned contribution to meeting the challenges posed by the crisis, and as constituting a series of independent recommendations, for further discussion within and between SIDA and the Mozambican and Zambian Education Ministries. It in no way constitutes or represents any policy commitment by either the Ministries or SIDA. There has been an attempt to make the report as direct, objective, and open as possible within the time limitations of the terms of reference.

We trust that this report will at least open a number of issues for discussion and analysis, and at best that it will be a useful contribution to Zambia's and Mozambique's educational development.

Stockholm, October 1987

Lennart Wohlgemuth
Head of Education Division

EDUCATION AND ECONOMIC CRISIS

the cases of Mozambique and Zambia

Report of a SIDA-Mission

1987-08-24 - 1987-09-04 (Zambia)
1987-09-07 - 1987-09-19 (Mozambique)

ECONOMIC CRISIS AND EDUCATION IN MOZAMBIQUE AND ZAMBIA: WHAT POLICY OPTIONS AND STRATEGIES?

1 INTRODUCTION

The two case studies were commissioned by SIDA to assess the extent to which the current economic and social crisis facing most of the countries in Africa is affecting their educational systems' coverage and performance, both in terms of quantitative and qualitative aspects. The major question was: Can Sweden's assistance to education systems undergoing crisis be adjusted in such a way as to help the countries cope more effectively with the situation? Underlying the choice of the two case studies was also a further implicit question: Is it possible for Sweden to develop a fairly standard policy for assistance to countries whose educational systems are severely constrained?

To the first question, the studies give grounds for a qualified yes. To the second, the grounds for a qualified no are given in the conclusion of this paper.

2 THE CASE STUDIES

Given the extent and depth of the crisis affecting them, and the approaching negotiations over SIDA support to education in each of the countries over the coming three years, Mozambique and Zambia were singled out for special consideration.

Both countries have one glaring common problem - their economies are in steady decline, their exports have fallen, their currencies have declined in purchasing power and exchange value. Consequently, their educational systems have been receiving relatively less financial resources in real terms, a factor which has seriously constrained the functioning of the system. Of particular concern was the issue that the crisis was rapidly reducing the quality of primary education and access to it. This is contributing to greater social inequality and inequity. Furthermore, in neither case are there hopeful indications that their economies will pick up soon.

In Zambia, the economic decline has come up partly as a result of its dependence on a single major export - copper, whose extraction is becoming more expensive while its market price has steadily fallen. Although there are attempts to diversify the economy in view of the dwindling copper reserves, these will take a long time to yield significant positive results. In the meantime, planners have to cope with limited resources in their efforts to restructure the economy.

In Mozambique, one is looking much more at a situation of externally imposed ruin. The totality of factors behind the situation is far more complex than in Zambia, but one factor stands out. South Africa is behind the terrorist activities which have devastated almost all sectors of the economy. Furthermore, there are no signs as yet that South Africa intends

to stop its disruptive campaign against Mozambique. Against this background, it is very difficult, if not impossible, for the planners to have effective control over the direction of the country's future.

These absolute statements have of course, some relativity. On one hand, South Africa has already exerted a degree of disruptive pressure on the Zambian economy, and it cannot be denied that this pressure will broaden. On the other, the Mozambican government, as indeed is the case with Zambia, is fully committed to the development of the country. Were peace to prevail, Mozambique has considerable diversified resources which could provide a basis for growth and development.

We may thus conclude that, if the problem is how to deal with Zambia's and Mozambique's economic crisis and the resulting educational crisis, there is need to pay particular attention also to the causal factors which lie beyond the boundaries of these countries.

3 FEATURES OF THE ECONOMIC CRISIS

In Zambia, the economic and social crisis has manifested itself in various ways. GDP has fallen in real value. The contribution of minerals to GDP has dropped from 44 per cent (1964-70) to 14 per cent, with the contribution to government revenue standing at 13 per cent. The value of the Kwacha has steadily declined over the last six years (1982-April 1987). Per capita growth rate for 1984-85 stood at -1.0 per cent. Against this background stands also a huge foreign debt - 4,63 billion USD, and a rapidly growing population, of which 49 per cent is under 15 years of age and 48 per cent is urbanized. The net effect of these factors has been reflected in Zambia's recent decisions to ask lender countries to reschedule her loan repayments, to cut public spending and to reduce employment in the public sector.

In Mozambique, large borrowings made for investment purposes during a period of growth (1977-1981) were supplemented by subsequent loans to finance consumer goods imports, national disaster relief, armaments et al., all contributing to constant budget deficit and a steadily growing national debt. In parallel, worsening terms of trade, unavailability of consumer goods, currency inflation and black marketing served to initiate a spiral of declining exports, which thereafter was aggravated by bandit actions which disrupted production, transport and communications. The GNP declined at least 35 per cent in real terms from 1981-86, while the financial losses caused by the bandit terror have been estimated at over 5 billion USD. In addition, South Africa's decision to reduce the employment of migrant labourers from Mozambique has only exacerbated the crisis in the country's already devastated economy. Substantial income has been lost following South Africa's reduction of migrant labour from Mozambique. The redirection of imports and exports a way from Mozambican railways and harbours has also resulted in enormous income losses. In all, South Africa's policy of economic destabilization has cost Mozambique close to another 5 billion USD.

The net result of all these developments is that the country's economic infrastructure has been largely destroyed, production has been disrupted, and unemployment has risen. The government budget expenditure too has fallen tremendously in real terms.

4 GOVERNMENT MEASURES TO MEET THE ECONOMIC AND SOCIAL CRISIS.

The Zambian government with the support of international agencies (IMF in particular) began taking corrective measures in the second half of the 1970's. The Kwacha, for instance, has been devalued at intervals since 1976; in 1978 Zambia agreed to the IMF economic programme designed to reduce the high rate of inflation and restore the balance of payments. Since 1983 other new measures have been introduced to curb further overall expenditures and reduce budgetary deficits. A freeze on employment in the public sector has been imposed. Other measures have included imposing foreign exchange restrictions on recurrent spending and making efforts to increase economic diversification and domestic production in agricultural and primary commodity sectors. Recent budgetary policies have emphasized domestic savings.

However, Zambia's decision (1st May 1987) to abandon the IMF economic recovery programme has meant suspending economic liberalization measures that had earlier been instituted, such as the decontrol policy on prices. While the Western international community has been sympathetic to the economic and social hardships Zambia has been going through during the IMF programme, Zambia's decision on IMF has dismayed many donors. Although the full economic implications of this decision have yet to become clear, it is evident that the suspension of the programme has only provided Zambia a temporary respite. The Interim National Development Plan (1987/88) which followed the IMF suspension (July 1987) has equally been received with mixed reactions which in general are not very positive.

In Mozambique the government (in consultation with the IMF) has implemented a series of drastic measures to redress the economic decline. The national currency has been deflated by about 1.000 per cent, wages raised by 225 per cent, the state budget cut by 20 per cent, underemployed workers and surplus civil servants have been declared redundant, a general rationalization programme has been introduced, a number of state subsidies and services have been withdrawn or this cost transferred to the consumer. Some state services and productive sectors have been privatised (or at least destatised). Paper money is rapidly being squeezed out of the economy: the black market rate on foreign currency vis-a-vis the official rate has dropped from 45:1 to 2:1. Exports have been made cheaper and imports dearer. Market liberalization has significantly raised prices by 200-400 %, to the advantage of the producers. It seems that under these measures the economy is slowing picking up again.

5 EFFECTS OF THE CRISIS ON THE EDUCATION SYSTEMS

Inasmuch as the nature and scale of the crisis are so much more alarming in Mozambique, it is not surprising that its effects on education in Mozambique and the consequences of those effects are much worse than in Zambia.

In Zambia, although the economic difficulties have forced the government to reduce drastically its budgetary allocation to education, the sector, through community support and access widening measures, has managed to retain a high net enrollment in primary schooling. Total enrollments which stood at 683,912 in 1975 had risen to 1.365 million in 1986, an increase of 100 per cent.

However, the MGEC has still to grapple with other problems such as the problem of rapid urbanization (6.7 per cent growth 1969-80) and its effects on provision of school services. The problem of providing wider access to Grade 5 in rural areas is also yet to be solved. And overage children are still found in grade 1 cohorts, an indication that many eligible children cannot gain access to schooling at 7 years of age. Unless the economy picks up soon there is a real possibility that what has been achieved so far could sooner or later be lost.

In Mozambique, the government's efforts since independence to turn the elitist and exclusive education system to the service of the people led, through a period of enormously rapid expansion, to a situation where the previous education pattern was reproduced on a much larger scale: wide at the bottom (though still not wide enough to take in everyone eligible) and a sharp narrow top as the stages move towards secondary and university levels. Along the way from grade to successive grade a kind of halving process can be seen to be taking place, starting with around 500 000 children in 1st grade and ending with about 2 000 young adults in 9th grade, and 1 000 in 10th grade. Although the system's coverage grew steadily up to 1980, thereafter enrollment slowed down at almost all levels up to 1984. Since then all indicators reveal a downward trend in coverage, quality and efficiency at almost every level and in every track of the educational system. At the bottom of the pyramid, the financing of primary education has been reduced to the payment of salaries (whose real value dropped by about half from 1981 to 1986). Meanwhile, terrorist activities have lead to over two thousand schools being destroyed or closed, which has affected about 500,000 pupils. At the top of the pyramid, the annual total sum of graduates from the 9th grade general secondary and basic level technical schools dwindled from 3,800 to 2,250 between 1982 and 1986 - for a population of 14 million. This means that Mozambique still has over 90 per cent of all pupils concentrated in the primary level, and that the education structure of the population is still: about 70 per cent illiterate; 22 per cent have less than 4 years of schooling; 6 per cent have four years of schooling, and the more highly educated few constitute the last 2 per cent.

6 ADOPTED STRATEGIES FOR EDUCATION

The Zambian government has adopted two strategies: The transferal of costs to users or parents and increased cost-efficiency. Parents must now provide school requisites, such as textbooks, exercise books, pencils etc. In 1985 the government introduced a K100 termly fee for every pupil attending a boarding school. This was later followed up with the introduction of school fees for all non-Zambians attending schools.

Many far-reaching measures which are designed to widen education cost transfers have just been worked out and are now waiting cabinet approval. Among these are: the institution of a general education levy to be handled by district councils; a recommendation to expand existing PTAs into production cooperatives; and incentive grants to the establishment of private institutions at many levels.

As for cost-efficiency the government has recommended new regulations which should eliminate wastage in the employment and distribution of teachers. One such proposal is that the government should discontinue paying salaries to non-working teachers (i.e. teachers on transfer who cannot be offered posts) and introduce a minimum teaching load policy. However, efficiency problems that have seriously affected production and distribution of educational materials do not seem to have attracted government attention.

In the face of severe economic crisis and resource constraints, the Mozambican government has continued its policy of rationalization and has increased its attention to cost-saving and cost-efficiency measures. Aspects of administrative efficiency have also received particular attention. Specific measures that have been taken are: making attempts to maintain constant enrollments in major sections of the system; making efforts to complete primary school coverage in towns and at economic growth points; introducing automatic promotion in lower grades; imposing entry age ceiling restrictions; putting limitations on the permitted years of repetition; improving evaluation methods; and reviewing internal regulations in the vocational track. The government is also going ahead with its planned educational reform programme. The reform is designed to widen access to seven years of primary education and to raise teacher supply and quality.

7 CONCLUSIONS

The two case studies have shown that, despite there being some similarities in the factors that have produced the current economic crisis in Mozambique and Zambia, the crisis has affected the countries' educational systems differently. It can be discerned, for example, that some of Mozambique's current educational problems have a historical origin. Thus, economic and military destabilization have served to aggravate the situation and block efforts to redress the problems.

All the same, there are some common factors: both countries are explicitly committed to the development and improvement of their educational systems, but are doing so under severe resource constraints; both countries are running large teacher training programmes; they have a problematic situation with regard to educational materials; and both have problems with their educational administration. Both countries are against donors helping pay teachers' salaries. This means in effect that the capacity of the governments to pay the salaries of teachers will, to a large extent, constrain the growth of the education sector. This places on the Governments a heavy burden which can be borne only through making serious inroads into the provision of capital investment and school materials of all kinds. In this context, judicious foreign support to other kinds of recurrent expenditure and to provision of school materials can assume a large and positive role. On the contrary, injudicious support can lead to higher wage bills and financial commitments which the two governments has no way of meeting.

It is clear, however, that the salaries of teachers have come to comprise the greatest expenditure on education in the two countries; at primary level, the governments' spending manages to cover only this cost. At the same time, both governments are continuing to train fairly large numbers of teachers. In Zambia, where there is little need (or room) for more teachers in the system, this has led to numbers of underemployed teachers. In Mozambique, where school coverage is very far from total, new teachers can serve to alleviate the load on those already teaching, or for network expansion purposes. However, in both cases the training of new teachers is an expensive matter, and their addition to the system can only raise its cost. In Zambia and Mozambique, it seems also that the training of new teachers is not improving the quality of the system significantly, while the proportion of under- or un-trained teachers working in the system seems to have remained rather high. In this case, it seems important rather to retrain and up-grade existing teachers, and therefore also reduce the amount of new training, because of the related problems of efficiency and cost.

Effectively, the countries' inability to pay for, or subsidize, educational materials must also increase inequities in the system as well as reduce teaching quality itself. This problem must be evaluated against the costs of teacher training.

These similarities lead us to the conclusion that there are some particular areas in common which Swedish aid can usefully support, these being:

- support to programmes to enhance the quality and flexibility of education administration and planning;

- support to the provision of books and materials to schools;

- support to in-service teacher training and upgrading;

- support to self-help schemes for school improvement and extension, and for production of educational materials locally.

Although the studies have served to identify these common areas of strategic importance, they also show that the context and forms of support have to be carefully researched and decided in each individual case. For instance, the specific problems of Zambia lead us to recommend some capital investment in primary school building in urban and rural areas, along self-help lines, to increase the system's coverage and efficiency. The problems of Mozambique lead us to recommend de-emphasizing the primary education sector in favour of increased support to higher levels of in-service and technical/vocational training. The studies show that the problems are most urgent in Mozambique, and that innovative forms of support to its education sector need to be seriously considered.

These examples show that it would be difficult for SIDa to develop a common "crisis-management policy" for education systems under economic stress.

However, the work done points to the possibility of SIDA adopting a common approach for developing support policies to countries whose education systems are in crisis. Such an approach would involve:

- joint consultations on the education sector's priorities, most important shortcomings, most vulnerable sectors, and most crucial structural weaknesses;

- joint consultations on the country's economic and social policies, priorities, and problems, and their implications for the education sector;

- whereupon, support priorities can be jointly identified and forms of cooperation established.

Finally, it seems best that Sweden combine a policy of general long-term guaranteed commitment with a policy of flexible response to developments in the recipient's education system.

PART II

EDUCATION SUPPORT TO MOZAMBIQUE

A QUESTION OF SURVIVAL

Anton Johnston
Kjell Nyström

EDUCATION SUPPORT TO MOZAMBIQUE - A QUESTION OF SURVIVAL

1 SUMMARY

This section of the report looks into the economic crisis affecting Mozambique as a result, interalia, of South African economic and military destabilization, and analyses the crisis in education as affected by economic decline and system-internal problems.

The economic crisis is exceptionally severe. In real terms, from 1981 to 1986, the GNP dropped by 35 %, overall state expenditure by 58%, and educational expenditure by 48%. In 1986, the state budget was cut across the board by 20%. In 1987, measures introduced under the Economic Rehabilitation Programme (PRE) devalued the currency by 1 000%, raised prices by 200-400%, raised wages by 225% (or more for higher echelons), and introduced rationalization measures reducing the modern sector labour force and the civil service. There has been some privatization of production and distribution. Some state services' costs have been transferred to the consumer, while rents and amenity prices have been or are being raised considerably. One result has been an increase in social differentiation and inequity.

Estimates indicate that local production of food will cover only about 8% of market needs in 1987-88. Other estimates indicate that infant mortality has risen to nearly 50%. Bandit terrorism has destroyed transports, communications, economic infrastructure, and social and administrative services. Schools, health posts, rural shops and warehouses, and administration buildings have been prime targets. Alternating droughts and floods have taken a heavy toll, and bandit actions have hindered relief activities.

Hundreds of thousands of people have fled into towns or over the borders, while about 4 million people are considered to be in danger of starvation. South African destabilization of the economy has included reducing its use of Mozambique ports and railways by about 90%, while at least 70 thousand Mozambican immigrant workers have been made redundant and returned home, increasing local unemployment and reducing foreign income extremely. We are forced unhappily to conclude that all available indicators point only to continued South African aggression and continued economic instability, if only as a result. However, some preliminary indicators point to a certain revival of production as a consequence of the PRE measures.

The crisis has rebounded on the education system also. In effect, there has been not only a down swing in the real value of expenditure on the system, but since 1984 also a down turn in enrollment in many of the system's components and a general drop in the number of graduates in as good as all the system's tracks and levels. The table below lays out developments from base year 1984 and requires little further comment.

Table 1. Changes in enrollment and graduation 1984-1987

	Enrollment			Graduation		
	1984	1987 [a]	%-age change	1984	1986 [a]	%-age change
Primary						
1-4	1,237,817	1,194,000 [b]	-3.5	72,743	75,204 [c]	+3.4
General Secondary						
5-6	103,970	116,045 [d]	+11.6	20,176	15,953	-20.9
7-9	17,461	23,230	+33.0	1,829	1,532	-16.2
10-11 [e]	1,967	2,089	+16.2	367	470	(+28.1)
Technical secondary						
Elementary [f]	1,515	183	-87.9	478	86	-82.0
Basic	9,723	7,590	-21.9	1,511	710	-53.0
Medium [e]	1,598	1,293	-19.1	318	229	(-28.0)
University [e] [g]	1,151	1,569	+36.3	54	108	(+100)
Adult courses						
Literacy and-				13,233	6,754	-49.0
	185,166	83,327	-55.0			
Post-literacy [h]				7,596	4,837	-36.3
5-6	24,156	15,248	-36.9	3,403	2,254	-33.8
7-9	11,586	10,700	-7.6	676	407	(-39.8)
10-11 [e]	861	934	+8.5	36	52	(+44.4)

[a] Figures for 1986 (graduation) and 1987 (enrollment) are given as provisional and may turn out to be slightly higher. Equivalent figures for 1985 and 1986 respectively, show the same tendencies.

[b] This figure includes new 5th Grade.

[c] 1985 - there were no "final" 4th Grade graduates in 1986 due to new 5th Grade.

[d] 1986 - the 1987 figures reflect discontinuation of old 5th Grade.

[e] These figures are very small, so the percentages (in brackets) are somewhat misleading.

[f] Elementary level is in the process of a planned phasing-out

[g] 1986 enrollment and 1985 graduation.

[h] Enrollment reflects sum of attendance in literacy and post-literacy.

Source: CNP (1987); MINED (1987 c), (1987 d).

Behind the figures indicated lie first and foremost the bandit disruptions of the system and the society. Mass movement of the population creates general instability and demoralization, even for those not directly affected. Starvation and poverty bring hungry participants to school and irregularly at that. Thousands of schools serving hundreds of thousands of pupils have been destroyed or closed. However, numerous other factors contribute to the situation: the falling real value of teacher salaries, poor working conditions for teachers, the breakdown of in-service teacher upgrading activities, the fall in state expenditure on materials, delays and calamities in distribution of available materials, and a rigid formal system of time-tabling and examinations, to name but a few.

In the face of these difficulties the government is taking some measures to improve internal efficiency, but other unavoidable measures (such as passing book and material distribution costs onto the consumer) will probably work in an opposite direction. Meanwhile the government is pressing ahead against all odds to change the system according to the reforms planned in 1979-1982, converting it from a 4-2-3-2 to a 7-3-2 structure, and raising the intake level and length of training for new teachers.

We conclude that a number of measures need to be taken to improve the internal efficiency of the system, that the question of rising costs for material and books needs urgently to be analysed, that available resources need to be concentrated on graduating more people from the higher levels of the system and on implementing parallel-to-service strategies (evening classes, on-the-job-training, and in-service upgrading of teachers), and that the reform implementation needs to be reconsidered, for instance in terms of opting for a 6-3-2 system and of delaying the implementation of planned reforms in the training of new teachers.

As far as Swedish aid is concerned, we recommend some changes in priorities for funding, in line with our analysis of the problems of the systems. In particular, we think that SIDA should give more support to retraining and upgrading of workers and teachers on-the-job, with a view to helping Mozambique reduce system costs, raise internal efficiency, and rapidly increase graduation levels. We know unhappily that following these recommendations will make the system more elitist and urban-concentrated, but consider this the best way of making education contribute to resolving the economic crisis under present conditions.

