Education Division Documents No.12

Education in Zambia, Past Achievements and Future Trends

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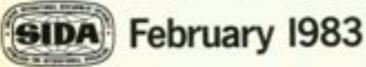


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PREADE

The following report is the result of a study undertaken at the request of SIDA. We began our preparatory work in Stockbolm and carried out the empirical work in Zambia during three wreks in January - Pebruary 1983. From the annexed list of presons met it can be seen that we have benefited from discussions with samy persons in the Educational Sector in Zambia. We would like to take this opportunity to acknowledge the valuable assistance we have received from those people and from the stiff of the Swedian DCO. The conclusions of this report remain, however, those of the authors only.

LUSARA

February, 1983.

'ngemar Pägurlind

Jan Valdelin

ABBREVIATIONS

CSO	Centril Statistical Office
CDC	Curripulum Development Centre
10C0	Development Cooperation Office
DTENT	Department of Technical Education and Vocational Training
ESSP	Education Sector Support Programme
PNDP	First National Development Plan
к	Kwacha (\$K = SEK 6,535)
MEC	Former Ministry of Education and Culture
MGEC	Ministry of General Education and Culture
MIE	Ministry of Higher Education
NCDE	National Commission for Development Planning
PTA	Parent-Teacher Association
SADCC	Southern Africa Development Coordination Committee
SEK	Swedish Crowns
SIDA	Swedish International Development Authority
SNDP	Second National Development Plan
TNDP	Third National Development Plan
TVTC	Technical and Vocational Teachers' College
UNZA	University of Zambia

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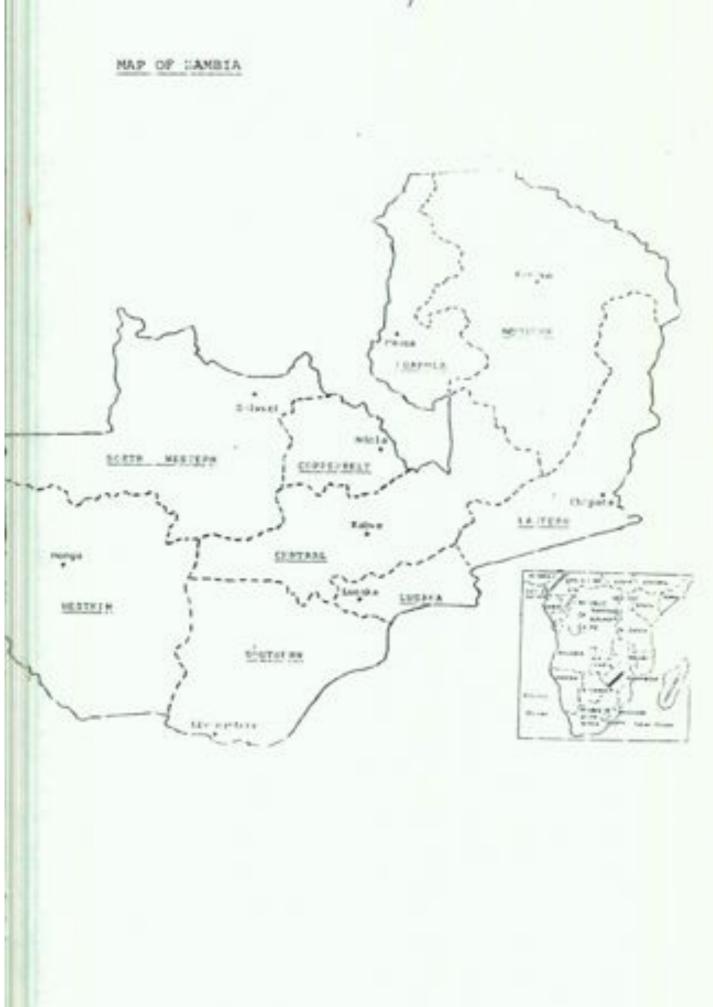
HOTE ON STATISFICS

This report relies heavily on Zambian statistics produced by the Central Statistical Office and its Statistical Officers prates at the suctorial ministries. The results of the study are consequently dependent on the accuracy of those statistics.

Some of the problems in Zambian statistics production and distribution have been presented in a Seminar Report (CS-) 1977), which who includes a very useful quide to sources and publications of statistics in Zambia.