2 PAST AND PRESENT USE OF RESOURCES FOR EDUCATION

2.1 Government expenditure on education

In parallel with, and to a large extent because of, the ongoing destabilization of the country, the real value of the financial resources attributed to education has gone down vertiginously. The table below shows national expenditure on education in a resumée form (for a fuller account, the interested reader is referred to Annex 3).

Table 2. National expenditure on education, 1980-1986, recurrent and investment, in billion meticais 1)

	1980	1981	1982	1983	1984	1985	1986 2)
In current prices:							
Total state expenditure	24.0	31.3	33.8	38.8	33.5	32.5	39.4
Expenditure on education	2.9	3.2	3.9	4.3	4.4 3)	4.4 3)	4.8 4)
% education	12.1	10.2	11.5	11.1	13.1	13.5	12.2
GNP	78.9	81.4	91.6	92.5	109.4	147.8	159.0
% education	3.5	3.7	4.1	4.3	3.8	3.2	2.8
In 1980 constant prices 1)							
GNP	78.9	79.8	76.3	59.7	54.2	56.6	52.1
Total state expenditure	24.0	30.6	28.2	25.0	16.6	12.5	12.9
Expenditure on education	2.9	3.1	3.2	2.8	2.2	1.7	1.6

In real terms the GNP has, from 1981 to 1986, dropped by 35%, state expenditure by 58%, and educational expenditure by 48%. We need not look much further for explanation of much of the crisis in education; we will, however, look further into the forms of the impact of the restricted financial resources.

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1) Figures and deflation indices derived from Informacao Estatística 1986 (CNP, 1987, pp 28, 32-34)

2) Provisional

3) Estimated redistribution of biennial expenditure

4) Estimate from levels pertaining from 1981 to 1986

Most of educational expenditure goes to staffing and then mostly to teacher salaries. The table below indicates the percentage of the budget actually spent in 1984 on the diverse areas and levels of education. It should be noted that the survey which derived these figures excludes Cabo Delgado Province, and accounted for 3.9 billion of the 4.4 billion meticais (including 0.2 billion capital investment) spent on education. Furthermore, it does not cover international aid, which comes mostly in the form of personnel, equipment and material.

Table 3. Distribution of educational expenditure, 1984, %

Level	Teaching Staff	Non-teaching Staff	Material and services	Total
Primary	39.3	0.2	0.2	39,7
Secondary	11.3	1.0	1.9	14.2
Adult educ	1.7	0.2	0.2	2.1
Technical	4.4	1.3	1.4	7.1
Teacher train	1.4	0.4	1.6	3.4
Higher	2.5 a)	2.0 a)	3.2	7.7
Central admin	-	3.9	8.3	12.2
Provincial admin	-	5.2	4.5	9.7
Hostels	-	1.7	2.2	3.9
TOTAL	60.6	15.9	23.5	100.0 (3,890m Met)

Source: Duvieusart (1986).

Notable in this table are the costs of material and services at central and provincial levels. Material costs at central level cover textbook cost subsidization, inter alia, but the provincial costs are surprising. It may be deduced that some boarding hostel costs may be included here.

In 1986, all ministries received directives to cut their budget expenditure by 20%. The Ministry of Education attempted to achieve this target by staff rationalization and by reduced expenditure on material without putting any teachers out of work. In fact, the 20% cut on material expenditure was executed, but salary expenditure was only cut by about ten percent. This was achieved in part by reorganizing subsidiary non-educational activities in cooperative forms and by removing productive workers employed by schools from the state payroll, these workers to be paid by their own production in the future. Administrative costs were cut down mainly by reducing the size of the provincial and district directorates, and by returning teachers from these directorates to schools - this latter measure reallocating costs without reducing

a) Hypothetical division; total staff 4.5%

them overall, and making it possible to keep more schools going.

Within the framework of the Economic Rehabilitation Programme (henceforth called PRE),further savings are being introduced this year by privatizing the school material distribution services and including costs and profits in the sales price of materials. In tune with overall revision of salaries and prices, this means that primary level pupils have to pay per year around 2,000 MT each. It is too early for any evaluation of the effects of this measure, but it is inevitable that families with many children, and poor families at that, will be hard put to send their children to school. This may reduce primary enrollment, even significantly, unless some kind of selective subsidy system can be implemented by the Government. Furthermore, it seems that adult education books are being sold in very small quantities, which points to either decreasing adult enrollment or adults coming into classes without books.

At present, small fees (in relative terms) are payable from seventh to eleventh grade, and monthly fees are paid for hostel accommodation. Fees still have to be revised, for 1988, in line with general price measures. It is the intention of the Government not to impose any fees at the primary level. The fees paid revert to the Ministry of Finance, and should thus be discounted against the net budget costs - and unit costs based on government expenditure - for secondary education.

As can be seen from the table above, primary education is the sub-sector which has the largest budget outlay, but almost entirely in the form of teacher salaries. However, a survey of unit costs gives a different impression. The table below indicates the unit annual costs per education level excluding non-allocated costs such as central and provincial administration.

Table 4. Annual recurrent unit costs per education level

Level	1981		1984	
	Unit cost (MT)	Standardized cost	Unit cost (MT)	Standardized cost
Primary	1,260	1	1,763	1
Secondary 5-9	6,587	5	6,866	4
Secondary 10-11	18,590	15	25,161	14
Technical	21,488	17	29,810	17
Teacher training	29,054	23	41,598	24
University	131,603	104	203,029	115

Source: adapted from Duvieusart, 1986, pp 9-11

We may note that the apparent large-scale increase per unit from 1981 to 1984 is not, in most cases, a real cost increase given the inflation over that period. Indeed, where current unit costs have not increased much, it implies that the unit expenditure in real terms has fallen significantly. Overall,

from 1980 to 1986, teachers and other staff have taken the brunt of the crisis, as the purchasing power of their salaries has decreased over that time to one half or even one third. The unit cost for secondary education from grades five to nine has remained surprisingly low. The numbers enrolled at this level have risen fast, but probably with the effect of reducing the number of boarders and thus the unit boarding cost included in the calculation.

In terms of unit costs, two levels give cause for great concern. In 1984, teacher training cost nearly seven times the average GDP per capita, and university training no less than 32 times that (Duvieusart, 1986, p 10). Furthermore, university expenses rose significantly both in real and unit terms between 1981 and 1984. It looks as if one of the first places for severe rationalization efforts should be the university. In 1984, the university seems to have incurred more materials and service costs than the whole of the primary education system, while Duvieusart's report indicates that the university has a very high level of non-teaching staff, a significant additional proportion of total central administration costs, and a number of faculties, especially Arts and Science, which are being run at an astoundingly high price. Against these costs should be weighed the fact that fees paid for university attendance are rather low - 1,000 MT per course per term.

Another area of cost saving appears to be teacher training. The plans for teacher training currently being implemented imply a steady rise in the intake qualification level and the number of years of training to be given. The full implementation of these plans will also mean a steady increase in the cost per graduated trained teacher and in the salary costs in each level of education.

Other cost aspects which give cause for concern are implicit in the plans to extend primary education to cover seven grades. This is either going to mean high capital costs in school network expansion or high recurrent and capital costs in expansion of boarding facilities. In either case, one has also to consider the costs of employing more teachers and of the increased consumption of materials. Given that education has received an insignificant amount of capital to invest through the budget, neither of these options seems very feasible.

In cost terms, even the expansion in numbers and coverage of primary education seems difficult. It should in this context be noted that for this level, the State is now paying virtually only teacher salaries, as the cost of material is being shifted onto the shoulders of the parents.

In absolute terms, the direct and indirect taxes levied by the State should be the major foundation for the education budget. Unfortunately, the State has been borrowing money from international creditors and the national banking system to finance the budget. In fact, a good deal of the expenditure on education is thus ultimately in the form of general government loans. This entails that it is highly unlikely

that education for some time to come will receive funds emanating from government income-generating sources. As the Government's policy is to restrict borrowing, the education system can only expect at best a constant, but most probably a falling, allocation and has thus to find alternate sources for financing its operations.

2.2 Community resources

Apart from taxes, the community contributes significantly to meeting some of the educational expenses and itself incurs various costs by sending children to school. Most of the primary school network is composed of small schools built by the community itself. A proportion of lower secondary school installations has also been constructed in this way. Rural families incur a level of foregone income by the absence of their children from production.

Families have always had to pay a small price for books and materials. Duvieusart (1986) calculated that in 1984, primary school per capita cost on these items were 117 Meticais, of which 22 Meticais is covered by the budget, 55 by foreign aid and 40 by parents. In 1987, it seems that families are spending over 2,000 Meticais per child on material. The increase is partly that there are many more books to buy, and partly because in effect distribution costs have been moved over to the parents.Book production costs are still highly subsidized by the budget and foreign aid as authorship and layout costs are hidden in the form of State personnel salaries and the paper is donated from abroad. Some books are even being reprinted overseas with all costs paid by agency donation.

At secondary level, a fee is paid in fiscal stamps amounting to 600 - 1,000 Meticais for day students and to 1,000 - 3,000 Meticais for adult students per academic year. In boarding schools, boarders pay 100 - 300 Meticais per month. Duviuesart (1986) points out that families pay a 30 - 100 Meticais contribution to the school social fund to help needy schoolchildren. The fees still have to be adjusted to fall in line with general price policy.

In some cases, firms pay a fee for placing workers in technical, vocational and adult boarding courses. In 1984, furthermore, the university received 3.5 million Meticais from contributions paid by firms.

2.3 Contributions from school production

School production is another possible way for income to be generated for education. The Director of the World Food Programme gave a good account of efficient large-scale food production being undertaken at many boarding schools. Technical schools in the course of practical training produce items for marketing which bring in income - at least 61 million Meticais in total in 1984. The value of such production activities is hard to estimate, as some production is consumed

at school and most schools have an extremely shaky accounting system.

2.4 Foreign aid contributions

Numerous agencies are providing contributions to the education system, many on the basis of a single project, few in terms of long-term commitment. The contributions can be divided into grants and loans to education.

A substantial number of donors contribute to the provision of didactic materials and textbooks. This takes the form of paper (Norway and Canada), textbook printing (Finland), geometry instruments and basic school material (Holland), publishing and printing (Sweden), laboratories (Italy, German Democratic Republic), books for school libraries (Federal Republic of Germany), and equipment for hostels (Holland). Some of these donations include support to development of national capacity to produce material or to use equipment supplied. A request for language laboratories and sports equipment has been made to Japan.

The largest single donor is the World Food Programme, which supplies food to around 170 boarding institutions and emergency food to primary schools in war-torn areas.

A number of donors also contribute to infrastructural development. Sweden, Denmark and the Soviet Union support the construction, development and equipping of technical schools and teacher training institutes along with technical assistance in the form of teachers and technicians. Switzerland is supporting development of new primary schools and an office for support to self-help construction. West Germany supports a school reconstruction and school production project in Manica Province. Holland has financed the construction of an adult educator training centre in Beira (Manga).

Various donors contribute to the training of personnel, either through technical assistance (GDR, Sweden, UK, USSR), scholarships (GDR, UK, USA, USSR) or provision of whole schools abroad (Cuba, GDR). Italy, Sweden, Unicef and the World Lutheran Federation support experimental projects and personnel development in various areas of the system. Holland and the USSR provide personnel support to the University. A number of NGO's are involved in small projects, often with a high component of personnel support.

Almost all foreign support is provided in the form of personnel, training and direct imports of materials and equipment, and is thus not easily quantifiable in financial terms. The largest donors are the WFP, the USSR, Sweden, Norway, Holland and the GDR. Cuba's contribution through the provision of four schools in Cuba must also be of high value.

The Ministry of Education is in the initial stages of developing projects from loans promised by IBRD and the African Development Bank. The former will develop Maputo's primary school network and the Commercial Institute, support training

at two University faculties, and assist the Ministry in improving its planning and administrative capacity. The latter will finance the construction of three new teacher training colleges and the upgrading and extension of two more.

3 RECENT DEVELOPMENT OF EDUCATION

3.1 Introduction

There is no doubt that, at the time of Independence, Mozambique inherited one of the most underdeveloped and inegalitarian education systems in the world. The "official" system, extremely biased towards the urban areas, catered almost entirely for the colonist population, which departed en masse between 1974 and 1977 (it is estimated that 90% of the 165,000 colonists left). The colonists took with them not only a good deal of the country's wealth but also most of the developed sectors' technical and administrative skills, leaving behind a 93% illiteracy rate.

The "mission" system, which was the access route to education for the African population, had at most a 36% coverage (1973) of the primary age group population. 50% of the enrollment was bunched in the "pre-primary" year and pass rates in each grade lay between 20 and 30 percent. The ratio of boys to girls in the system stood at 2:1.

It is not surprising that FRELIMO decided to concentrate a large portion of the country's scarce financial and human resources in education. Furthermore, a vast demand existed for education given the system's role as nearly the only, albeit very limited, promoter of social mobility. Between 1975 and 1984, the primary level (excluding pre-primary which became optional) grew more than three times larger, lower secondary five times larger and middle secondary almost four times larger. General upper secondary and university enrollments have never reached the very low pre-Independence levels, while secondary-equivalent technical and vocational school enrollment grew slightly at the Basic level, and doubled at Medium (pre-university) level.

All this expansion led, naturally, to a need for a large new intake of teachers and a parallel need for teacher training. From 1975 to 1984 the teaching corps almost doubled. In this context, it should be noted that most of the teachers in the "official" system left the country between 1975 and 1977. One aspect of this expansion has been, however, that many rather new, young, untrained and low-qualified teachers are today teaching in the system at all levels.

In addition to this effort, adult literacy and post-literacy activities were launched, and schools opened at night for adult classes from 5th to 11th grades in both the general and technical/vocational sub-systems. In 1984, adult enrollment in the general sub-system was as much as 30% of the day-school enrollment.

In 1979, work got under way to reform the whole system in stages, beginning with grade one in 1983. Hitherto, in adult literacy and post-literacy, reforms have been introduced in the form of a three-year 5th-grade equivalent course. In general education, new curricula and textbooks have been introduced at the primary level. In 1987, the new 5th grade has been added on to the previous 4-year primary cycle. Entry age to the first grade of primary education has been raised to seven years. Teacher training has also been reformed in order to keep pace with curriculum reforms.

As a result of all these efforts, the illiteracy rate had by 1980 dropped from 93% to 70% in the population over ten years of age. Those literates who have aquired literacy through interrupted schooling, adult education programmes or through other means comprise 22% of the population. Those over ten years of age who have completed four years of primary schooling amount to a further 6%, while not even 2% has any higher qualification than primary. 1980 census figures also show a very high correlation between educational participation and ability to speak Portuguese, the official language; i.e. almost all illiterates do not speak Portuguese.

Primary coverage is rather biased towards urban areas (12% of enrollment is in Maputo City which has eight percent of the population), while secondary education becomes more and more urban-concentrated per level up the system. In 1984, 92% of all enrollments in the general education system were still in the first four primary grades.

Notwithstanding the vast expansion of the system with concomitant increases in equity in coverage and between the sexes, and with some qualitative improvements in relation to the colonial system, by 1980 education was already showing signs of crisis. Despite an average annual 2.6% growth rate of the population, primary enrollment tended to drop slightly each year thereafter.

The system was wracked at all levels by high drop-out and failure rates as well as rising unit costs. Late entry and constant repetition created a skewed age distribution towards higher ages. In 1984, while the modal ages in the four-year primary school were seven, eight and ten years, those in the fifth grade were 14 and 15.

Expansion of middle and upper secondary levels has been slow and the number of graduates has remained constant or even in some cases dropped. The sum of day-school graduates from the end of the ninth-grade (or equivalent) general and technical/vocational schooling has fallen steadily from 3,800 in 1982 to 2,250 in 1986 - for a population of 14 million.

No analysis of the crisis in education can ignore the effects on the system of South African military and economic destabilization efforts. In the five northern provinces, 2,025 primary schools and 21 secondary schools were not operating in May 1987 because of bandit aggression, out of total of 3,698 primary and 111 secondary schools. The destruction or closing

of these schools have affected 283,000 primary and 8,200 secondary school students.

The economic crisis, and measures taken to rectify it, have drastically reduced financial resources available to deal with the situation. Added to economic and social instability and hardship also lies a set of system-internal problems: lack of material, less-than-minimal infrastructure, untrained and mistrained teachers, inadequate management, a non-mother-tongue curriculum, and a rather formalistic and centralized approach to education in general.

In the following sectors, we will take a closer look at the forms of the crisis in the various component parts of the system.

3.2 Primary level

In primary education, some small internal improvements go hand-in-hand with a rapid deterioration overall. The following table gives a first rough insight into the problem.

Table 5. Enrollment ratios, primary grades 1-4

Year	Age-group 7-10 years ('000) [a]	Enrollment grades 1-4 ('000)	Gross enrolment ratio (%)	Enrollment age 7-10 in gr 1-4 ('000)	Net enrolment ratio (%) [d]	Net enrolment age 7 in gr 1 (%)
1980 [b]	1,317.0	1,317.4	100.3	412.2	31.3	29
1984	1,485.8	1,237.8	83.3	727.5	49.0	43
1985	1,525.4	1,248.1	81.8	732.2	48	44
1986	1,566.4	1,241.6	79.3	736.2	47	43
1987 [c]	1,980.1	1,194.0	60.3	-	-	-

Source: CNP, (1984a), (1984c), (1987); MINED, (1987).

While total enrollment was dropping and the age-group 7-10 increasing, the number of pupils attending in the target range of 7-10 years increased, though reaching a platform after 1984. This implies a reduction in over-aged children, a

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a) It cannot be excluded that the 7-10 year agegroup projected on the basis of the 1980 census is smaller than indicated due to increased mortality since 1982: Infant mortality by 1986 has been reported to be as high as 45-50%

b) 1980 data from the National census. The Ministry gives 94% for the gross enrollment ratio and 41% for the net enrollment ratio.

c) Estimates and provisional figures. The enrollment ratios dropped far in 1987 if only as a result of the addition of a new grade five to the primary cycle, raising the age-group to cover to the ages 7-11.

d) The basis for deriving a "22.7% primary school enrollment ratio" shown in recent reports such as "An Education Project - Credit Request Document" (Unesco/World Bank, 1987) cannot be understood.

stricter adherence to the entry age of seven and some increases in internal efficiency.

A Ministry of Education follow-up on classes using the new, reformed curriculum since 1983 expressed some grounds for optimism about the effects of the reform. The follow-up study registered somewhat improved promotion rates over those previously computed.

However, some calculations (see Annex 4) give ground for continued worry. Our rough cohort reconstruction on new entrants in 1981 indicates that of the 396,000 new entrants, only 37,000 would enter grade four in 1984. In that year, the graduation rate was 51% implying (statistically) that 19,000 would graduate from the primary level. That is, not even five percent of pupils successfully complete the four grades in four years. Even given the errors implicit in such an analysis, the figure is shaking.

In 1986, on the basis of repetition, drop-out and promotion rates prevailing in each grade in 1984, one study (B. Duvieusart, 1987; see Annex 5) calculated that of each 1,000 new entrants to grade one, 718, 506 and 362 would eventually enter grades 2, 3 and 4 respectively. In other words, 282 entrants would only see grade one, a further 212 would not get further than grade two, 144 would have grade three as their final level of schooling and 362 would enter into grade four of whom only 196 would be promoted to grade five under the old four-year primary system. These 362 entering the fourth grade would spend an average of 7.7 years each in the four grades of the primary cycle if no statutory limit was imposed on maximum repetition. Of the 1,000 new entrants, only 49 would be promoted to fifth grade in their fifth year of schooling - close to the cohort estimate above, though subject to the same caution already expressed.

There is no wonder that the age range at the primary level is so wide (34% of enrollees were over ten years of age in 1984) or that the modal ages in grade five were 14 and 15. For the almost 50% who in Duvieusart's model do first and second grade at most - putting aside actually passing - it can seriously be questioned to what degree their schooling experience has at all been useful.

The addition of a new fifth grade to primary level could imply even more difficulties in getting through the whole course, although its introduction in 1987 seems to have been fairly successful. Of the fourth-grade graduates, over 90% were promoted into fifth grade, as a result of self-help contribution and of prioritizing entry into Grade five over first grade entry. Some 40% of all schools now offer the full five-year course.

In light of the problem of high repetition and failure rates, the Ministry of Education is considering the introduction of three measures: a lower maximum number of permitted repetitions, automatic promotion in some grades, and a lower ceiling entry age to primary level.

3.3 General secondary level

In the education system to the end of 1986, secondary level education has been divided into two tracks, general and technical/vocational, and three levels, referred to herein as lower (grades 5-6), middle (grades 7-9) and upper secondary (grades 10-11). In the technical/vocational track, which has more years per equivalent level, the corresponding levels are referred to as elementary, basic and medium.

Plans are in operation to introduce seven years of primary (new fifth grade in 1987) and to promote all fifth grade passes into a new sixth and seventh grade in 1988 and 1989 respectively. In correspondence, the technical elementary level would be phased out.

Under the best of peaceful circumstances, this would present severe difficulties. Hitherto, the few (161) lower secondary schools are distributed approximately one to a district and a few in each provincial capital. This development represents a breakthrough as there were only 26 such schools in 1975. However, the teachers are few (2,446) and the under-trained represent a majority (55%). Most of the schools have to have boarding facilities.

Table 6. Enrollment and graduation, general secondary level ('000)

Level	1980	1982	1984	1985	1986	1987[a]
Primary						
Enrollment 1-4	1,317.4	1,247.1	1,237.8	1,248.1	1,241.6	1,194.1
Graduates Gr 4	82.7	58.8	72.7	75.2	- [b]	-
General secondary						
Enrollment 5-6	80.0	80.7	104.0	111.3	113.9	77.0[b]
Graduates Gr 6	18.2	14.2	20.2	15.0	16.0	-
Enrollment 7-9	9.7	12.5	17.5	21.6	23.8	23.2
Graduates Gr 9	1.0	1.7	1.8	1.7	1.5	-
Enrollment 10-11	0.4	1.2	2.0	2.2	2.2	2.1
Graduates Gr 11	0.3	0.3	0.4	0.3	0.5	-

Source: CNP, (1987); MINED, (1987d).

Admittedly few pupils, proportionally, successfully complete primary schooling, but still, at the end of 1983, 65,225 pupils passed grade four while in 1984 only 46,500 places existed in grade five. In 1985, 72,743 places were needed - 56%

a) Estimates and provisional figures.

b) The introduction in 1987 of a new grade 5 primary finishing year implies no final primary level graduates in 1986 and no new intake to the old grade 5 lower secondary in 1987.

more than available the previous year - and at the beginning of 1986 the need had increased to 75,204 places. In the meantime, failure, repetition and drop-out rates have been high in fifth and sixth grade: 21% and 32% repetition respectively, and 47% pass-rate from grade six in 1984.

With the phasing out of elementary technical level, this no longer represents an alternative access for grade four graduates. In 1984, a maximum of 700 places may have been available; by 1988, no places will be available.

The introduction of a new primary grade five in 1987 will probably reduce the entry pressure on the first year of new upper primary education, i.e. new grade six, next year. However, the Ministry of Education predicts that the promotion of all new fifth-grade graduates into the new sixth grade will not be possible.

The passage from sixth to seventh grade (in 1990, from seventh to eighth) may be becoming somewhat more easy, strangely enough. In 1984, graduates of grade six (20,176) had access to various options: about 6,000 new grade seven places, a few of the total 6,300 grade seven evening-course places, about 2,500 places in technical/vocational basic education, about 1,000 places in teacher training of various types and, possibly, 1,000 places in Mozambican secondary schools in Cuba. In 1985, the number of sixth grade graduates had dropped calamitously to 14,949 or, in other terms, a decline of 26% (though the number of graduates in 1984 seems to have been exceptionally large; see Table 6 above).

Meanwhile, growth at general middle secondary level has been very fast: it has expanded more than twice from 1981 to 1986. Nonetheless, passage through middle secondary level is by no means easy. In 1984, 50% of the enrollment at this level was in grade seven, 29% in grade eight and 21% in grade nine. The pass rate in that year from grade nine was only 51%. Given the age distribution in lower secondary and the probable length of time needed to pass through middle secondary, most of this level's students are already adults, i.e. over 16 years of age.

Inequities at this level are marked. Girls comprise 32% of the enrollment and the now 42 schools are almost all situated in larger towns and cities. Maputo City has about one third of all enrollment at this level and probably produces half of the graduates.

As to upper secondary level, the numbers involved are extremely low. This derives not only from the low graduation from middle secondary, but also from scarcity of schools and teachers. In addition, previously a relatively low priority was accorded to this level by the Government itself: the level was closed entirely from 1977-1980. There are five schools operating at this level with 117 teachers, one third of whom are of foreign origin. Graduation has remained constantly in the low hundreds per year.

With the general rise in intake capacity at all three secondary levels, accompanied by a parallel rise in the number of teachers, some with much longer and higher-level training, it seems now imperative to take actions which permit a much smoother flow through the system. What has to be addressed in particular are the high repetition and failure rates and the alarming trend shown by available figures of a drop in the number being graduated from sixth and ninth grade.

It must be added that the given figures do not include the three Mozambican schools in Cuba, which apparently have a better internal efficiency and a good graduation level. Even if these numbers are added to the graduation from the system in Mozambique, however, the total number of graduates from grades nine and eleven cannot exceed 3,500 and 600 per year respectively, which is still a most minimal fraction.

3.4 Technical and vocational secondary education

Technical education, despite an ambitious and rather successful attempt to train teachers for its total capacity, has also seen a marked decline in recent years, both with regard to net enrollment and, to a larger extent, in success rates. Part of this may reflect continued lack of textbooks and material, part the entrance of under-qualified primary/lower secondary school graduates affected by unstable and substandard schooling since Independence. Nonetheless, this trend raises alarming questions concerning the high capital investment made in teacher training facilities, and the high unit costs at this level.

Table 7. Enrollment and graduation, technical secondary level ('000)

Level	1980	1982	1984	1985	1986	1987
Elementary						
Enrollment	2.8	2.0	1.5	0.7	0.7	0.2
Graduates	0.5	0.3	0.5	0.1	0.1	-
Basic						
Enrollment	9.9	10.0	9.7	9.3	8.4	7.6
Graduates	1.6	2.0	1.5	0.9	0.7	-
Medium						
Enrollment	1.0	1.4	1.6	1.6	1.3	1.3
Graduates	0.3[a)]	0.4	0.3	0.2	0.2	-

As noted above, the technical/vocational secondary sub-system is divided into three levels, elementary (grades 5-6 equivalent), basic (grades 7-9) and medium (grades 10-11) with the same number or one year's extra training at each level. In the near future, the extension of general primary education to seven years will imply the closing down of elementary

a) 1981 (1980 figures incomplete).

level. This process of phasing out was begun already some years ago.

Basic level vocational education is an important parallel track to general secondary. Over the years from 1975 to 1985 it has graduated almost as many students as its general counterpart. As two teacher training institutes for technical subjects started operating in 1981/82, the subjects on offer in the schools are covered mostly by Mozambican teachers. High investments in equipment have been made with support from inter alia Sweden, Denmark and the Soviet Union. There are now 25 basic schools, up from 13 in 1975, with 667 teachers. 521 teachers have been trained with ninth grade entry qualifications and 2 or 3 years of specialization for the technical subjects. Other trained teachers for the general subjects have been incorporated from general teacher training colleges. There is, however, a marked lack of trained teachers for mathematics and physics, and for Portuguese.

The situation is similar at medium technical education level. The number of institutes has risen from three to four. Almost the same number of students has been graduated from this level as from general upper secondary. A number of teachers has been trained at university level. Large amounts of equipment have been installed. Numbers of foreign teachers are employed at this level.

Given what should, therefore, be reasonably favourable circumstances for a good quality education, it is doubly alarming to see that even at these two levels, graduation has dropped by 64% at basic level over 1982-86 and by 39% at medium level over the same period. There are also some indications that industrial stream graduates have not been favourably evaluated in their new workplaces.

Insurgency accounts for some of the problem in the form of some disrupted schooling, electricity cuts and lack of supply of needed materials.There are very few textbooks available, and there has apparently been too little individual time on practical activities especially for teachers in training. The enrollment structure reveals the typical "bunching" in the first year, and "drop-out rates at the schools as a whole amount to 70%" (DANIDA, 1986, p 23). The report cited attributes these problems inter alia to "little attention being paid to desires expressed by the students concerning enrollment" (p 22), to teacher turnover "which at one school averaged 30% of the staff each year" (p 24), and to inadequate administration. Deble's report (1986, p 26) points to a serious under-utilization of capacity in some technical schools. The pupil/teacher-ratio at Basic level in 1986 was 13:1.

In discussions, it was indicated that there are two problems that influence the level of quality. One is that the on-the-job training and upgrading of technical teachers has been neglected over the 1980-86 period, and another that teachers apply both a bureaucratic interpretation of internal regulations on pupil behaviour and an over-stringent evaluation designed to "catch the pupils out". In spite of the low

pupil/teacher-ratio, therefore, quality is adversely affected by teacher capacity and comportment.

One may note here that Mozambique also has a technical medium level institute in Cuba, which now produces per year as many graduates as the medium level system in Mozambique does, or some 300 in 1986/87.

As to further growth in the technical-vocational sub-system, it is clear that many graduates from grade six are available to enter Basic technical schooling. As it is, installed capacity at Basic level is about 14,000 places as against the 7,600 places occupied in 1987. However, SETEP considers it counter-productive to enroll more students at this point in time, both because of the low quality and high attrition rates (notably in first-year Basic) and because it must direct its efforts to meeting the real - and eventually rather low - demands of the labour market. Rather than even further crowding first-year, SETEP wishes to increase the numbers in the following years and the total graduation by quality improvement centred on teacher upgrading. On the other hand, at Medium level there is a labour market demand some ten times higher than the number of graduates available.

3.5 Teacher training

Teacher training at all levels has been characterized by a move towards higher entrance levels and courses of longer duration. Also here, it is alarming that in spite of the high investments made, representing very high unit costs, half of all primary teachers are still professionally untrained, while success-rates in secondary schools have not noticeably improved.

Mozambique has made very large efforts in the training of teachers ever since Independence. At present, in line with the general reform of the education system, teacher training models are being changed over, with a view to increasing the qualification level, quality and quantity of teachers in the system. A summary of efforts since 1980 is contained in Annex 6, which also shows current training.

If no allowance is made for teacher drop-out, it seems that most teachers for grades five to eleven have been trained. However, the high drop-out and failure rates at all levels of the system are consistently blamed on low quality teaching. One factor at play is that most trained teachers have entered their training course directly from school and begin teaching young and inexperienced. The housing and salary conditions they have faced have been rather poor, notably as the real value of salaries dropped so far over the 1980-1986 period. Up to 1986, we can deduce a fairly high level of teacher drop-out, as indicated by the following table:

Table 8. Teacher training and teacher employment

Level	Teachers in 1980	Teachers in 1986	Growth 1980-86	Teachers trained 1980-85
Primary 1-4	17,030	20,756	3,726	11,423
Secondary 5-11	2,087	3,422	1,335	3,281

Source: calculated from CNP, (1987).

The absolute difference between growth and training serves only as an indicator, as several factors intervene in interpreting the figures:

- some teachers working in the system in 1980 were admitted to training afterwards
- some trained teachers have been taken in for re-training
- some trained teachers have become teacher educators, general subject teachers in technical schools, or administrators
- there have been some imbalances in secondary teacher training causing a shortage of mathematics and Portuguese teachers
- principally at primary level, some new teachers were admitted without training, during the period covered.

The Ministry predicts that the dropout of trained secondary teachers will be reduced substantially by the PRE, which has linked salaries to relevant diploma held, thus making salaries of teachers on-the-job above those available in the productive sectors. Nonetheless, primary teacher salaries are very low in absolute terms and continuing dropout can be expected at this level.

One notable problem with teacher training, for the present and the future, is that in general the Ministry's strategy is to train new teachers, while few resources have as yet been put into retraining, upgrading and requalifying teachers in service. The continuing low quality of education, even with a presumably strong influx of trained teachers, would seem to make in-service training and shorter retraining of existing teachers a priority far above the admission of many new prospective teachers into training courses of long duration. Unhappily, the experimental distance-course upgrading of primary teachers undertaken in 1986 seems to have yielded very unsatisfactory results. One must also question, in terms of results, the quality of initial teacher training undertaken so far. This, together with the financial implications,leads us to question whether longer initial training is really the best solution to the problem.

Certainly, the strategy delineated for the future is a very costly one. First, trainees will have to undergo longer initial general training. On 1984 (averaged) figures, in the

best of circumstances, a 6th-grade participant had cost the State around 30,000 Meticais and a 9th grade participant around 50,000, allowing for just one repetition in primary and one in secondary, and discounting system wastage (figures used are costs per annum per student enrolled, not costs per graduate).

Second, lengthier teacher training in boarding centres will automatically cost more. Three years for an enrolled trainee cost, on 1984 figures, 125,000 Meticais (again for trainees, not graduates). To be noted is that these costs omit capital outlay.

Third, the salaries of such higher qualified, longer trained teachers will be much higher.

Fourth, unless the (in usual terms) imbalances in 1987 caused by the initial phase of the PRE continue, it is quite possible that so highly trained teachers - notably in mathematics - will be attracted away to the productive sectors. By Law 5/86, it has been established that a graduate from a training programme must give an equivalent number of years of service in the post for which training was provided, or repay the cost of training to the State. However, it is still doubtful to us whether, even if the law can be applied in practice, the State can really afford to train teachers in 3-4 year courses and then lose them after only 3-4 years' service.

Fifth, the output of graduates, especially at 9th grade level, is so low that it must be seriously questioned whether Mozambique can afford to divert a large number of them into lengthy teacher training courses at this stage.

These factors must be weighed against potential quality gains in the system. Important areas of study must be how to improve teachers' living conditions in or near the school to which they are allocated, and how to upgrade teachers already in the system, on-the-job and between terms.

3.6 Adult education

The adult education sub-system is divided into a specifically adult-oriented semi-formal primary level equivalent three-year programme, numerous evening classes following the essential components of the general and technical/vocational secondary curricula, and "accelerated" boarding courses at lower secondary level. All these forms of adult education are characterized by a priority-group enrollment system, which attributes available places first and foremost to cadres, workers and collectivized sectors in that order.

The primary equivalent programme has seen a constant decline from its heyday in 1980, when the census registered 579,500 participants. In 1984, still over 180,000 people were registered despite all the problems of insurgency, a declining economy, and simple lack of access in large areas of the country, but by 1987 the number had declined to about 83,000.

Nonetheless, over the years 1979-1986, 348,300 adults were graduated from the literacy level, and 114,300 graduated at primary completion level (old 4th/new 5th grade).

The 1980 census indicates two important facts that should have an impact on the programme. On the one hand, virtually all the illiterates in the country do not speak any Portuguese, while on the other some 73% of all literates both spoke (some) Portuguese and only had interrupted primary schooling.

There has been an infusion of some 600 trained and paid adult educators into the programme. Nonetheless, the current DNEA evaluation of the "primary" level is that little is happening, and that the 600 educators have small classes, do few hours of work per week, and for the most part need to be retrained in even longer courses. Over the past two years, moreover, the provincial and district level adult education administration and training corps has been severely cut down as part of the Ministry's staff rationalization programme.

The DNEA is also responsible - with very meagre human, material and financial resources - for adult enrollment in general secondary evening classes. Table 9 below presents the enrollment situation in the 80's. (Evening enrollment in technical/vocational courses falls under the responsibility of SETEP.)

Table 9. Adult enrollment in evening classes ('000)

Level	1980	1982	1984	1985	1986	1987 a)
Gr 5-6	11.7	22.9	24.2	22.3	24.7	15.2
Gr 7-9	3.7	8.0	11.6	8.5	10.7	10.7
Gr 10-11	-	0.2	0.9	0.8	1.2	0.9

Source: MINED, (1987c).

A curriculum reform reducing the normal school curriculum to its core components meant that from 1984, adults needed only to attend four nights a week instead of five. A further reform created a special parallel "adult directorate" in many schools to take care of evening courses. The graduation rates in these classes have, for various reasons, been very low - between 30 and 50% from fifth to tenth grade, and much lower in eleventh grade. Notable reasons are electricity failures, job pressures on adults, very accelerated curricula, transport problems, and, in upper secondary, the very large number of separate disciplines to be covered.

However, the following table should strongly make an important point.

a) Provisional figures.

Table 10. Day-course and evening enrollment at general secondary level

Year	Course	5-6	7	8	9	10	11
1983	Day	91,044	6,682	4,396	3,273	862	718
	Evening	23,147	4,361	3,081		521	
	% adult	25	65	40		33	
1984	Day	104,000	8,814	5,064	3,583	1,057	910
	Evening	24,156	6,301	3,024	2,261	538	323
	% adult	23	72	60	63	51	36

Source: Deble, (1986); MINED, (1987c).

The adults graduating must represent an extremely important resource for the present economic crisis and for the future. From 1978 to 1986, 27,000 adults graduated from sixth grade, 4,100 from ninth, and 110 from eleventh. Unfortunately, available figures may indicate a declining enrollment even at these levels, though 1987 figures are provisional; see Table 9. It appears also that the enrollment of adults in the accelerated training centres (CFAT) has gone down sharply, largely due to bandit actions having prevented the centres from functioning.

The only data on the level of adult enrollment in technical/vocational schools has been found in the Maputo Commercial Institute, which had 482 adults in evening classes in 1984 as against 577 day-course students. It should be noted that in the technical/vocational track, evening classes have only really functioned in Maputo and Beira.

3.7 Tertiary level

The University has still not reached the enrollment levels of colonial times, and it is extremely expensive. The education is realized at a cost per capita of at least 115 times the primary per capita cost (1984 figures). This derives from high staffing, very low student-teacher ratios, and a large and expensive proportion of foreign teachers.It seems, on top of this, that Mozambique has even been forced to send students overseas on scholarships to courses equivalent to ones on offer in the University simply because no lodging could be found for them. At the University again output is low. The problems involved are represented in the rather self-explanatory table below.

Table 11. Enrollment, graduates and teachers at university level

	1980	1982	1984	1985	1986
Enrollment	836	1,112	1,151	1,351	1,569
Graduates	115	116	54	108	n/a
Teachers	244	308	351	323	330

Source: CNP, (1987).

4 GIVEN CONSTRAINTS FOR THE FUTURE

4.1 Destabilization effects

The education sector has been badly shaken by the combination of destabilization, insurgency, economic crisis and natural disasters. These have resulted, for the country as a whole, in the destruction or closure of well over 2 000 primary and about 30 secondary schools affecting some 500 000 pupils and over 15 000 teachers, entailing large population movements into coastal areas, towns and cities, and over the border. At present, the growth rate of the urban population lies probably around 15% while it was estimated at 13% some time back and at 8% in 1980. A large proportion, 30%, of the population is at risk of starvation through having moved, through being isolated in areas to which access is being prevented by armed bandits, and through being subject to under-supply and under-production resulting from bandit actions, droughts, floods and collapse of marketing networks.

Bandit actions include destroying or closing schools, cutting down on primary enrollment, interrupting the course of the school year, destroying or preventing the distribution of educational material, and putting entire populations to flight, often into precarious conditions on the outskirts of the larger urban areas.

The Ministry of Education reported that, of some 500,000 pupils affected by destabilization measures in 1986, "only" 100,000 had fallen out of the system. The continued coverage of 400,000 displaced pupils is being absorbed by re-enrollment in other schools in safer places, pushing up classroom crowding and pupil-teacher ratios. In an already strained situation, there are very few resources to cope with this sudden influx of pupils (see Annex 7 for an example).

On a regional level, population movement and the access possibilities for the Ministry combine to push up enrollment in urban areas. In Maputo City, total primary enrollment rose 26% between 1984 and 1986, while country-wide it dropped 4% over the same period. Reports on the situation in the provinces of Zambezia and Tete, the former the country's most populous province, are especially alarming. Even in 1984 they had some of the worst values of indicators for enrollment ratios at each level, female attendance, over-age attendance, school distribution, promotion, repetition and drop-out rates, and secondary promotion rates (see Deble, 1986, pp 6, 7, 9 and 10, and Annexes). The emergency report of the Ministry (July 1987) indicates that these two provinces had lost, respectively, 62% and 77% of their primary schools by May 1987 (MINED, 1987b).

It is not possible to foresee any appreciable improvements in the war situation, as bandit activities are proceeding with substantial South African support, and as the South African regime is continuing its programme of economic sabotage and destabilization. For instance, it seems clear that around 40 000 miners will be expelled from South Africa during this

year representing further unemployment and further reduction in income to the State and the family sector. A Mozambican report to the Non-Aligned Movement in 1987 foresaw a need for USD two billion subsidy over the next four years merely to compensate the probable effects of such hostile actions.

4.2 The Economic Situation

On the macroeconomic plane, from 1981 to 1986 the economy had declined by 35% to a level below that at the time of Independence and in the context of a population growth from 11 to 14 million. This represents a cut of nearly 50% in GDP per capita since 1981.