We have not been able to check and countercheck all of the figures used in this report. In some cases we have found statistics where the reported figures need adjustment for our specific purpose. It seems, for example, as if pupil/ toaches ratios as reported in t a Educational Statistics are based on the reported figures of enrolment in September of the year precessing the school start. When the term starts in January many schools have taken over students from other areas, making the actual classroom situation differ from the reported one. In other cases we have found no explanation for large and surprising discrepancies, for example, in time series. In such initances we hope toat we have not overseen or been unaware of changel reporting or presentation of statistics.

On the whole our impression is that the available statistics are accurate to such an extent that the validity of our results remains sufficient Except for mistakes on the part of the authors, the magnitude of errors should not disturb the main conclusions of this report.



PUPPED OF THE STUDY

The study reported here has been undertaken at the request of NIDA. The full Terms of Reference are asnexed (Annex If).

The purpose of the study is to provide SIDA with information to serve as a basis for future decisions on Swedish support in the field of education. Thus, the principal fields of work have seen, on the one hand, an analysis of pret national achievements is Zambian education cooplet to an assessment of future plans and, on the other hand, a survey of strategic ateas where support would be most effective in contributing to the full diment of such plans.

The results are summarized in the sections "Summary" and "Conclusions and Recommendations".

S IMMA RY

 In January 1983 the Ministry of General Education and Culture announced that the interim structure of the proposed Educational Reform was to be implemented with immediate effect.

The Education Reform dates back to 1976, when a draft proposal was presented, followed by a nation-wide debate. Proposals and recommendations with the ultimate aim of actieving a nine-year basic education for everybody was published in 1977. Reforming education for production is one of the important themes in the proposals. Only small steps have been taken towards the implementation of the proposals and recommendations since 1977.

b. The national objectives to enroll all seven-year-old children in Grade 1 have yet to be fulfilled. Rates of encolment differ between regions, with the lowest to be found in urban areas like Lusaka and the industrialized parts of the Copperbelt. However, decreasing encolment rates are also found in the Western districts where rural and pastoral economies are prevalent. The progression rate from Grade 4 to Grade 5 has been increasing for the country as a whole up to 86 per cent, with sharp differencent between rural and urban areas. Since 1974 the total encolment in the Primary School system has been over 80 per cent of the 7-14 year-olds.

The progression rate from Grade 7 to Form I of the Junior Secondary Scools has been approximately 20 per cent during the late 1970s and was down to 18.5 per cent in 1902. Euring the same period 50 per cent of the Form III pupils could continue in Form IV.

The training of Primary School teachers has produced good results. Only a very small percentage of the teachers in the field are untrained. Also Junior Secondary Education is self-sufficient with trained teachers. The sajority of teachers for the Upper Secondary school are still expatriates. An upgrading of Junior Secondary teachers is planned.

- c) The study has investigated and identified why national objectives in education have not been fulfilled. A rapid progress lowards some objectives have also been demonstrated.
- d) Data on expenditure and financing of education have been analyzed for the 1970s. Projections of such data have been made for the 1980s.

It has been shown that projections of educational costs amount to an increase of the share of expenditures on education from approximately 12.5 per cent of the total state budget on the average and from 5 per cent of 3DP to 18 per cent and 6 per cent respectively, in the 1980s should the major quantitative objectives be achieved. Further, it has been shown that allocations to the capital budget in the form of school buildings carry to direct implications for recurrent budget expenditures. On the other hand, increased quantitative output of sectors imply direct increases of the recurrent budget.

Unit expenditure per stident varies from Primiry school to University in the relation 1:94. It has been shown that unit expenditure per student in harsh economic times do not reflect the real cost per student in those functions where budget reductions are heaviest, such as Primary schools. Those parts of costs not covered by public expenditure have been curried partially by parents. Due to sconnic decline over the last years a major transfer of recurrent costs from the state budget to parents has taken place.

- e) The objectives for the Sutare development within education is best found in the document Educational Reform, Population and Recommendations.
- f) It is difficult to see that future objectives in the ship cation sector can be attained during the 1980s. The study has shown that only the implementation of the expansion parts of the Bisic Education reform would amount to an average addition of 100 to 120% to the normal education budget of the 1970s. It has also been shown that just nornal expansion due to population growth would flow up education budgets to 150% of its size in the 1970s, implying a share of 6 per cent of more of expected GDP.
- g) Donor activities in the education sector have been identified.
- h) In the following section, "Conclusions and Recommendations", areas for Swedish support to the implementation of Zambia's elucational policy are recommended.

CONCLUSIONS AND RECOMMENDATIONS

The theme of this report has come to be the dim financial prospects of Basic Education in Zambis; will it be possible at given level of standards to enrol 100 per cent of those children legible for Grade One even in the 1980s7 For financial reasons our projected answer is no.