The external debt rose to an estimated 3,2 billion USD in 1986, and even after renegotiations of payments in 1987, its service is higher than total expected export revenue. Local production is expected to cover only 8% of marketing needs in 1987/88.

4.3 The Labour Market

The combination of falling imports and exports, declining state expenditure, devaluation and rationalization measures has meant that Mozambique is facing a shrinking modern sector labour market at a moment when she is in desperate need of increased production and productivity. In contrast to 1975, when the economic crisis was accompanied by the opening of the labour market as colonists left the country, in the 1980's the measures adopted have thrown numbers of workers, and recently even civil servants, into unemployment.

"Rationalized" industries and services are fully staffed for the productive level they are able to maintain in the face of economic decline, and there are few openings for new employment. Thus, while on the one hand the modern sector is fully staffed by experienced but rather under-qualified workers, the education system on the other hand is beginning to produce general school graduates for whom employment opportunities are limited. The only big demand level is for 11th grade and university graduates.

If an infusion of graduates from these higher levels into the modern sector does lead to increased administrative efficiency, production and productivity, it may be the case that such an infusion would lead to a reopening of the labour market for graduates at lower levels. The PRE at least assumes this correlation and puts emphasis on the graduation of more qualified people from the highest level of technical education and from tertiary education. It is of course to be admitted that Mozambique must have amongst the lowest of proportion of populations in the world with such qualifications.

It is also to be noted, however, that much of Mozambique's production is still in the hands of the little-schooled family sector. Furthermore, Mozambique's capital accumulation possibilities are severely constrained by South African

destabilization, bandit destruction and the terms of repayment of its national debt. In the very first place, the most important goals of international support have to be to assist the country with coping with South Africa, insurgency and the debt. In second place, efforts need to go into reviving the economy wherever possible by capital infusion and by on-the-job training for those already producing in the modern and family sectors. "New" training, in economic terms, needs apparently to be concentrated at higher levels, and as a third level of priority only.

4.4 Other Necessary Function of Education

Education fulfills many functions besides meeting economic needs. Basic education has a primarily political function through its socialization and nation-building aspects as well as in providing a response to popular demand and a chance of social mobility. It may also be the case - where such education is effective - that it contributes to raising skills and productivity, not least in the field of peasant production.

Secondary and higher education not only produce skills but also opportunities for social mobility. In addition, it responds to a powerful "middle-class" demand which no government can afford to ignore. This is especially the case where - as now in Mozambique - there is a strong direct linking of formal qualifications to salary levels.

The education sector as a whole is also a "modern", job-intensive sector, which provides employment for thousand of teachers, administrators and subsidiary personnel of all kinds.

In short, it is simply not an option for Mozambique to abandon rural primary schooling, cut back secondary education, close entrance to teacher training and shut down the university. Mozambique will have to keep all of these systems going to some extent, and contrive the best possible balance between expense, enrollment and output. This further restrains the available room for manoeuvring.

4.5 The Education System

As can be seen from our doleful account, one of the most evident constraints on the future functioning of the education system is precisely the way it currently functions. In purely economic terms, much of the money invested in the system is being inefficiently utilized in that it finances repetition, dropout and failure.

In the face of what is likely to be a constantly declining education budget, the results of this inefficient use of available resources are likely to decline in relation to what is intended, and increase in relation to what is not desired, unless some drastic measures are taken to improve the education career of the system's participants.

5 STRATEGIES FOR THE FUTURE

5.1 Government economic strategy

In 1987, an Economic Rehabilitation Programme (PRE) was launched in consultation with the IMF. Its foci are adjustment of the national currency to its real value, stimulation of family sector production, rehabilitation of existing productive capacity, creation of minimum consumption levels for the population, encouragement of exports and discouragement of imports and concentration on the sectors of agriculture, industry and transport.

The measures applied have been drastic. Hitherto, a 1 000% devaluation in two steps, from 40 MT to 400 MT per USD, has been effected with further devaluation to come. A relaxation of most market prices (which rose between 200 and 400%), higher taxes on luxury goods and services, and a tighter fiscal policy have been implemented. A 225% raise in salaries, in some cases as of specialists a much higher raise, has been granted. A serious rationalization programme has been introduced including an across-the-board state budget cut of about 20%, putting under-productive workers and superfluous civil servants out of work. There has also been some privatization of the productive and distributive sectors.

The measures taken have rapidly funnelled excess paper money from the economy, cut the value of savings, reduced consumption of and demand for goods, cut back the foreign currency parallel market rate, and privileged producers. In some sectors, the readjustment has led to unjustifiably high prices for goods, but generally speaking it seems that production is beginning to rise. It is at present very difficult to judge the effects of the PRE as the whole economy is adjusting without enough stability having yet been attained for an overall evaluation to be made.

As regards the state sectors, care has been taken to try to spread the impact of budget cuts evenly, and to try to transfer some of the costs of the social services to the public. In the health sector, general fees will be raised significantly while in education fees have been raised at secondary and higher levels, and some of the material and textbook distribution costs have been transferred to the purchaser. Each sector is supposed to compensate additionally for the budget cuts by improving effectiveness, by rationalizing administrative costs, and by reducing capital investments.

5.2 Government educational strategy

The Government has been struggling since Independence to improve the education system, increase its efficiency and widen its coverage in a controlled way. It has constantly run up against the tension of trying to meet enormous demands at all levels with very limited human and material resources. Among the measures adopted to attain the goals set, has been the general education reform currently under implementation.

The reform was predicated during years of relative stability and economic growth, using projections of increased resources and increased demands from the economy. Indeed, even under these predicted circumstances, it was foreseen that the reform would imply considerable sacrifices on the part of the system's participants and of other sectors of the economy.

It has been clear to the Government over the past few years that developments were not proceeding favourably. In the face of destabilization and economic decline, considerable extra sacrifices have been demanded, the labour market situation has changed abruptly, and severe cuts have had to be made in the administrative staffing and in the financing of materials and services.

A continued policy of rationalization, an increased attention to cost-saving, cost-recovery and cost-efficiency measures, and a focus on increasing administrative efficiency will be applied. In addition, education plans are being rethought, principally along three lines:

- maintaining a constant enrollment in the major components of the system;

- making efforts to complete primary education coverage, under reasonable infrastructural and staffing conditions, in towns and at important economic growth points;

- taking various measures to improve system quality and efficiency. Such measures include introducing automatic promotion in lower grades, entry age ceiling restrictions, and limitations on permitted years of repetition in general education, as well as improved, flexible evaluation methods and reform of stringent internal regulations in the technical track.

However, outside of these measures, the Government is pressing ahead in the face of all odds to implement the full scope of the planned education reform. Presently, work is going ahead, and will continue over the next couple of years, to provide seven years' primary schooling for as many as possible, and to step up teacher training in quantity, level and duration to meet the reform's predicted needs in quality and quantity.

5.3 International agency strategies

As far as we could determine, foreign aid projects are fully inserted into the Ministry's long-term education system reform plans. We found no indication of any particular restructuring of support to meet the unpredicted problems caused by the war and the decline of the economy.

However, we were informed by the Planning Commission that any extra aid to education in the future would have to be in the form of net new contributions. No increase in funds could be expected in the form of transfer of funds from other sectors, or through opting for new support to the education system if

it could be used elsewhere instead. It was also explicitly mentioned that there was no interest in donors actually supporting, subsidizing or contributing to the salaries of personnel working in the primary and secondary levels of the education system.

5.4 Options and Possible Priorities

In terms of all the system-internal and -external constraints which have been summarized above, the scope for manoeuvring available to the Government seems somewhat limited, and rather depressing in view of the overall goals for education which the system is supposed to attain. The following observations, from the information at our disposal, represent our considered reflections on the situation, and are presented here as an independent contribution to helping on-going endeavours to manage the present crisis. Thus qualified, let us proceed.

In the first place, it seems inconceivable that any form of further expansion of the system should occur at any level, with the limited exception of medium technical and perhaps upper secondary and university levels.

This has immediate impact on various other levels. In particular, it seems urgent to reduce the enrollment in initial teacher training institutions, reduce the number of these institutions, and turn over a number of them to specific in-service training and re-training purposes. Simultaneously, new in-service training strategies need to be considered. Training of new teachers should merely cover the predicted attrition among existing teachers.

It would also seem advisable to rethink system developments based on longer-term periods of training in boarding regime. Along these lines, it would seem logical not to raise initial entry qualifications for teacher training - such as going over to 9th grade plus three years' training for primary teachers - and, in consequence, not to expand the number of teacher training institutions (especially not through financing with loans). A flexible strategy of courses in short modules supported by autodidactic materials for in-service use would seem to be indicated.

It may well also be advisable, in the short run, to postpone the proposed 7-3-2 system structure on the same principles, and to opt for a 6-3-3 structure instead. This would certainly simplify enormously the problems of school expansion, increased boarding, longer school careers, defective transition rates, old - new system equivalence, teacher training levels, large-scale book production, et al. An efficient basic education system with six properly functioning grades is enough to provide a maintainable level of literacy, numeracy and some other practical skills.

Once six years' primary schooling was properly functional, and available to all, and once the economy was out of the present morass, it would still be possible at a later stage

to make the adjustment from six to seven primary grades, should this be deemed to be necessary. There can be no doubt that the conquest of six grades' schooling for all would represent a considerable victory, perhaps rather greater than attaining five grades for most and two more grades for some. And, we underline, this option would be rather a lot less expensive.

In the second place, it seems imperative to find rapid and cost-effective ways of improving quality and efficiency at all levels. It may seem contradictory, in this light, to recommend cutting back on the entry levels and length of teacher training, but the discussions throughout this document have pointed to the problems and the costly payoffs implicit in such a strategy.

We have already recommended a changeover to in-service training, short-module retraining, and autodidactic training for teachers (possibly supported locally by careful teacher allocation, operationalization of the ZIP system, etc.). Another imperative is to try to improve teachers' living and working conditions by concentrating on housing, accessibility of consumption goods, and efficient payment of salary (part, perhaps, in kind).

Other, partially related, strategies could be a concentration on training in evaluation techniques and an experimentation of flexible time-tabling (e.g. more hours per day, fewer days per week), multi-grade classes, and automatic promotion. Investment in simple school furniture and assistance to self-help construction of school buildings and classrooms are also indicated. It is important also to provide school books as far as is possible. In this regard, relatively cheap ways need to be found for pupils, particularly from poor families, to get access to books, as the present high cost of books may precipitate discontent, dropout and non-enrollment.

Third, in view of the present labour market situation, it seems important to concentrate in the short run on a general in-service, or parallel-to-service, education strategy. This implies increased attention to evening classes, in-service vocational training, part-time schooling and training, et al. A specific reorienting of priorities might well be to put literacy training in abeyance and focus on the post-literacy level within priority sectors instead. Particular attention needs to be paid to improving cost-efficiency at the pre-university and university levels.

Fourth, attention needs to be paid in short order to the improvement of system administration and accounting. Among the goals of such improvements would be to make local administration more flexible to respond effectively to demands of the local situation. Not least the effects of the insurgency argue for such flexibility.

Fifth, in response to the critical economic situation, it may be necessary (although urban- and elitist-oriented) to concentrate material and human resources on some "key-schools" at each level to guarantee a minimum output of properly qual-

ified graduates to enter each level above. This conflicts very much with the general Party line and policies, but may be unavoidable under present chaotic circumstances.

Sixth, it could be profitable in political, cultural and economic terms to put efforts into introducing a mother-tongue subject into the primary school curriculum. Such a measure would at least be a support to pupils' literacy learning.

Seventh, and controversially be it added, it may be profitable to attend to increasing the practical content of school subjects and the amount of production at school. This is a difficult strategy involving delicate balancing, and it may prove to cost more than it is worth. It is, however, an area worth studying, at least in secondary and technical/ vocational schools.

At least in the technical track, it seems sensible to cease adding equipment to schools and to concentrate more on obtaining spare parts and raw materials. This would facilitate both the operationalization of practical training and the increasing of schools' production output for the market. If need be, a few basic schools might be upgraded to medium level institutes, rather than new institutes being built and equipped.

6 OPTIONS FOR SWEDISH ASSISTANCE

6.1 Current Support

The cooperation between Mozambique and Sweden within the field of education has been laid down in a three year agreement dated 30 November 1984, amounting to 40 million Swedish kronor and covering the period January 1st 1985 - December 31st 1987. The agreement has been prolonged by half a year, to June 30 1988, and by SEK 10 million. The cooperation is concentrated in three areas.

The first area is to strengthen the Ministry's capacity to expand and improve the education system with emphasis on the primary levels through support to its central service functions to

- distribute school material
- publish textbooks
- coordinate and make use of foreign aid

The second is to improve and somewhat expand technical and professional education through support to

- the organization of auxiliary services within the State Secretariate for Technical and Professional Education (SETEP) in charge of technical schools

- the up-grading of certain technical schools

- the maintenance and supply of equipment to the network of technical schools

The third area is to improve the quality and efficiency of adult education and literacy through support to staff training, curriculum development and the use of audio-visual aids.

6.2 Future Options

Under the circumstances outlined above, the crisis in Mozambique cannot be described as a "mere crisis": it is characterized by rapid and astoundingly large changes in living conditions and economic and social relations, and by extreme instability. The issue is clearly one of survival, and all measures aiming at meeting general basic social needs have to be correlated with the macro-economic actions taken for survival. Below, a number of extraordinary measures are proposed which go against the usual educational policies of both the Mozambican government and SIDA. In brief, the recommendations give priority to forms of "battening down the hatches" which are likely to privilege upper levels of the system, stagnate primary coverage in rural areas, and move the system towards its pre-independence urban-centered and elite character, something which Frelimo has strived to overcome over the past decade. The intention with this is not that the government should abandon rural schooling, which in any case is not an option it can choose. However the "customary rules of the game" are no longer applicable and this has to be mirrored in the Swedish support to the education sector.

For instance, it is not sensible at present to channel funds to primary education if nothing else in society is functioning. Given the circumstances, extra enrollments are not on the cards at any level other than in the context where existing financial capacity is underutilized, such as where teachers are employed with small classes or work less than full-time. In effect, the goal is to prevent functioning becoming even worse than it is and to spend as little money as possible on that: available financial and human resources should be used to make existing structures, especially in the technical tracks, more efficient and increase their utilization rates with the goal of furnishing the economy with the required trained manpower.

It is also important to realize that, even in the unlikely event that the present situation is resolved within the next few years, the repercussions of the destruction of the economy and the dislocation of population through destabilization actions and natural disasters will be seriously felt for many more years to come. This means that efforts in the education sector, and in particular the use of foreign funds, have to be geared towards the rehabilitation and sustenance of the economy: what is at stake is not the education of individuals per se but the survival of Mozambique as a nation.

This entails that support to education cannot under prevailing circumstances be directed towards the improvement and development of the education sector in isolation. Rather, sup-

port has to make its contribution to those aspects of the sector that have as direct and immediate impact as possible on the supply of needed manpower to the prioritized sectors of agriculture, industry and transport and their administration. The lack of trained manpower is acute and a most serious obstacle for a successful implementation of measures within these prioritized sectors.

6.2.1 Technical education and vocational training

The point of departure for support is consequently the improvement in efficiency of technical education and vocational training. A series of deficiencies has been delineated above and has to be addressed, making foreign support complementary to national efforts.

In view of our conclusions above, it would seem in this area to be important to maintain Swedish support to financing of efforts to improve teaching quality, internal efficiency, practical training, and school production. Among the possibilities, some of which have already been implemented or suggested, are:

- assistance to in-service teacher training measures;
- assistance to the production of textbooks for technical subjects; and
- assistance to obtaining spare parts for installed equipment, to improving electricity and fuel supply, and to obtaining raw materials for didactic and productive purposes.

Special attention might be paid to improving the training and increasing the output from the medium technical institutes. The approach to be used is largely the same as that delineated above, with perhaps some complementary provision of equipment.

In industry and agriculture under rehabilitation, on-the-job training for workers, which falls under SETEP's jurisdiction but is still sporadic and disorganized, could also be a subject for renewed attention.

In general, it seems that Swedish support could be redirected towards making in-service and parallel-to-service training, of both teachers and workers, function as effectively as possible. The plans to turn some ex-Trade schools at elementary level into Rural Development Centres could also be a subject of support in this light.

6.2.2 General Education

It is of course clear that many of the problems in the upper levels of the system are directly attributable to the defective school experience of their participants at the primary level. This implies that all links in the process aiming at

the supply of trained manpower have to be considered with a view to avoiding the breakdown in one link which would limit the impact of all other efforts. The Ministry of Education, in cooperation with other structures, organizations and donor agencies, has to ensure that all parts of the process are adequately covered and sustained. A concentration of efforts to the relevant aspects of the overall education system has to be made as the scarce resources available are insufficient for anything else.

It is a hard choice, but the expansion of the coverage of primary education and the rehabilitation of destroyed rural primary schools will largely have to be postponed. There is at present no room for constructing new schools or increasing enrollment with all that this entails in terms of teacher training, educational materials production and distribution, and the like. Where dislocated pupils are flocking into towns, temporary self-help construction to expand existing schools will have to be used.

What is necessarily a point of attention is the guaranteeing of a sufficient high-quality output from the primary level to meet the intake needs at higher levels. In this context, it would be useful to debate the possibilities of re-orienting the on-going education reform towards a 6-3-2 or 6-3-3 system, rather than continue striving for a 7-3-2 system. This latter structure would, amongst other things, demand additional boarding facilities in the few existing secondary schools, making it a much more costly and questionable strategy.

At primary level, as a second priority after technical education, Swedish support of a similar kind to that already given could be continued. The provision of textbooks and educational material, including their distribution through DINAME, should thus continue, with emphasis on providing books to the "new" primary grades (5th and 6th and, if implemented, 7th). To this could be added in-service primary teacher training, and the upholding of pre-service training to cover losses through attrition.

SIDA could also help the Ministry to study carefully the real average price of materials and their distribution, and perhaps contribute some subsidization to allow poorer families to send their children to school.

Limited funds could be made available to local production of educational material which, in view of the strained financial situation, is desirable and warrants support. In this context, some funds could also go to the development of self-help techniques for improving existing classrooms and their furnishing. Funds could also be set aside for self-help schemes for adding classrooms both to cope with dislocated pupils and to complete schools to include new primary 5th and 6th grade - given a 6-3-3 structure.

Production activities, especially at boarding and secondary schools, constitute another economic priority deserving of some investment.

An area which at least merits study, is that of putting some efforts into improving the quality of life for teachers, thereby raising their morale and performance and reducing the attrition rate.

A suggestion put forward by the Ministry has been to create a revolving find in each Province which could support starting up production at schools, and advance loans to teachers to help them house themselves near the schools where they are posted, or to help those who have lost everything through bandit attacks.

Sweden might earmark some extra funds for the World Food Programme to supply food to schools and/or teachers in areas particularly hard hit by the war. Such funds could perhaps be made available under the Emergency Support Programme.

6.2.3 Administration and Planning

Another priority area in view of increased efficiency is administration and planning. It is here important to view the whole sequence from school level via districts and provinces to central level and to include the important advisory role of the inspectorate. Furthermore, as far as technical and vocational schools are concerned, the introduction of accountancy and budgetary measures as well as inventory and costing systems, particularly for production activities, should be incorporated into administration and planning.

6.2.4 Adult Education

Support to adult education could continue to concentrate on the effective use of the Manga Centre as a focus for activities in the field of adult education. Of particular importance in this field are the expansion of night school enrollment and post-literacy activities within renewed, concentrated efforts aiming at raising functional literacy and educational levels of workers in productive enterprises in urban and more developed rural areas.

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Annex 2

LIST OF PERSONS INTERVIEWED

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M. Educacao:	Dir Elisabeth Sequeira (International Cooperation) Dir Arnaldo Nhavoto (Planning) Secretario do Estado Maria dos Anjos (Technical Ed) Dir Teresa Veloso (Adult Ed) Vice-Ministro Paulo Muianga (Administration)
M. Cooperacao:	Sr Chico Verniz
DANIDA:	Mr Louis Dalgaard
NORAD:	Ms Anne-Beate Jensen
WFP:	Mr Dieter Hannusch Ms Pina Frazzica

Annex 3

STATE GENERAL AND EDUCATIONAL EXPENDITURE

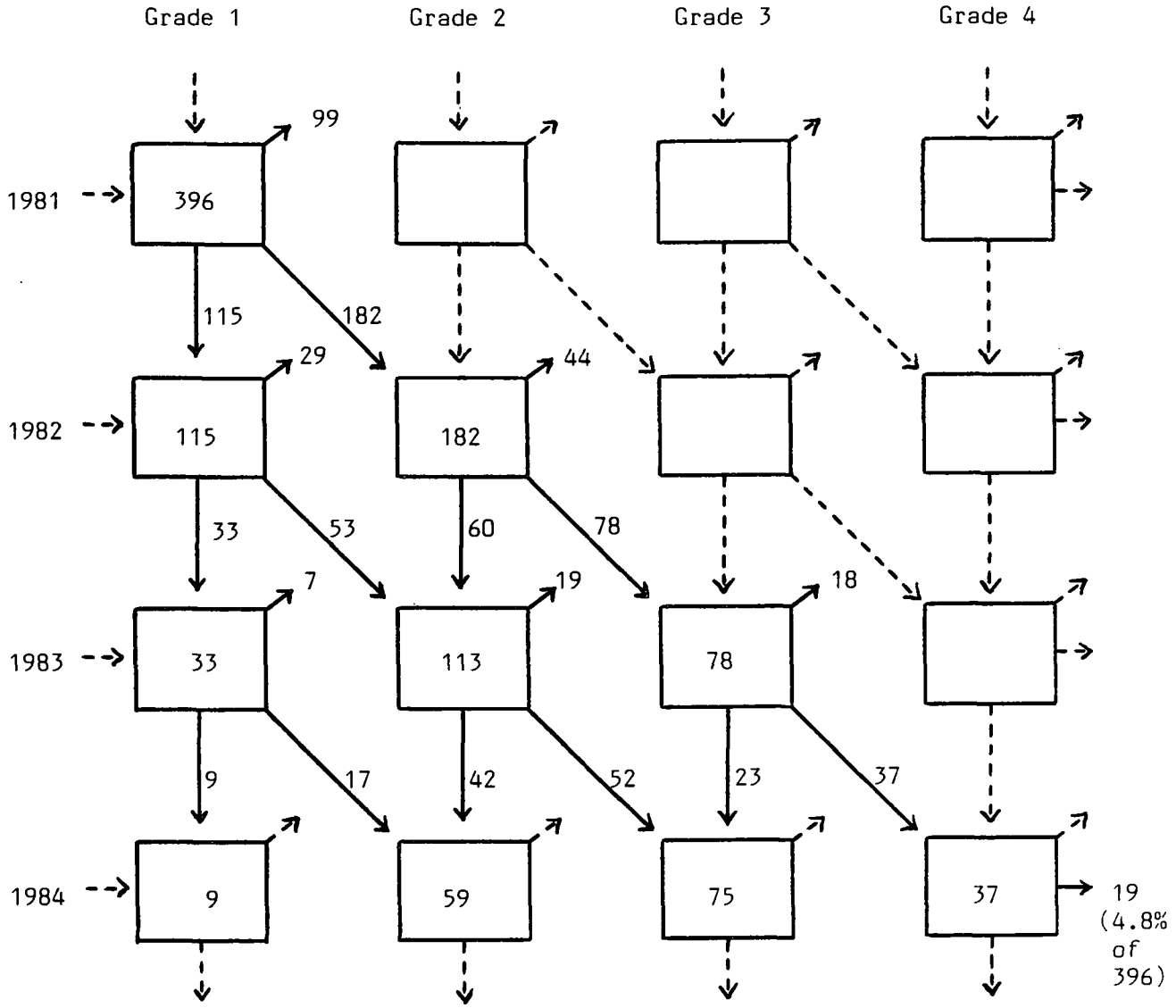
	1975	1980	1981	1982	1983	1984	1985	1986
a) Recurrent								
Total state	6.1	14.1	17.3	19.5	21.7	22.9	24.4	27.4
Education	1.1	2.5	3.0	3.7	4.0	4.1	4.2	4.6
% ed.	18.8	17.7	17.3	19.0	18.4	17.9	17.2	16.8
b) Investment								
Total state		9.9	14.0	14.3	17.1	10.6	8.1	12.0
Education		0.4	0.2	0.2	0.3	0.5		0.2*)
% ed.		4.0	1.4	1.4	1.8	2.7		1.7
c) Total								
State		24.0	31.3	33.8	38.8	33.5	32.5	39.4
Education		2.9	3.2	3.9	4.3	4.4**)	4.4**)	4.8*)
% ed.		12.1	10.2	11.5	11.1	13.1	13.5	12.2
d) In 1980 constant prices								
Deflation index		100	102	120	155	202	261	305
State		24.0	30.6	28.2	25.0	16.6	12.5	12.9
Education		2.9	3.1	3.2	2.8	2.2	1.7	1.6
e) GSP - 1980 constant		82.1	84.1	78.8	64.4	58.2	53.9	56.2
GNP - current		78.9	81.4	91.6	92.5	109.4	147.8	159.0
GNP - 1980 constant		78.9	79.8	71.3	59.7	54.2	56.6	52.1
GDP - current		70.2	73.5	83.8	82.5	99.7	141.2	150.3
GDP - 1980 constant		70.2	72.1	69.8	53.2	49.4	54.1	49.3
f) Total state as % GSP		29.2	36.3	35.8	38.8	28.5	23.2	23.0
Total state as % GNP		30.4	38.5	36.9	41.9	30.6	22.0	24.8
Total state as % GDP		34.2	42.6	40.3	47.0	33.6	23.0	26.2
g) Total ed. as % GSP		3.5	3.7	4.1	4.3	3.8	3.2	2.8
Total ed. as % GNP		3.7	3.9	4.3	4.6	4.0	3.0	3.0
Total ed. as % GDP		4.1	4.4	4.7	5.2	4.4	3.1	3.2

Sources: CNP 1987
Duvieusart 1986

*) Estimate

**) Nominal redistribution of biennual investment budget

COHORT ANALYSIS - PRIMARY LEVEL ('000)



	Promotion rates			Repetition rates			Dropout rates		
	Gr 1	Gr 2	Gr 3	Gr 1	Gr 2	Gr 3	Gr 1	Gr 2	Gr 3
1981	0.46	-	-	0.29	-	-	0.25	-	-
1982	0.46	0.43	-	0.29	0.33	-	0.25	0.25	-
1983	0.51	0.46	0.48	0.26	0.37	0.29	0.23	0.17	0.22

Graduation rate Gr 4 1984: 0.51

Cohort analysis - primary and secondary level

Mozambique: Internal achievement model

Hypothesis 1. Repetition and promotion rates 1984. Present education struc

ANNEE D'ETUDE		1	2	3	4	5	6	7	8	9
TAUX	RED. DEFT	0.262	0.343	0.288	0.268	0.242	0.346	0.205	0.237	0.308
	PROMOTION	0.53	0.463	0.509	0.396	0.561	0.19	0.602	0.586	0.264
ANNEE 1	NOUVEAUX	1000								
	REDOUBL.	0								
	TOTAL	1000								
ANNEE 2	NOUVEAUX	0	530							
	REDOUBL.	262	0							
	TOTAL	262	530							
ANNEE 3	NOUVEAUX	0	139	245						
	REDOUBL.	69	182	0						
	TOTAL	69	321	245						
ANNEE 4	NOUVEAUX	0	36	148	125					
	REDOUBL.	18	110	71	0					
	TOTAL	18	146	219	125					
ANNEE 5	NOUVEAUX	0	10	68	112	49				
	REDOUBL.	5	50	63	33	0				
	TOTAL	5	60	131	145	49				
ANNEE 6	NOUVEAUX	0	2	28	67	57	28			
	REDOUBL.	1	20	38	39	12	0			
	TOTAL	1	23	65	105	69	28			
ANNEE 7	NOUVEAUX	0	1	11	33	42	39	5		
	REDOUBL.	0	8	19	29	17	10	0		
	TOTAL	0	9	29	62	59	49	5		
ANNEE 8	NOUVEAUX	0	0	4	15	24	33	9	3	
	REDOUBL.	0	3	8	16	14	17	1	0	
	TOTAL	0	3	12	31	39	50	10	3	
ANNEE 9	NOUVEAUX	0	0	1	6	12	22	9	6	2
	REDOUBL.	0	1	4	8	9	17	2	1	0
	TOTAL	0	1	5	15	22	39	12	7	2
ANNEE 10	NOUVEAUX	0	0	1	3	6	12	7	7	4
	REDOUBL.	0	0	1	4	5	13	2	2	1
	TOTAL	0	0	2	7	11	26	10	9	5
ANNEE 11	NOUVEAUX	0	0	0	1	3	6	5	6	5
	REDOUBL.	0	0	1	2	3	9	2	2	1
	TOTAL	0	0	1	3	5	15	7	8	6
ANNEE 12	NOUVEAUX	0	0	0	0	1	3	3	4	5
	REDOUBL.	0	0	0	1	1	5	1	2	2
	TOTAL	0	0	0	1	2	8	4	6	7
ANNEE 13	NOUVEAUX	0	0	0	0	0	1	2	3	4
	REDOUBL.	0	0	0	0	1	3	1	1	2
	TOTAL	0	0	0	0	1	4	2	4	6
ANNEE 14	NOUVEAUX	0	0	0	0	0	1	1	1	2
	REDOUBL.	0	0	0	0	0	1	0	1	2
	TOTAL	0	0	0	0	0	2	1	2	4
PROMOTION COHORTE		1000	718	506	362	196	145	62	32	20
TOTAL ANNEES EL		1355	1093	711	491	258	221	53	42	33

Annex 6

TEACHER TRAINING DEVELOPMENT ('000)

Assigned teaching level	Centre type	No of centers 1987	Train model	Teacher trained 1980-85	Total Teachers in system 1986	Graduates 1986	In train 1987
Gr 1-4	CFPP	-	6th+1	10,476	20,576	719	-
Gr 1-5	CFPP	18	6th+3	947		673	3,468
Gr 5-6	UEM	-	9th+2	2,032	2,446	-	-
Gr 1-7	IMP	4	9th+3	-	-	-	820
Gr 7-9	UEM	-	11th+2	1,058	859	-	-
Gr 10-11	UEM	-	11th+2	191	117	-	-
Gr 8-12	ISP	1	11th + 4 1/2	-	-	-	?
Basic	IPI,IPU IAC,ICM	4	9th+3	521	667	?	?
Medium	UEM, overseas	n	11th + 4/5	?	149	?	?
Adult primary	CFEP	2	6th+1	600	?	?	-

Notes
- - = 0
- ? = not available
- CFPP = primary teacher training centre
- UEM = Eduardo Mondlane University
- IMP = Medium-level pedagogical institute
- ISP = Superior-level pedagogical institute
- IPI = Industrial pedagogical institute (Nampula)
- IPU = Agricultural pedagogical institute (Umbeluzi)
- IAC = Agricultural institute (Chimoio)
- ICM = Commercial institute (Maputo)
- CFEP = Educator training centre (Manga).

Source:CNP, (1987); MINED, (1987); interviews.

Tempo nacional
REPORTAGEM

Inhambane

«Quando a escola é destruída passa-se a estudar debaixo das árvores»

Mesmo com guerra o ensino não pára

TEXTO DE ANTONIO ELIAS FOTOS DE JORGE TOMÉ E ARQUIVO

Muitas dezenas de professores e alunos morrem assassinados nas suas escolas, na província de Inhambane. E contam-se por milhares as crianças que se viram forçadas a ficar sem estudar, a meio do corrente ano lectivo. Os estabelecimentos são igualmente alvos principais dos bandidos armados. Não fosse pela coragem dos professores e alunos que se não vergam a essa barbárie, a cifra de crianças nesse estado estaria nas dezenas de milhar: «Quando a escola é destruída passamos a trabalhar debaixo do cajueiro», refere Manuel Vicente, Director Provincial da Educação.

A Educação, na província de Inhambane, atravessa um momento dramático.

À semelhança do que se passou em todo o país, os números de pessoas envolvidas no ensino subiram sobremaneira de 1975 a esta parte. No ensino primário, por exemplo, foram matriculadas no corrente ano lectivo 167 928 crianças, contra as 13 673 que frequentavam esse nível em 1975. Nesse

«O número de escolas destruídas está a aumentar muito, nos últimos meses» Manuel Vicente, Director Provincial da Educação

ano apenas 1091 jovens frequentavam o ensino secundário e agora (neste ano de 1987) a província tem 10 428 estudentes no nível secundário.

Por si sós, estes números deixam claro o grande crescimento verificado no ensino, explosão, aliás, que aconteceu em todas as províncias. Foi assim que se tornou imperativa a abertura de mais escolas, acompanhada com a formação febril de professores, acção ainda na agenda das prioridades das estruturas que orientam a Educação.

Procurou-se igualmente c r i a r todo um mínimo de condições materiais nas novas escolas por forma a tornar possível essa acção de ensino-aprendizagem. E mesmo com as lacunas que ficavam por preencher, como a montagem de laboratórios, por exemplo, os professores sempre buscaram alternativas de tornear tais insuficiências no seu trabalho.

A província de Inhambane tem agora 12 escolas de nível secundário, contra apenas três que existiam antes de 1975. Oito funcionam com as quinta e sexta classes e nas restantes, incluindo a Escola «Comercial e Industrial», lecciona-se até à nona classe. Entretanto, apenas duas dessas quatro escolas, têm laboratórios e os respectivos materiais para as disciplinas cuja aprendizagem, assim o exigem, nomeadamente as escolas «Comercial e Industrial» e a «Secundária Emília Daússe». Nas outras escolas os professores trabalham com base em esquemas, no quadro, para fazer demonstrações práticas de Física e Química, por exemplo, esclarece Manuel Vicente.

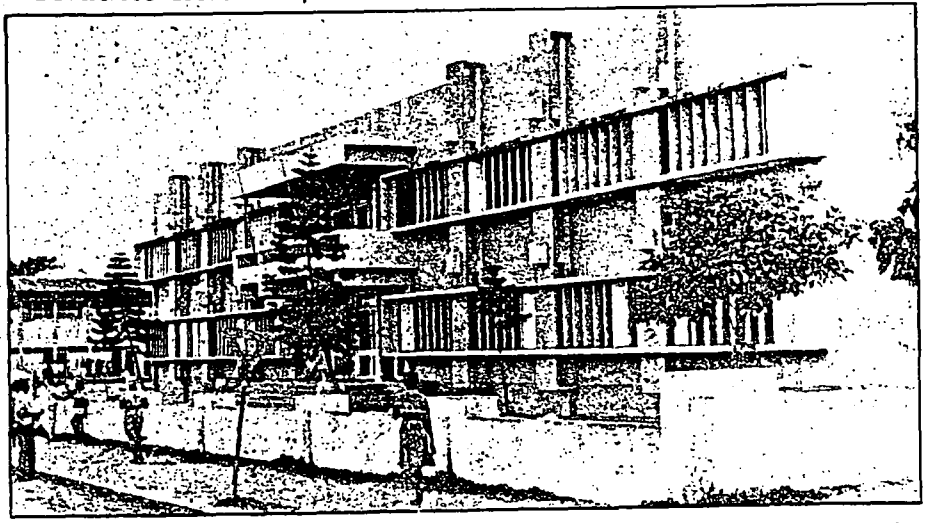
CÚMULO DO DESCARAMENTO?

Ferindo toda esta força de vontade, que é, ainda por cima, a grande felicidade das nossas crianças, os bandidos têm vindo a destruir escolas, a saquear o respectivo equipamento e diverso material ao mesmo tempo que assassinam e raptam professores e alunos. Muitos alunos e professores perdem a vida com canetas e livros na mão. Outros milhares de crianças vêem-se obrigados a ficar sem estudar, quando forçados a sair das suas zonas em consequência de as suas escolas e casas terem sido queimadas.

As famílias a quem assim acontece passam a «esquecer-se de procurar alternativas para as suas crianças continuarem a estudar, nas zonas onde se vão abrigar. Sem bases nenhumas para a sua sobrevivência nas suas «novas habitações» os pais passam a pensar em alternativas de arranjar comida para os seus filhos, relegando, por isso, o reenquadramento das suas crianças nas escolas para o último lugar, conforme aponta Manuel Vicente.

Francisco Herculano, um menino de 10 anos de idade, é apenas um exemplo da situação em que vivem centenas de crianças na província de Inhambane. Esta criança frequentava a terceira classe numa escola em Homoíne.

Francisco Herculano: A sua escola foi destruida em Julho último



Aspecto frontal da Escola Secundária «Samora Machel» da Maxixe: «O número de alunos aqui está a subir, porque recebemos estudantes vindos das escolas afectadas...» — Jeremias Fondo

1.388 escolas afectadas em Sofala Tete e Zambézia

Os efeitos do banditismo armado na Educação tiveram os seus efeitos mais nefastos na região centro do país. Um documento-resumo do Ministério da Educação sobre este assunto refere que nas províncias de Sofala, Tete e Zambézia, entre 1983 e Maio de 1987, foram destruídas 1388 escolas. Deste número 1372 são do nível primário e as restantes do nivel secundário.

Os números de alunos que ficaram afectados com esta situação situam-se em 199 338 no nível primário e 7387 no ensino secundário. A estatística de professores afectados pela desestabilização dos bandidos armados aponta 2159 no primeiro nivel e 160 no secundário. No meio dessas agressões encetadas contra escolas e outros estabelecimentos da Educação é óbvio que milhares de alunos e professores foram assassinados.

Mas porque o ensino não pode parar mesmo com a desestabilização dos bandidos armados que ainda persiste, a sociedade é chamada a dar o seu contributo na reposição dos grandes danos causados para a continuidade das actividades escolares.

A Educação, a quem cabe, em particular, a reabilitação urgente da população escolar afectada, reconstruindo escolas, repondo o material e o equipamento indispensável ao funcionamento do ensino, definiu programas de actividade para esse efeito, discriminando os recursos materiais e financeiros necessários.

Na segunda quinzena de Julho último essa escola foi destruída e a sua família abandonou a casa devido ao terror que então se intensificou, vindo a fixar-se em Inhamússua. E nesta região o rapaz não retomou a sua actividade, apesar de a sua mãe tentar enquadrá-lo na escola primária local.

TRANSFERÊNCIA FORÇADA

O número de escolas destruídas pelos bandidos armados «está a aumentar muito nos últimos meses. Só neste ano somam 14 os estabelecimentos afectados». refere Manuel Vicente, contando-nos sobre o último caso dessa natureza que se registou em Cambine, no distrito de Morrumbene: «Lá os bandidos atacaram duas escolas, uma primária e outra secundária com cerca de mil alunos da quinta à nona classes».

A Direcção Provincial da Educação viu-se forçada a transferir os professores e alunos para a vila de Morrumbene, onde viriam a reiniciar as aulas no dia 22 seguinte nas barracas e outros sítios improvisados. Não seria fácil retomar as aulas em Cambine, não só pelo facto de as instalações terem sido afectadas, como ainda devido ao medo que passou a existir.

Em Morrumbene, para além de se passar a trabalhar sob condições mais parcas há que haver um esforço enorme por parte de todos, por forma a poder-se recuperar as três semanas que perdemos na sequência dessa acção dos bandidos, afirma o Director Provincial da Educação elucidando que todos os professores estão cientes sobre isso e cada grupo de disciplina vai elaborar o seu plano de recuperação.

«O ENSINO NÃO PODE PARAR»

Em outras regiões da provinci quando as escolas são atingida pelo fogo dos bandidos, muda-s para debaixo de um cajueiro. Poi tanto, o ensino não pode parai No meio disto, entretanto, surger depois situações que as própria estruturas da Educação na provín cia ainda não podem evitar com

Os centros de alfabetização em actividade são poucos. «Muitos estão encerrados devido à guerra»

É contra estas crianças e a sua preparação para a vida que os bandidos agem

pletamente, sobretudo as desistências de alunos em maior número. Uns porque rumam para outras regiões com os seus encarregados de educação e outros desistem por medo de voltarem a ser surpreendidos, nas suas escolas. O grosso de alunos mantém-se nas suas actividades, suportando as transferências forçadas.

Ao longo deste ano lectivo, conforme Manuel Vicente, os bandidos armados assassinaram 52 alunos e 11 professores. Outros sete docentes são, até agora, dados como desaparecidos. Raptaram 96 alunos e saquearam bens a 128 professores, também ao longo do corrente ano nas suas incursões pelas escolas.

As escolas que funcionam sob relativa paz, na província, são as sediadas nas cidades da Maxixe e de Inhambane. Entretanto, nesses estabelecimentos sente-se igualmente as consequências desta acção banditesca sobre as suas congéneres nos distritos, conforme o Director da Escola Secundária «Samora Machel» da Maxixe, Jeremias Fondo, que afirma: **o número de alunos aqui está a subir, porque sentimo-nos no dever e obrigação de receber os estudantes de Homoine e de outras escolas igualmente afectadas.** Com esses alunos os professores são igualmente obrigados a fazer trabalho particular para recuperá-los, uma vez que chegam depois de terem passado semanas sem estudar.

No tocante à Alfabetização e Educação de Adultos a realidade é ainda pior, conforme o Director Provincial da Educação. Apontou que **ainda não procedemos ao levantamento, mas muitos centros estão encerrados.** Quando as aulas para adultos funcionavam na maior parte dos distritos da província, não se conseguia contemplar todos os alfabetizandos com o material didáctico, mas **agora há muitos livros e não temos a quem distribuir. A guerra forçou a milhares de adultos a deixarem de estudar.**

Já antes da intensificação do terror dos bandidos armados, segundo Manuel Vicente, a seca afectava o funcionamento da alfabetização nas regiões do interior da província. Com o agravamento da desestabilização provocada pelos bandidos armados, nos últimos tempos, mesmo nas zonas em que esta actividade se desenvolvia normalmente, os monitores e alfabetizandos estão envolvidos no combate aos bandidos armados». Apenas em alguns centros de actividade económica e social, nas cidades da Maxixe e de Inhambane, **é que temos alguns centros em funcionamento e estamos a fazer um trabalho de mobilização com vista ao reinício das aulas nos bazares e outros locais que julgamos haver condições mínimas para o efeito.**

□

PART III

EDUCATION SUPPORT TO ZAMBIA

KEEPING UP COVERAGE AND STANDARDS

Henry Kaluba
Mats Karlsson
Kjell Nyström

EDUCATION SUPPORT TO ZAMBIA - KEEPING UP COVERAGE AND STANDARDS

1 SUMMARY

National income in Zambia is no higher in 1987 than it was when the copper prices plunged a little more than a decade ago, but population has grown considerably. With both absolutely and relatively more children today, but with relatively less resources, the primary school system has experienced a difficult time in trying to maintain coverage and standards.

Though enrollment ratios fell in the end of the seventies, they actually managed to increase all through the eighties and are today as high as they ever were. Today, all children sooner or later enter primary school. Despite the crisis, the numbers of pupils per class and per teacher have been maintained or even improved. That coverage has been upheld is proof of very strong demand in the population for education.

But, the crisis has hit primary education hard. Today, the state pays for teachers' salaries and nothing more. Parents must build and maintain any new school buildings. They also contribute to pupils' consumption to an amount clearly larger than teachers' salaries. In as much as there is furniture or text books, they seem to have been imported or at least financed by donors. Teachers still teach, despite a big fall in real wages, but they have less and less resources to help them. And there is still a coverage problem which is threatening to grow. In poor urban areas, the queue of children having to wait a year or two before they can find a place in a grade 1 class room is probably getting longer, and in poor rural areas there is also a shortage of grade 5 class rooms, forcing children to leave primary education before their reading abilities have stuck.

The government of Zambia will not be able to provide these resources. In even best case scenarios, Zambia's external resources will be very scarce, which means that primary education can expect no foreign exchange allocations. The value of government expenditure cannot be kept up without reducing the budget deficit, which means that the government certainly will not provide any other resources for primary education except teachers' salaries. Parents must provide whatever other domestic resources that can possibly be raised, but parents already contribute a lot, despite decreasing incomes, and they will be expected to pay more also for other services. And still the number of children will grow, maybe by as much as 3,8 percent, and much more in the cities. Their demand for education shows no sign of abatement.

The government of Zambia, certainly at civil servant levels, is acutely aware of the economic constraints facing the future developments of the education sector. The crisis hits at the whole education sector, also at those non-primary subsectors which take more than half of government education allocations. But, because primary education has already been cut to teachers' salaries which cannot further lose their

proportion of expenditure, further cuts have to hit mainly at secondary and university levels, which, however, are politically very sensitive. The cost recovery and cost efficiency measures now proposed to the Cabinet must be characterized as quite radical.

Primary education remains government declared priority (though as revealed by expenditure, it can hardly be said to have been actual priority, at least not during the eighties). Government cannot be expected to provide additional real resources to the sub-sector, but it can be expected to improve the efficiency within the present system. Cost recovery measures, such as a district educational levy or increased responsibilities for parents-teachers associations which would be expanded in-to cooperatives, are being discussed but have not yet taken shape.

Despite the crisis there is still considerable under-utilization of resources, particularly the primary school teaching staff and the country's ability to produce and distribute educational materials and school furniture. Surprisingly enough to an outsider, there is considerable over-staffing of primary schools in Zambia, by more than 30 percent according to official criteria. The Government is preparing new legislation to avoid having to pay teachers who are not working. The necessity for reform seems now to be getting more understanding from the teachers' union than earlier.

If the costs of over-staffing may be reduced in the near future, it is more difficult to say when local resources, production facilities and distribution services may come to be better utilized. There is enough printing capacity in the country, but the Swedish-financed relatively small printing programme is running years behind. There are enough trucks in Zambia, but books and furniture have difficulties reaching the schools. There are workshops all over the country, but furniture has been imported by donors, or inefficiently produced centrally. To supply schools with materials and furniture, the systems of production and distribution need reform. Here we lack government policy.

These structural problems have hindered the main donor in the primary school sector, SIDA, from giving effective support. Lately, around half of its annually available support remains unutilized. It is not easy to see how this could change in the near future. A review of the options for donors does not reveal any resource gaps that could be easily filled by donors.

First of all, donors are not suitable for contributing to the main expenditure in the system, teachers' salaries. Such support is explicitly not welcomed by the state, which clearly states that government service is government responsibility. The political complications in government employment makes it risky for donors to become quasi-employers. The commitment shown hitherto by the Zambian government to pay teachers also makes it very doubtful whether there is any additionality in such support.

There is, however, definite additionality in the provision of education materials and school furniture. Of course, a donor could spend a lot of money on"efficient" production abroad and an independent distribution system in the country. If rather the goal is to mobilize internal resources then this can only be solved by structural changes, such as maybe privatization of production and decentralization of distribution. Since such changes will take a long time yet, this evident field of support will not likely demand much increasing resources in the near future.

With the aim of increasing the efficiency and the quality within the present system, several areas can be identified for new or increased support. General administration, school planning on district and individual school level, the inspectorate, and in-service teacher training are some such areas. The running costs involved, mostly local, are not big and preparation of such projects will take some time.

The mission also suggests, somewhat surprisingly maybe, that some new capital expenditure should be undertaken by donors. The apparent over-staffing at primary levels, means that new investments could be made in the building of new classrooms, without necessarily straining the recurrent budget. The urban grade 1 bottleneck seems the most urgent, but rural grade 5 is also a pressing need. Such support must necessarily take the form of assisting in mobilizing parents' resources. There exist several successful methods for helping self-help programmes.

Though the circumstances today seem to allow for an expansion of the educational system in order to maintain relative coverage, it seems unavoidable that the national economy will continue its fall. This will inevitably bring Zambia closer to the very difficult choice between maintaining coverage or quality in the educational system.

2. A DESCRIPTION OF RESOURCES FOR EDUCATION AND THEIR USE

2.1 Resources

Government

The economic crisis in Zambia has meant that GDP 1987 is no higher than it was ten years ago; per capita - the population is said to grow at around 3,3 percent - that means a significant drop in income.

Government expenditure has varied considerably over the past decade, both in real terms and as share of GDP, but it is safe to say that: 1) real non-debt servicing expenditure has declined; 2) capital expenditure has been more drastically reduced than has recurrent expenditure; 3) wages have increased as a share of recurrent expenditure at the expense of operational costs, but administrative costs have also been reduced, at least during the 1980's.

It is, however, very interesting to note that, though real resources have been reduced, the shares of the major categories of "developmental" expenditure have been increased. This is also true of the social services, in particular of education.

Educational expenditure averaged 13 percent over the period 1975-85. After a significant drop in 1980 to 8 percent, education even managed to increase its share to 17 percent in 1984, at the same time as the economic crisis became more entrenched. As a share of GDP, total government expenditure on education has also remained fairly constant between 4 and 6 percent, in real terms even averaging closer to 6 percent. All figures seem to be above average for comparable countries. For a comprehensive coverage since 1975, see Annex 5.

Table 1. Educational Expenditure in Relation to Gross Domestic Product and Government Expenditure, 1980-1985, at Current Prices (in million Kwacha)

Expenditure	1980	1981	1982	1983	1984	1985
GDP	3,063.6	3,485.4	3,595.3	4,181.2	4,931.0	6,332.1
Tot gov't exp	1,657.57	1,388.61	1,643.24	1,475.93	1,484.63	2,184.33
Tot educ exp	128.25	151.52	212.20	224.96	249.18	293.19
Percentage relationship						
Tot educ exp/ tot gov't exp	7.74	10.91	12.91	15.24	16.78	13.42

Source: GRZ Financial Reports (1980 - 1986).

As far as government expenditure on education is concerned, we can conclude that while it in relative terms has been upheld, showing a strong commitment to the sector, in real terms it has declined, meaning a difficult situation for the quality of teaching and for the future maintenance and expansion of the coverage of the system.

2.1.2 Parental contribution

The other local source of resources for education are of course the parents. Their costs - foregone income from child labour apart - consist of learning materials, school funds, transport, lunches and school uniforms. Some of these expenses have more the character of private consumption, but they are nevertheless an essential contribution to children's schooling, and they surely weigh heavy on the shoulders of the parents. A special study by the University of Zambia has shown that parental expenditure on these items in primary education in 1985 ranged from K50-110 per pupil in rural areas to around K200 in the urbanized regions of Lusaka, Copperbelt and Central Region. In secondary education the average was K450. This should be compared to the minimum wage, which is also frequently paid, of about K4 per day. This means that families will pay a very substantial amount of their yearly money income on education for their children. Compare also

the figure K100-200 per pupil in 1985 with the per capita income of that year, K950.

Table 2. Average Annual Amounts (in Kwacha) Parents in Each Region Pay for Education - Related Expenses of Each Primary Pupil, 1985.

Region	Learning Materials	School funds	Transport + Lunch	School Uniform	Total cost per Pupil
Central	22	6	103	91	193
Copperbelt	25	15	159	95	227
Eastern	14	10	100	68	110
Lusaka	26	15	134	93	206
Luapula	8	8	17	47	87
Northern	12	12	101	51	89
North-Western	6	4	6	37	51
Southern	12	11	90	55	96
Western	10	5	15	39	67
Zambia	20	12	124	78	166

Source: Kelly, M.J. et al (1986) Education Provision for ALL. University of Zambia. Lusaka.

In total, parents may, again in 1985, have spent somewhere in the region of K200m to primary schooling of their children, which certainly must be a heavy burden. It is of interest to note that parental outlay on primary education is even more than the government spends on this level, which that year was K120m.

The estimates for the parents' contribution to primary education used above do not include self-help schemes for the building of classrooms. There is at present no way of finding out how much this may come to. While the contribution earlier may have been considerable, it is likely to have been reduced as the economic crisis has worsened. Self-help schemes, however, still account for the building of practically all new primary school classrooms.

Although the number of private schools has considerably increased in the last decade, especially in urban areas, their ability to provide significant additional school places is minimal. In 1984 less than 1 percent of the total primary school enrollment were in private schools. At secondary school level only 6 percent of the total number of pupils were in private schools. Needless to say, school fees were prohibitively high for the majority of the population.

2.1.3 Foreign aid

The contribution of foreign aid to the education sector has not been large, at least as it has been measured in terms of kwacha. First of all, the share of total foreign aid that goes to the education sector is very small (under 5 percent), but also the size of foreign aid is small in comparison to

what the government and the parents directly contribute (USD 18m in 1984, compared to several hundred million kwacha).

The government recurrent budget is all financed by own resources (though, of course, the foreign lending the government managed to keep up as the crisis continued contributed to this being possible). The government also paid for most of the capital budget until the beginning of the eighties. Thereafter, foreign funds came to dominate this declining budget more and more.

Table 3. Proportion of Capital Budget for Education Arising From Development Aid, 1980-86. Amount in Million Kwacha [1) 2)]

Year	Capital Budget	Local Funds	Development Aid	Development Aid as a %-age of Capital Budget
1980	9.30	6.96	2.34	25.2
1981	12.63	5.27	7.36	58.3
1982	15.26	7.08	8.18	53.6
1983	13.41	6.72	6.69	49.9
1984	19.57	13.02	6.55	33.5
1985	26.80	7.90	18.90	70.5
1986	99.86	25.08	74.78	74.9
1980-86	196.83	72.03	124.80	63.40

Source: Kelly, M.J. et al (1986).

Since probably an increasing share of foreign funds was used for recurrent purposes and because the value of foreign currencies in relation to the kwacha is unclear, it is better to consider the importance of foreign exchange (whether recurrent or capital) contributed and what kind of local expenditure in kwachas it covered.

We have come across no comprehensive statistics, but nothing points to any other conclusion, than that foreign aid accounted for more and more of the sector's use of foreign exchange, and that it has probably accounted for close to 100 percent of such use during the present decade, at least for primary and maybe also secondary education. As far as foreign funded kwacha expenditure is concerned, most of it has gone into maintenance programmes and some other local recurrent expenditures.

2.2 Use of resources

In Zambia the government pays for primary teachers' salaries through the regional Offices of the Prime Minister, and the District Education Office before being collected by the headmasters. The districts have also received subventions for primary school teaching materials, but this was ended in the

1) All amounts in current prices

2) Does not include supplementary provisions

1986 budget. School books, in as much as they are provided, are supplied centrally but paid for by parents.

Parents pay also for the construction of any new classrooms, and, of course, for the consumption of the pupils in the school. Parents are organized into Parents-Teachers Associations, PTAs, to which contributions are voluntary, usually between K5 and K30. The PTAs play an important role around the school. Parents also pay a small compulsory fee to the school fund.

Donor funds have been used mainly for scholarships and technical assistance. A considerable amount has gone to imports of books, paper, furniture and maintenance inputs. The local recurrent expenditures have mainly gone for purposes like printing costs and training seminars. For the functioning of the school system, the contribution towards educational materials and school furniture has been important, as have the secondary school maintenance programmes.

Such then is the general use of the resources. As for the split recurrent/capital, it seems less and less is used for actual capital uses, i.e. real investments as distinct from what is simply put under the heading of "capital budget". If a country devalues, as Zambia did during 1985-87, the foreign funds within the capital budget will increase their value in kwacha terms, though no actual change in the value of the resources may have taken place. Since it hasn't been possible to see where this has been the case, the interpretation of the capital budget figures has been difficult.

One thing, however, stands out. If one looks at expenditure by different levels of education, an interesting difference appears as regards the importance of capital expenditure. There has been during the eighties a very considerable expansion of capital outlays on secondary schools. Expenditure went from K1m, or 25 percent of the capital budget, in 1981 to K11m, or around 70 percent, in 1984. This expansion consists partly of the ministerial endeavours to make basic education a nine year school for all, thus necessitating a physical expansion of secondary school Forms I and II into primary grades 8 and 9. In the 1986 budget it remains clear that secondary schools completely dominate the capital outlays, with university education taking a considerable part of the rest, and primary schools, teacher training and vocational training each receiving below 5 percent.

The expansion of the secondary schools and the already large university has meant a heavy share of recurrent outlays going to these higher levels of education. Of total government expenditure on education approaching K500m in 1985, about K25 m was capital outlays and the rest, 95 percent, was recurrent. If we only look at what of this is spent on the principal sub-sectors primary and secondary education, teacher training, vocational training and the university (which means excluding some very important recurrent expenditure such as administration and university bursaries), then of these K233m (leaving the same amount aside), secondary schools took 22 percent and the university 17 percent, vocational training 7

percent and teacher training 3 percent. Primary education commanded 50 percent (and even this is probably an exaggeration, due to uncertainties in the definitions underlying the table from which these figures are taken). It is interesting to note that these percentages seem to have been fairly constant during the present decade.

Looking at primary school expenditure, K120m in 1985 and more than 99 percent recurrent, it is clear that teachers' salaries (including allowances and other benefits) have become more and more important. This proportion rose form 77 percent in 1975, through 88 percent in 1980 to 96 percent in 1985. We have already mentioned how expenditure on educational materials and other necessities has been driven out of the budget for primary education. Table 4 below gives an indication of the share of recurrent expenditure going to teacher salaries. For a breakdown of allocations to other functions, see annex 6.

Table 4. Teacher Salaries as %-age of total Recurrent Expenditure by Region, 1985 - 86.

Total 1985, Recurrent Expenditure: K117,883,909		Total 1986, Recurrent Expenditure: K151,422,909
	1985	1986
Central	10.2	10.8
Copperbelt	17.1	19.1
Eastern	8.9	8.5
Lusaka	12.2	10.7
Luapula	6.7	5.3
Northern	12.1	11.9
N/West	6.1	5.3
Southern	12.4	13.1
Western	6.7	7.2
Zambia	92.3	91.8

Source: Calculated from NCDP (1986 + 1987)

Strong forces, then, are at work to keep teachers' salaries being paid. This has not prevented them from falling drastically in real value, maybe by as much as half during a ten year period. It is, however, important to note that the teachers in fact do get paid every month. There is no way of telling how the teaching morale has been affected, but the fact that the structure is still functioning is an indication that no irreparable damage has yet been done. And it could also be said that this in fact shows that teachers are motivated by more than just their salaries. Teaching may still be a vocation.

Sufficient educational materials of good quality are surely important for motivating teachers. We have already touched on them. The state supplies the text books and teachers' guides, which all however are in very inadequate supply. The state is dependent on foreign aid for its production, but administra-

tive and organizational problems still leave production far behind present possibilities. Not least distribution aspects remain unsolved. Exercise books are in relatively better supply, which is encouraging since they are so important in the learning process. They should be available at subsidized prices from the state book distributor, but have often to be bought at actual prices from private retailers. But the problems of producing sufficient books are reflected in Kenneth Kaunda Foundation's inability to meet production targets in recent years as shown in the table below.

Table 5. Textbook/Exercise Book Production of Kenneth Kaunda Foundation (KKF) 1985-87.

Year	Textbook Production			Exercise book Production		
	Budgeted	Actual	Shortfall %	Budgeted	Actual	Shortfall %
1985	1,800,000	850,000	57.2	16,000,000	16,023,695	--
1986	1,500,000	863,000	42.4	18,000,000	17,693,900	29.4
1987	2,200,000	0	100.0	15,000,000	1,272,800	91.5

Source: Wright, C. (1987).

Primary school buildings are set up by parents if their PTA is active and manages to collect contributions and if there are building supplies to be bought. The number of classrooms is expanding much more slowly today, if at all, than earlier, indicating the difficulties that the economic crisis has meant. Today, shortage of classrooms may be the most important factor contributing to the grade 1 intake bottleneck in urban areas and the grade 5 intake bottleneck in rural areas.

School furniture seems to be financed exclusively by donors. World Bank imports and Swedish financed central production have been the main source. A decentralization of production and repair has improved the situation, but supplies remain a serious problem.

Finally, expenditure on primary teacher training is low, around K6m per year during the period 1981-85, which recently has meant reduced real resources. Apart from affecting tutors' salaries, and the living standards of the teachers-to-be, this has severely cut the availability of teaching materials. The general pattern in the education sector is valid here, too.

The teacher training colleges educate a number of teachers every year, who are assured of pay after having passed exams. The continuous net increase in teaching staff means a constant increase in the pressure on the primary education recurrent budget. The net yearly increase in teachers has more than kept up with the net yearly increase in pupils, thus reducing the pupil/teacher ratio even as the crisis has progressed. This development has lead to a clear over-staffing of teachers. According to regulations of how many teachers are permitted per class, there was an over-staffing of 7000 teachers, or 31 percent, in 1986.

Though definitions of what is actually over-staffing are relative, it is evident that there is a not inconsiderable number of teachers who get full pay, but teach a minimal number of periods, if any. The cause of this problem is the regulations stating that those who have completed teacher training should be paid regardless of how much they teach, together with the strong urbanization in Zambia. Teachers who move into town on their own or following a husband who is posted or employed in town, means that that teacher will be paid whether the local schools can give her work or not. This means that the problem of over-staffing is largely a rural/urban problem. Kabwe Urban District, e.g., had an over-staffing of 58 percent, while a rural region like Luapula only had an average of 16 percent over-staffing. It is interesting to note, however, that in no district in the whole country was there under-staffing as defined by the Zambian state.

Table 6. Primary School Enrollment and Teacher Distribution by Region, 1986.

Region	Total Enrollment	Number of Teachers	% Over-staffing
Central	139,421	3,300	36
Copperbelt	305,368	6,190	31
Eastern	135,861	3,205	33
Lusaka	161,078	3,145	49
Luapula	92,262	2,161	16
Northern	170,436	3,333	18
North-Western	77,535	1,790	20
Southern	180,530	4,174	36
Western	103,429	2,543	38
Zambia	1,365,926	29,841	31

Source: Derived from MGEC (1987).

3. EFFECTS OF THE ECONOMIC CRISIS ON EDUCATIONAL DEVELOPMENT

3.1 Primary education

Primary enrollment has continued to expand during the economic crisis, and it has expanded even as measured by the gross enrollment ratio. This ratio which fell during the latter half of the seventies, actually grew again in the beginning of the eighties, and is today as high as it ever was, around 92 percent. The pupil/teacher ratio fell drastically 1975-80 from 95 to 49, and continued to fall to 46 in 1984. Even the retention rate, i.e. grade 7 enrollment compared with grade 1 enrollment seven years earlier, increased from 0.76 in 1974 to 0.88 in 1984.

This development is strong proof of the urgency perceived by both the government and the people on the need for education. That the crisis has hit the sector became evident when in 1984 the unit cost (as measured in constant prices, total costs for the primary education divided by the number of en-

rolled pupils) fell for the first time since independence. Coverage has been upheld. It seems that still today practically all children sooner or later start school. It is the length and quality of the schooling that the crisis is hitting the hardest.

It is important to state clearly: despite the economic crisis, the government has upheld and even expanded the educational system. The output of teachers and the enrollment of pupils have more than kept pace with the increase in population, both in primary education and in secondary education.

Table 7. Enrollment in Primary Schools, Grade 1-7, by Region, 1984 and 1986.

Region	1984	1986	% Change 84-86	GER 7-13, -86
Central	124,211	139,421	12.2	101.0
Copperbelt	276,570	305,368	10.4	86.6
Eastern	128,944	135,861	5.4	83.0
Lusaka	145,511	161,078	10.7	81.2
Luapula	93,008	92,262	-0.8	84.3
Northern	158,885	170,436	7.3	97.8
North-West	70,952	77,535	9.3	103.3
Southern	165,707	180,530	8.9	104.2
Western	96,822	103,429	6.8	104.1
Zambia	1,260,610	1.365,920	8.3	92.0

Source: MGEC Annual Reports and Unpublished data.

But the crisis has, of course, hit the sector severely. The real value of total educational expenditure dropped 39 percent between 1974 and 1983 according to one study, while capital expenditure dropped as much as 81 percent. This has meant that the system has faced increasing difficulties in maintaining its qualitative standards. Actual spending on teaching and learning requisites dropped from 9.8 percent of all primary school expenditure in 1975 to 7,1 percent ten years later. Real per pupil expenditure on educational materials fell from K2,19 in 1980 to K0,63 in 1985, before being completely abolished in 1986. It is clear what this means for already difficult teaching standards.

No figures we have come across give any indication of the development being any other than the one generally presumed to be the case: the crisis first hit the physical expansion of the system, i.e. the number of schools and classrooms, thereafter the availability of educational materials dwindled, today teachers' salaries completely dominate government spending on primary education, which means that with a prolonged crisis sooner or later probably even the coverage will be affected.

The crisis has maybe struck at the quality of teacher training, but not yet at the numbers of teachers trained. The increase in teaching staff has continued despite clear evidence of over-staffing described earlier. This problem of under-

utilization is the more striking when considering the importance of the teachers in the education process.

Inefficient use of resources also marks the provision of educational materials, since output and distribution could be increased by improvements in management and likewise in the structure of production and distribution. The same can be said a fortiori of school furniture.

The low level of investment in primary education today shows up in the acute lack of classrooms for grade 1 intake in the urban areas and for grade 5 in rural areas. The coverage of the education system is today definitely constrained by lack of physical facilities, while the quality of education is constrained by the lack of teaching materials.

In comparison with other sub-sectors of educational expenditure, primary education has not done very well. Spending on secondary schools, especially capital spending probably entailing rising demands on the recurrent budget, has increased forcefully during the beginning of the eighties and the pressure is still on. The already resource-demanding university has had its allocations increased during the eighties, even measured as a share of what the principal sub-sectors receive. Attempts have been made to cut down allowances and bursaries, but instead even new departments have opened. It seems the primary education budget has been largely determined by how much has had to be paid for teachers' salaries.

3.2 Government response

Nobody is more acutely aware of the need for setting priorities and searching for options than the government. In a number of ways problems have been described very explicitly and radical solutions proposed, for some of which it certainly will be difficult for the government to gain acceptance. The government effectively follows two strategies: the transfer of costs to the users or parents and increased cost-efficiency.

The government has repeatedly declared primary education to be its priority in terms of level of education. The extent to which this actually has been so may be debated in view of how actual expenditure has been distributed among the sub-sectors. But it certainly is true to say that a great deal of effort has been put into supporting a more general intake into grades 8 and 9, both of which in government policy are to be included in primary education. The considerably larger space devoted to secondary and university education partly reflects the greater scope for cost recovery and efficiency that probably exists in these sectors, but it certainly also reflects the great interest and political concern over these sub-sectors among the dominant levels in Zambian society. However, the government laudably states clearly that priority is put in ensuring 100 percent enrollment in the age group 7-13, and ensuring 100 percent progression to grade 5.

In the transfer of costs to users, a great deal of energy is spent on finding ways to bring this about in secondary and university education. The greatest savings can be achieved by transferring responsibility or recovering expenditure on boarding, transports and books. Some of these measures have had to be retracted on account of strong opposition, but the secondary school boarding fee was implemented, and many far-reaching reforms are forthcoming, one of them being something as radical as book rentals at post-primary levels.

Cost transfer in primary education must be seen against the background of parents already spending considerable amounts. Furthermore, the largest single expenditure, teachers' salaries, will remain the responsibility of the government, though there have been discussions on opening up possibilities for local communities to contribute to these ends. The costs which are "transferable" are in fact those that the government anyway doesn't pay today: educational materials, building and furnishing of classrooms. Cost shifts are therefore more in the nature of the mobilization of additional resources. This may be possible.

Two ways of accomplishing this are being discussed. One is the institution of a general educational levy, to be handled by the district councils. Though this may be an effective way of avoiding losses in the central government machinery so that a greater share of taxes may go to education, the large variations in the strengths and capabilities of district administrations may make this a less effective solution in those places where it is most needed. However, the suggestion which has been put forward in quite strong terms in the recent economic recovery programme, deserves to be further explored.

The other way of mobilizing local resources is by way of already existing PTAs. There are suggestions of expanding the PTAs into co-operatives, which would organize production, the proceeds of which would go into financing the needs of a primary school. Though the rationale of keeping the influence over extra mobilized resources close to the parents is appealing, it is doubtful whether it is more efficient to produce collectively in new organizational forms, rather than each household contributing its share, either voluntarily, much as today, or more compulsorily, closer to the form of a school fee. In any case, what should be avoided is for such prospective co-operatives to develop unnecessary resource-consuming superstructures and for such productive activities at school not to over-use the pupils as labour and thereby detract from the teaching-learning process. However, a strengthening of the PTAs in their ability to contribute is something that definitely should be promoted. The government is considering e.g. improved guidelines; allowing PTAs to retain rent on community built housing; providing a per capita grant as an incentive to the establishment of private institutions at all levels. Donors should consider how they could support PTAs in self-help schemes.

As for cost efficiency the government is proposing a host of actions, some of which are likely to be quite controversial

in Zambia. Many concern the university and involve mainly the rationalization of the non-teaching staff. The most important one for primary education is the "elimination of wastage in the use of teaching staff". This will involve a minimum teaching load policy, effective distribution of teachers, discontinuing paying salaries to non-working teachers, no longer guaranteeing employment or salaries to teaching spouses of personnel on transfer, all of which problems have been serious, as has been emphasized earlier. Initial opposition from the strong teachers union seems to have been partly overcome, as the economic constraints on the education sector become all too apparent.

Efficiency measures that so far seem not to have been discussed by the government are the forms of production and distribution of educational materials and school furniture. This will, however, be needed.

In sum, then, one may conclude that the government is fully aware of the economic constraints facing the sector, and that it is active in searching for real options for cost efficiency and cost recovery.

3.3 Donor response

There has been no co-ordinated response from the donors to the development of the education sector during the present economic crisis. As already mentioned educational support is a small part of total foreign aid to Zambia (under 5 percent), and the main parts of the educational assistance consist of scholarships, higher-level teaching staff and recently also a large investment in the university. Primary and secondary education seem to get around 10-15 percent each of development aid for education.

With one major exception, donor funded programmes continue as planned, without any specific changes due recent economic developments. The exception is the World Bank funded secondary school construction and maintenance project which was suspended when Zambia defaulted on its repayments to the Bank. The few other donors stick with their commitments, but there seem to be a general reluctance to get involved in new ones. The exception to this may be the African Development Bank, which is preparing support to the building of primary schools.

Nordic aid seems to be the most relevant aid at present. Outside of it, there is large support in the form of a veterinary faculty at the university funded by the Japanese, scholarship programmes funded mainly, but not only, by the British, and some minor contribution from the multilaterals UNDP and UNICEF.

NORAD has been co-financing the World Bank-supported secondary school maintenance programme. They are now in a worrisome position because of the Bank decision to suspend its support. NORAD has also made a small one-time contribution to the SIDA-supported "SHAPE" project. NORAD has, however, made

it clear they are not intending to enter any new projects in the near future.

FINNIDA has indicated a greater willingness to expand its involvement. At present it is importing text books for both primary and secondary schools, in co-ordination with SIDA. The FINNIDA programme has certainly the potential of being an important contribution to the education sector in Zambia.

Sweden, however, still remains the most important contributor to primary education. With the under-utilization of the relatively large Swedish funds available, and the strong Swedish commitment to support the sector and to reassess its involvement in light of the economic development, there should be considerable scope for Zambia to make important use of the Swedish resources.

4. CONSTRAINTS ON FUTURE DEVELOPMENT

Though there are important efficiency gains to be made in the educational system in the short run, and even some additional resources to be mobilized by shifting the burden of paying for educational services to a larger extent towards parents and local communities, nothing can make up for a lack of growth in domestic production. Without increased income per capita, the education sector will continue to suffer, with serious long term repercussions on even the possibility for the economy to grow and the increase in population naturally to fall. Investments in human capital can be neglected only at great peril in the longer term.

To assess the effects of economic crisis on the education in a country - and how the educational crisis in turn affects the economy - one would want to take recourse to some kind of sensitivity analysis. Lacking this, the best one can do is to analyse the constraints that slow economic growth poses for the development of education. The following is a brief outline of such constraints. The aim is not one of prediction, therefore a judgment of the prospects of present economic policies is not needed. The aim is to bring out the choices of priority that have to be made within the education sector, and how foreign support could most effectively be used during a period of very slow, or even declining, growth in per capita income.

4.1 External resource constraint

Even with the most efficient means of promoting exports, foreign exchange earnings will continue to grow very slowly at best during coming years. The copper depletion means that the one sure source of income will eventually run dry, it is said already in 15-20 years. This raises formidable demands for the transformation of the Zambian economy. Whatever policies best promote this, it is clear that the supply of foreign exchange will remain short for the foreseeable future.

This will actually come to be a greater difficulty for higher levels of education, than for lower. What that may mean to university education is difficult to say, but we are here concerned mainly with primary education, which is not a big user of foreign exchange. But, whatever it does use, cannot be expected to come from the government. All imports must come from external grants. The benefits of education cannot be measured meaningfully in terms of future pay-offs in foreign currency. Therefore, loans, even highly concessional ones, are not the most appropriate ways of financing especially primary education.

4.2 Government resource constraint

Real value of government expenditure can be maintained, not to mention increased, only within a process of economic reform that involves a decreased budget deficit. The government recognizes this explicitly in its recent economic recovery programme, the Interim National Development Plan, which effectively covers 1988. The plan in fact makes projections for a substantial cut in the budget deficit. However, this cut is to be achieved exclusively by cutting interest payments to foreign creditors. If we compare the plan projections for the recurrent budget deficit net of such interest payments for 1988 with the preliminary result for 1986 and estimates for 1987, we must conclude that the deficit actually grows considerably. Even as the government presents its plans, the budget deficit is more than 35 percent of revenues. This is untenable in the long run, especially since new credits will be short. The next budgets will have to cut on the real value of wages, operational costs and subsidies. Even in this preliminary 1988 budget, when recurrent expenditure net of foreign interest in fact increases by 28 percent and revenues drop by 10 percent (the latter due to the need of keeping the copper mines financially viable at the revalued exchange rate), real values of expenditure cannot be supported.

It is unclear how this immediately affects the education expenditures. In the near future, which now seems to be quite long, it is highly unlikely that the value of recurrent expenditure could be maintained. What that means for primary education is teachers' salaries and no more than salaries, reduced in real value at that.

4.3 Local and private resource constraint

The government resource constraint means that the central government is pressed to pass on costs, and not just educational costs, to the consumers of services. This can take place directly, by way of fees, voluntary contributions or simply by transferring the responsibility of securing educational materials, or it can take place indirectly by levying a special tax to be handled by district councils. Such changes can be correct in order for the government to be able better to respond to demand for education: there are some efficiency gains to be won and it may be possible to mobilize

additional resources if the parents see more exactly for what purposes their income is spent or taxed.

These moves come at a time when, as stated earlier, the per capita income in Zambia has declined. The prospects for increased per capita income are not encouraging. So, costs are passed on for private expenditure when the people can least afford it. This is of course intrinsic to the problem; it has to be that way. But, though parental initiative may be easy to tap in the early phases of a crisis, this becomes increasingly difficult as the crisis becomes more entrenched. It is hardly possible to quantify, but it is clear that there is a limit to what effectively can be transferred to private expenditure. Only increased production and productivity can solve this dilemma.

4.4 Investment constraint

What is true of general expenditure on education is even more true of education investments. Lack of investment is already becoming a severe constraint for even upholding past achievements in the sector.

For Zambia as a whole, the investment rate is too low for sustained growth to be achievable. What resources exist for investment should be used for productive purposes, which would contribute to increased savings and investments. Given the low utilization of present productive resources, that should actually be achievable, with proper economic policy reforms. Whatever these reforms are, it is clear that investment will go mainly - and correctly at least as regards domestic resources - to purposes which promise a quick pay-off, or as the present government plan formulates this: "projects with a high multiplier effect" and "short gestation period". Education is certainly not such a project.

Effectively this means that the near future promises meagre resources for investment in education.

4.5 Population growth

With population growing at more than 3 percent annually, and double that figure in already strained urban areas, the economic constraints outlined above cannot but mean an education sector in decline during a long time to come. Population growth is for all practical purposes an independent variable in the short term, and deserves therefore to be treated as such, but for the longer perspective it must be remembered that it has been shown that improved primary education goes along with reduced mortality (and morbidity) and nativity.

4.6 Political interests

Political interests should maybe be discussed in connection with political will and priorities, but to a large extent they are given and function as constraints. Expenditure on

education reveals class structure, and Zambia is no exception. In Zambia differences in income are substantial. The very high spending on secondary and university education should be understood in view of this.

This class bias also explains why the expansion of secondary schools has continued long after the crisis has become all too apparent. It is likely that the same interests will continue to protect their stake in the state educational system, and moreover, if necessary, to expand private facilities. This tendency is already evident.

The class bias will become even more apparent as the government continues to shift costs to the parents of primary school pupils. Here, the rural/urban split will also become more important. Maybe the most underprivileged today live in urban slums. They may turn out to be a more politically expressive group than the rural poor are.

The demand for education is great among all classes. The "humanistic" ideology in government policies has definitely served to strengthen also the poor people in demanding education. Education should be a right, but without a sufficient economic base it cannot be honoured. The political consequences of not being able to answer to the demand for education should not be underestimated.

5. POLICY CHOICES - PRIORITIES AND OPTIONS

What room for manoeuvre do the economic constraints, on the one hand, and the demand of increasing numbers and political pressure, on the other, leave? Priorities will have to be set and realistic options sought out.

An evident priority to be made is the one between different levels of education. As revealed by actual expenditure, government has put a great deal of emphasis on secondary and university education, less so on primary education, continuing education or vocational training. Higher levels of education are also important, but in Zambia there is clear evidence of educational unemployment. Qualification demands are rising. When at the same time primary education coverage is threatened and even literacy among children may be receding, it is most urgent that increased priority be given to primary education. Vocational and skills training is not much touched upon in this report, but it is likely to be a field in need of more resources if the Zambian economy is going to be able to diversify and the widespread unemployment be reduced.

Primary education is easy to set up as a priority, it is more difficult to back it up with actual expenditure, given the strong societal forces at work supporting higher levels. Whatever is achieved in terms of total resources for primary education, priorities will also have to be set within it. With limited resources, quantity will generally stand against quality, the coverage of the system against its standards. Even within each side of the duality, policy choices must be made.

As for the coverage of the primary schools, there are the grade 1 and grade 5 intake bottlenecks, and we must also mention the grade 8 intake bottleneck, as grades 8 and 9 have become part of a planned nine year Basic Education. Leaving the grade 8 problem aside, which however today is an important one demanding considerable attention and resources, and instead concentrating on what is usually meant by primary education, extending the coverage would to a large extent mean the building of new classrooms. To some extent it may still be met by administrative measures such as multi-grade classes, double or triple shifts. However, it seems already clear, that especially in urban and semi-urban areas, the physical grade 1 intake bottleneck is very serious. With the apparent availability of under-utilized teachers, priority on coverage expansion might still be an option, even during economic crisis. However, it would definitely hinge on parental self-help and donor support.

On the qualitative side, we face two questions of priority: how to use funds for teachers' salaries and how to use funds for non-salary expenses. There seems not to be a realistic question as to the balance between the two types: during economic crisis salary payments will prevail. As for the priorities within the two types, fortunately there exist efficiency gains to be made.

The apparent and general over-staffing could be mitigated by reducing the output of teachers. It is unclear whether new teachers in fact demand additional government allocations for salaries or whether the rate of nominal salary increase is reduced to accommodate for the net increase in the number of teachers. Over a number of years this may, however, be a zero-sum development, with total teacher salary demand on government expenditure not being able to increase. This raises the question of how far you can let real wages fall before the quality of education is severely affected. This bottom seems however not yet to have been reached (though with continued economic decline it certainly will be reached, as it has been in other countries). Therefore, the option is for a more efficient distribution of teachers and their utilization by changing government employment regulations and supporting quality and morale by giving better in-service training and material facilities, both of which are suitable fields for donor assistance.

It cannot be realistically expected that government finance for material provisions - books, teaching aids, furniture - will be forthcoming. A large responsibility, however, rests on the government to see that production and distribution systems of material supplies work more efficiently. Donors can import paper and even co-finance local costs in printing, in furniture production, in self-help classroom building schemes, but they can never make up for the apparent sub-optimality, even ineffectiveness, of present systems. With increased donor support and appropriate bold reforms - including maybe privatization of production and decentralization of distribution - the option is for better supplies and better quality in education, even during economic crisis.

Despite these encouraging possibilities, it cannot be evaded that with a prolonged economic crisis - and many considerations point in that direction - a choice will finally have to be made between sustained coverage and sustained quality. This is actually not a choice, because education with a steadily shrinking quality ceases to be meaningful. After a certain stage, the quantitative outputs in the system will have to give in. Yet the pressure for intake will remain, as will the risk of government having to support an overextended system. With a prolonged crisis there is no option for education.

Donors cannot solve this problem. They can assist in the general development of economies in crisis, as also their governments must contribute to relieving some of the external constraints faced by the developing economies. As far as the support to the education sector goes, we have outlined several ways donors can be of great assistance in providing more resources, but this is generally dependent on the recipient government promoting more efficient structures for the utilization of present resources. Generally speaking, there is scope for an increase in donor responsibility for recurrent, foreign and local, non-salary expenditure. Teachers' salaries remain the political responsibility of the government, as they also remain the economic link to the education sector carrying capacity of the national economy.

6. OPTIONS FOR SWEDISH ASSISTANCE

Against the above analysis of the education sector, the economic constraints and the policy choices that are being made, a quick review of the present Swedish programmes may look as follows. The educational materials and school furniture programmes are very relevant. Expanded assistance is highly motivated, would certainly be additional to Zambian efforts, but requires for effectiveness and efficiency structural reforms on the Zambian side, which, however, are difficult to achieve. The teacher training/resource center programme (now "SHAPE") is also highly relevant and suitable for donor financing. Expansion, however, can only come with time as the programme progresses. Special education is a field not touched upon in this paper. In Zambia there seems to be an advanced will and capability for programmes in this field. The close cooperation with Sweden is here motivated on its own grounds. The support to the two university departments is being dismanted.

This means that with the present programmes, the allocated funds to educational support in Zambia, around SEK 25m a year, cannot be fully utilized. Utilization has run as low as 50 percent in recent years, reflecting the structural problems in the educational materials and school furniture programmes. Furthermore, the situation is not such that it is possible to easily support primary education during the present economic crisis by expanding expenditure in other areas.

Where this would seem to be most easily the case is to contribute to the financing of teachers' salaries, by far the

most heavy burden for the government. It is, however, first of all very clear that the government does not want this type of assistance. Government service is part of government responsibility and should remain so. Teachers constitute a large part of government employment and their terms of employment are by no means uncontroversial. It is, then, secondly, not advisable for donors to get involved in such responsibilities as quasi-employers. Thirdly, there is the important question of additionality. Teachers' salaries have been consistently paid and raised, though not enough to keep up with inflation. The commitment seems to be very high on the government side to continue with this. It is by no way certain that some kind of donors' teacher salary fund would be a net contribution. In addition, the actual overemployment among teachers does not warrant additional funds before regulations have been changed so as to reduce unnecessary spending or increase utilization of teaching staff.

The question of additionality is quite important. Primary education does not command even a majority of educational funds in Zambia. Available funds would in principle allow larger allocations to the sub-sector. The very evident bias towards higher levels of education seems, however, not to be easily changed. While the primary system already has hit a practical rock bottom as far as government allocations are concerned - keeping its coverage only because of the strength of demand and by steadily reducing quality inputs - today, even secondary and university education are the targets for measures of cost recovery and efficiency.

The government has an important responsibility in reducing under-utilization and inefficiencies in the teacher employment, and educational materials and school furniture provision structures. Should the latter be achieved, there is scope for additional Swedish resources to be spent for that purpose. But Sweden could also assist in reducing the inefficiencies by supporting planning, monitoring and coordinating at different levels, ministerial, regional, district and individual school levels. In-service training for administrators, inspectors and head masters seems to be an important field for support. To support quality, in-service training of teachers, rather than educating more teachers, seems to be a further, surely additional, potential area of support for Swedish aid.

Another possibility for use of Swedish funds should be brought forward, though it at first reflection would not seem a likely area for support during a structural economic crisis. That is the support to self-help initiatives for the construction of classrooms. There is no central help forthcoming (except possibly through the ADB) and it would not be necessary for the government recurrent costs to be increased along with such an expansion. There are well developed ways of providing self-help schemes with additional local building materials in a way which still mobilizes extra resources from the local community. Support to such an expansion should, however, be very carefully considered, as selfhelp schemes clearly fall under local responsibility and foreign inputs only facilitate, not replace, local initiatives.

Finally, though some of the conclusions of this report are quite positive as to how the education system has managed during the present crisis, and as to what the possibilities of increasing efficiency within the system are for a modest increase in the physical base of the educational system not to overburden the carrying capacity of the national economy and the government finances, the fundamental structural problem remains: if Zambia cannot break out of the economic crisis, the educational structures cannot be upheld.

Annex 1

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Annex 2

LIST OF PEOPLE INTERVIEWED.

MINISTRY OF GENERAL EDUCATION AND CULTURE

Hon B. Kabwe	Minister
Mr M. Mushemi	Acting Permanent Secretary
Mr F. Cheki	Chief Inspector of Schools
Mr D.M. Lubasi	A/Deputy Chief Inspector of Schools
Mr L. Makomani	A/Assistant Secretary - Planning
Mr F. Lundström	Senior Planning Officer
Mr M.M. Sikuyuba	A/Senior Planning Officer
Mr Thindwa	Assistant Secretary - Finance
Mr K-O Holmberg	Senior Planning Officer

MINISTRY OF HIGHER EDUCATION

Mr R.W. Mazonga	Chief Education Officer
Mr M.D. Chanda	Senior Planning Officer
Mrs F. Bwalanda	Education Officer
Dr W. Hoppers	SHAPE Secretary

NATIONAL COMMISSION FOR DEVELOPMENT PLANNING

Mrs Muchelemba	Deputy Director, Manpower Planning
Mr C.C. Banda	Economist
Mr S. Siyanga	Economist

NORAD

Mr J. Eie	Senior Project Officer

SIDA

Mrs B. Ragnarsson	Programme Officer - Education

FINNIDA

Mrs M. Luoto	Programme Officer

TEACHING SERVICE COMMISSION

Mrs J.M. Chiwela	Chairman
Mr J.K. Zulu	Secretary
Mr L.P. Bwalanda	Commissioner
Mr L.M. Njamba	Commissioner
Rev. S. Mtonga	Commissioner

UNICEF

Mr A. Manyindo	Programme Officer

UNDP

Dr Carvalho	Programme Officer

UNZA

Dr O.S. Saasa	Head, African Development Studies Dept.

ZEPIU

Mr J.Z. Banda	Director

Annex 3

ABBREVIATIONS

ADB:	African Development Bank.
EEC:	European Economic Community.
FINNIDA:	Finnish International Development Authority.
KKF:	Kenneth Kaunda Foundation.
MGEC:	Ministry of General Education and Culture.
MHE:	Ministry of Higher Education.
NCDP:	National Commission for Development Planning.
NORAD:	Norwegian Development Authority.
PTA:	Parent - Teachers Association.
SHAPE:	Self-Help Action Programme in Education.
SIDA:	Swedish International Development Authority.
UNDP:	United Nations Development Programme.
UNZA:	University of Zambia.
UNICEF:	United Nations Children's Fund.
ZEPIU:	Zambia Education Projects Implementation Unit.

Annex 4

ZAMBIA - STATISTICAL SUMMARY

Area	753,000 km2		
Demography	1980 (actual)	1985 (estimated)	2000 (projected)
Population:	5.66m	6.72m	11.83m
Growth rate:	Total	3.5 per cent (1980-85)	
	Urban	6.7 per cent (1969-80)	
	Rural	1.1 per cent (1969-80)	
Structure:	Under 15 years of age - 49 per cent (1980)		
Dependency:	107 (1980)		
Urbanization:	48 per cent (1984)		

GNP (in US dollars)	1983	1984	1985
Total	3,620m	3,020m	2,620m
Per capita	580	470	400

Growth rates *)	1973-85
Total	0.5 per cent
Per capita	-2.0 per cent

Foreign Debt (in US dollars)	
Total	4,627m (on 31 Dec. 1985)
Debt servicing	887m (1986, projected)

Foreign trade (in Zambian Kwacha)

		1985
Total goods and services:	Exports	2,517m
	Imports	1,761m (+1.073m in invisibles)

Foreign Exchange Rate (Zambian Kwacha per US dollar)

	1982	1983	1984	1985(Oct)	1986(Oct)	1987(Apr)
US$1.00	0.93	1.25	1.79	6.25	12.30	c.21.00

Government expenditure	1976	1980	1984	1985
Total as % of GDP	50.0	54.1	30.1	34.5
Capital as % of Total	35.0	34.7	12.3	12.7
Growth rate *) 1974-84	-5.7 per cent (recurrent expenditure)			

Performance of Minerals	1964-70	1980	1985
as % of GDP	44	16	14
as % of export earnings	95	96	94
as % of government revenue	59	5	13

Domestic inflation	Low income group	High income group
1976	24.5 per cent	21.4 per cent
1980	11.1 per cent	9.9 per cent
1983	23.5 per cent	19.2 per cent
1985	58.3 per cent	56.4 per cent

*) In constant terms

Annex 5

EDUCATIONAL EXPENDITURES IN RELATION TO GROSS DOMESTIC PRODUCT AND GOVERNMENT EXPENDITURES

AT CURRENT PRICES	1975	1980	1983	1984	1985
Gross Domestic Product					
GDP (K'million)	1583.4	3063.6	4181.2	4931.0	6332.1
GDP per capita (Kwacha)	323.8	539.4	672.2	768.1	942.3
Government Expenditure (K'million)					
Total Expenditure	855.04	1657.57	1475.93	1484.63	2184.33
Recurrent Expenditure	609.47	1081.97	1250.01	1302.55	1906.47
Capital Expenditure	245.57	575.60	225.92	182.08	277.86
Routine Running Costs *)	259.28	449.63	710.58	775.42	994.36
Education Expenditure (K'million)					
Total Expenditure	98.01	128.25	224.96	249.18	293.19
Recurrent Expenditure	75.41	119.91	208.57	229.34	272.40
Capital Expenditure	22.60	8.34	16.40	19.85	20.79
Percentage Relationships					
Tot Gov't Exp/GDP	54.00	54.10	35.30	30.11	34.50
Tot Education Exp/GDP	6.19	4.19	5.38	5.05	4.63
Tot Educn Exp/Total Gov't	11.46	7.74	15.24	16.78	13.42
Rec Educn/Recurr Gov't	12.37	11.09	16.69	17.61	14.29
Rec Educn/Rout.Run.Costs	29.08	26.67	29.35	29.58	27.39
Capitl Educn/Capitl Gov't	9.20	1.45	7.26	10.90	9.86
AT CONSTANT 1977 PRICES					
GDP (K'million)	n.a.	2010.7	1821.0	1902.0	1953.7
Per capita GDP (Kwacha)	n.a.	354.0	292.8	296.3	290.7
Tot Education Expenditure	n.a.	93.48	110.76	111.39	119.43
Tot Education Exp/GDP	n.a.	4.65	6.08	5.86	6.11

Source: Kelly, M.J. (1987) The Impact of Economic Hardship on Education in Zambia 1975-1985. P37.

*) Routine Running costs = Personal Emoluments; Recurrent Departmental Charges; Grants and other Payments

Annex 6

ANALYSIS OF RECURRENT EXPENDITURE AT PRIMARY SCHOOL LEVEL BY REGION AND FUNCTION, 1985 AND 1986

1985 Expenditure: 117,883,909 1986 Expenditure: 157,422,909

Function	Teachers Salaries		Allowances + Benefits		Office Services		Student Requisites		Total
	85	86	85	86	85	86	85	86	
Central	10.2	10.8	0.4	0.4	0.3	0.3	0.02	0	10.9/11.5
Copperbelt	17.1	19.1	0.9	0.8	1.0	1.8	0.4	0	19.4/21.7
Eastern	8.9	8.5	0.4	0.1	0.1	0.03	0.2	0	9.4/ 8.6
Lusaka	12.2	10.7	0.3	0.5	0.6	1.1	0.2	0	13.3/12.3
Luapula	6.7	5.3	0.4	0.4	0.1	0.1	0.2	0	7.4/ 5.7
Northern	12.1	11.9	0.2	0.5	0.2	0.3	0.1	0	12.5/12.6
North/West	6.1	5.3	0.2	0.4	0.1	0.03	0.1	0	6.4/ 5.7
Southern	12.4	13.1	0.4	1.0	0.3	0.4	0.5	0	13.5/14.4
Western	6.7	7.2	0.1	0.2	0.1	0.1	0.2	0	7.1/ 7.5
Zambia	92.3	91.8	3.3	4.3	2.6	4.0	1.9	0	100.0/100.0

Source: Calculated from NCDP (1986-1987) Estimates of Revenue and Expenditure. Government Printers. Lusaka

Annex 7

PUBLIC ANNUAL COST PER STUDENT AT DIFFERENT LEVELS OF EDUCATION, 1979-84

(At 1984 Constant Prices, Kwacha)

Sector	1979	1980	1981	1982	1983	1984
Primary	109.28	102.59	102.28	121.45	101.82	80.46
Secondary	559.11	557.45	512.12	556.77	456.20	376.47
Teacher Training	1,679.90	1,640.28	1,681.71	2,172.89	1,525.58	1,374.17
Technical Education	3,365.85	3,207.92	3,343.39	3,567.03	3,013.66	2,798.19
Bursaries	1,154.34	1,180.11	2,625.42	2,039.56	2,944.79	1,571.34
University Grant-in-Aid	6,510.29	6,613.21	8,098.39	10,982.09	7,059.32	6,661.86
University including Bursaries	7,664.63	7,793.33	10,723.81	13,021.65	10,004.11	8,233.20

Source: Kelly, M.J. et al (1986). The Provision of Education for All. UNZA. Lusaka.

Annex 8

PER CAPITA EXPENDITURE ON PRIMARY SCHOOL PUPILS 1981-84

Provinna	1981	1982	1983	1984	Average 1981-84
Lusaka	1.52	1.62	1.58	1.05	1.42
Copperbelt	0.96	2.62	1.31	1.68	1.65
Central	1.69	2.15	1.74	1.26	1.70
Northern	1.20	0.90	0.96	0.78	0.95
Western	2.04	4.08	2.02	2.07	2.54
Eastern	1.54	2.32	1.58	1.31	1.68
Luapula	2.23	4.36	1.87	2.38	2.70
North-Western	0.68	5.18	3.88	3.09	3.27
Southern	1.47	2.31	1.43	3.08	2.09
Zambia	1.42	2.63	1.62	1.76	1.86

Source: Calculated from ERIP Report (1987). University of Zambia. Lusaka.

Annex 9

FOREIGN AID TO EDUCATION BY STATUS FUNCTION AND AGENCY 1986 (IN KWACHA)

Agency	AMOUNT Donor	GRZ	Aid Status	Function
SIDA	3,400,000	-	Grant	Staff Development
SIDA	940,000	-	Grant	Teacher Tr-Special Ed
SIDA	500,000	-	Grant	Repairs + improvements
SIDA	700,000	-	Grant	Resource Centres
SIDA	3,900,000	-	Grant	MGEC-Planning Unit
SIDA	300,000	100,000	Grant	Special Education
CIDA	80,000	-	Grant	Tech Educ + Vocir
CIDA	3,500,000	-	Grant	UNZA-agric School
NORAD	9,400,000	2,350,000	Grant	Maintenance programme
IBRD	338,000	507,600	Loan	ZEPIU-Administration
IBRD	10,000,000	3,000,000	Loan	Educ Project-V
IBRD	6,000,000	2,000,000	Loan	Maintenance Programme
ADB	5,100,000	900,000	Loan	Educ Project-I
EEC	2,750,000	600,000	-	ZAMSTEP

Source: NCDP (1987) Estimates of revenue and Expenditure. Government Printers.

Annex 10

PRIMARY SCHOOL EXPANSION BY ENROLLMENT, CLASSES AND TEACHERS IN SELECTED YEARS

	ENROLLMENT			CLASSES			TEACHERS			
	1975	80	86	1974	80	86	1975	80	85	86
Central	75327	98531	139421	1846	2361	3526	777	2042	2893	3300
Copperb	191590	229390	305368	4965	5422	6757	2175	4601	6271	6190
Eastern	9673	108301	135861	2513	2839	3567	876	2129	2665	3205
Lusaka	81428	111534	161078	1843	2330	3095	815	2191	3254	3145
Luapula	70032	79212	92262	1747	1967	2671	696	1720	2142	2161
North	112683	133448	170436	2874	3365	4159	1062	2514	3176	3333
North/W	45395	51814	77535	1174	1359	2226	495	1078	1475	1790
South	121744	144851	180530	3024	3569	4460	1344	2964	3579	4174
Western	77440	84857	103429	2071	2247	2754	924	1933	2239	2543
Zambia	683912	1021938	1365920	21787	25459	32915	9164	21172	27694	29841

Source: Calculated from MGEC Reports - 1975-1986. Lusaka.

Annex 11

DISTRIBUTION OF PRIMARY AND SECONDARY SCHOOLS BY REGION AND TYPE:1985

	SECONDARY SCHOOLS					PRIMARY SCHOOLS
REGION	GOVERNMENT	AIDED	SELF-HELP	PRIVATE	TOTAL	
Copperbelt	23	3	7	11	44	257
Kabwe	8	1	7	4	20	293
Lusaka	11	3	4	13	31	156
Southern	7	12	6	4	29	488
Luapula	6	2	3	1	12	253
Northern	10	3	6	1	20	543
Eastern	9	1	3	1	14	454
North-Western	4	1	3	1	9	274
Western	7	2	4	1	14	337
Zambia	85	28	43	37	193	3055

Source: Kaluba, L.H. (1986) Education in Zambia: the problem of access to Schooling and the paradox of the private School Solution. Comparative Education Vol. 22, No 2.

Annex 12

PRIMARY SCHOOL TEACHERS BY CATEGORY AND REGION: 1985

	ZAMBIANS				NON-ZAMBIANS				
	Trained		Untrained		Trained		Untrained		
Region	M	F	M	F	M	F	M	F	Total
Central	1,264	1,058	366	188	13	15	5	15	2,924
Copperbelt	2,337	2,889	458	330	46	125	1	2	6,188
Eastern	1,528	711	113	117	5	5	-	-	2,479
Lusaka	1,103	1,784	22	21	28	123	2	18	3,101
Luapula	1,381	464	149	101	1	1	1	-	2,098
Northern	1,832	801	130	156	7	1	-	-	2,927
North/West	936	322	168	69	11	7	2	-	1,515
Southern	2,039	1,455	122	131	8	12	1	1	3,769
Western	1,341	771	64	123	-	2	-	-	2,301
Zambia	13,761	1,255	1,592	1,236	119	291	12	36	27,302

Source: MGEC (1986) Planning Unit. Lusaka.

STUDY OF EDUCATION SUPPORT TO MOZAMBIQUE AND ZAMBIA IN A PERIOD OF ECONOMIC CRISIS - TERMS OF REFERENCE

1 BACKGROUND

The economic crisis in African countries South of the Sahara has worsened over the past few years. Both Zambia and Mozambique have been badly affected, and in both Structural Adjustment Programmes are being implemented. These include priority attention to productive sectors, at times at the expense of the social sectors. These are thereby hit twice - once by the crisis itself, and again by their low priority rating when funds for recurrent costs and development are re-allocated.

In both countries, the education sector has been badly affected. Local administration has been cut down, capital investment almost stopped, innovatory activities declined, and other recurrent funding pared to the bone. For example, Mozambique after a large devaluation, is cutting its education budget by around twenty per cent.

In this situation, it is important to study whether Swedish assistance is really meeting the most pressing needs and helping the education sectors survive until better times come.

2 OBJECTIVES OF THE STUDY

The study should look at the possible consequences of the present economic crisis for the survival and development of the education sector, and identify the system's most pressing needs.

It should analyse whether and how Swedish assistance to the sector could be adapted to serve these needs optimally.

The study should serve as an input to the forthcoming sector review discussions.

3 TASKS

The consultancy shall include:

- a review of the domestic (government and local) resources, both development and recurrent, made available to the education sector in past years;

- a study on the utilization of these resources;

- a description of the qualitative and quantitative consequences for the education sector of the economic crisis;

- an analysis of the implications of financial and other restrictions for the education sector over the next five years;

- an analysis of options available to counteract the effects of the crisis, and a review of existing and possible donor inputs;

- a discussion of ways of using Swedish resources to assist the education sector and of the long-term implications of using Swedish resources to meet recurrent costs.

4 EXECUTION

The study shall be carried out in close cooperation with the Ministries of Education and of Finance. The SIDA teams will include expertise in the areas of both education and economics. The joint on-site study is expected to be concluded over the period of two weeks, on the basis of advance groundwork to be done by the recipient governments and of the inclusion in the work-teams of people familiar with the countries' educational and governmental systems. Thereafter, the teams will meet to discuss and consider their final recommendations regarding Swedish assistance to education in a period of economic crisis.

5 ADVANCE PREPARATION

Advance preparation by the recipient governments for the work-teams' visit shall include:

A. Collection and presentation of statistics and figures on the size, distribution and utilization of the education sector budget each year from 1981 to 1986,

1. **by type of expenditure for the total system, for the primary education sub-system and for primary teacher training**

- administration, including administrators' salaries, travel and inspection, etc;

- other recurrent, including teacher salaries, teacher training, boarding costs, textbook subsides, etc;

- innovatory, including pilot and experimental programmes, research and development, institutional development, etc;

- capital, including school construction, expansion and maintenance, furnishing and equipment, vehicles, etc.

2. **by target level for expenditure**

- proportion, amounts, and per capita expenditure distributed across the five principal subsystems over the 1981-1986 time-period, viz:

1) General education - primary level (1-7)
- secondary level (8-12)
2) Technical secondary education
3) Adult education
4) Teacher training
5) Higher education

3. **by sources of financing**

- immediate: fees, charges, voluntary contributions, and local subsidization;

- national: reattribution of revenues and taxes and allocation of subsidies to the education sector;

- extranational: international bilateral and multilateral credits, loans and donations.

B. Presentation of national currrent and future priorities and policies with regard to education on how to respond to the crisis, including inter alia:

1. reduction of personnel as well as personnel expenses;

2. reduction of expenses by alternative organizational forms;

3. cutting back on specific educational sectors or levels;

4. interrupting long-term innovation and development plans;

5. levels and activities seen as absolute priority.

C. Presentation of strategies of international agencies to adjust support to the education sector to meet the financial crisis including:

1. priority areas of financing or investment;

2. financing mechanisms;

3. indication of existing externally financed projects which should be abandoned or continued.

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