Taking into account the wide financial gap between the artual situation and valued objectives in education, an "Evaluation" has been made by the application of Sambian and Swelish objectives to the findings of the study. The purpose has been to identify strategic areas for Swedish support to education. "Cunclisions and recommendations" as regards Swedis's support have been presented in spite of the uncertainty as to future implementation plans. The recommendations may be summarized in the following points.

Swidis: support ought to be concentrated to Basic Elucation. If physical expansion of Easic Elucation shall be supported by forden, it ought to be o contrated to Grade One classroom additions. Such support cught to be integrated with self-help scheme:, low-cost buildings and maintenance schemes and be fised in local materials and skills.

upport to increase the internal efficiency of the existing system ought to concentrate on the supply of teachers' handbooks and exercise books. Support by expertise to the planning and administration of education ought to continue and possibly be increased.

Support to teachers' housing and teacher training is not justified in view of its effects on future recurrent costs and the scarce resources.

Parther studies have been suggested in the following areas: identification of fast growing population agglomerations and na decided rural areas, respectively; finding administrative solutions to the rural Grade Five problem; cost reduction measures in text-book production; feasibility study for an educational facilities supply unit. EDUCATION AND DEVELOPMENT IN MAMBIA: THE NEED FOR EDUCATION IN A DECLINING ECONOMY

Trends of Educational Policies

In January 1933 the Ministry of General Education and Culture announced that the interim structure of the proposed Educational Reforms was to be implemented with immediate effect. The ultimate aim was to achieve the concept of the nine-year Basic Education for everybody. However, the sost important change at the moment is that Secondary school system will comprise a two-year Junior programme, Grades 8 and 9, and a three-year Secondary programme (Tises of Zambia, January 22, 1983; Zimbia Daily Mait, January 22, 1983). The statement by the Ministry can be seen in the light of an unchanged objective since independence in 1964 to expand the whole education system.

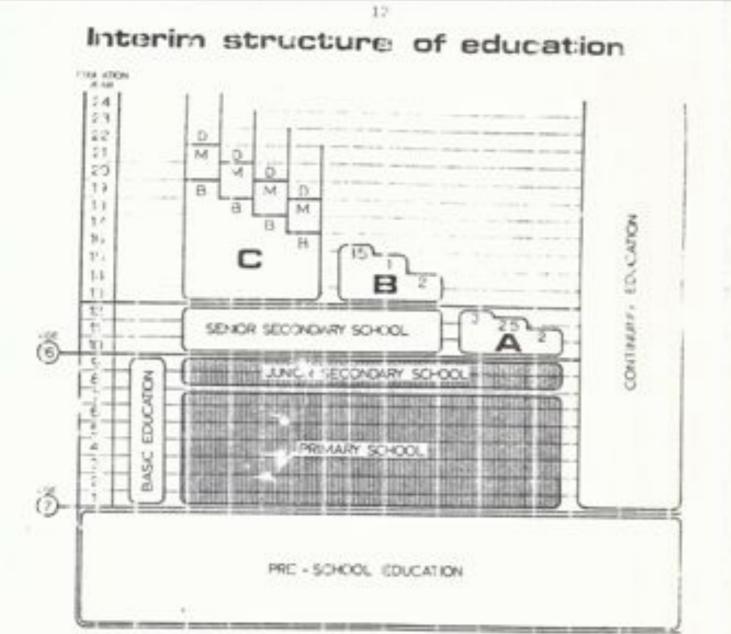
The country is governed by the United National Inlependence Party (UNIP) under the Leadership of President Kennet: Kaunda. Elimination of racial and social segregation, expansion of educational provision, and achievement of rapid output of high-level manpower in order to Zambianize administration have been among the educational priorities of the part/. The UNIP Central Committee is the highest policy making boly and the Prime Minister and his Cabinet have the executive responsibility. Since September, 1982, there are two Ministrie: of Education: the Ministry of General Education and Culture and the Ministry of Higher Education.

In the mid-seventies two steps were taken by the dovernment: (1) rural development was declared the key development strategy, and (2) a launching of a major exercise for the reform of the educational system was initiated. A draft proposal for a far-reaching education reform was premented in 1976 and after a National Debate new proposals and recommendations for an Efucational Reform were presented in 1977. The Third National Development Plan (TNDP) 1979-1983 set as a goal to reorient the education system.

Humanism and equality are important goals for the Zambian society according to the proposals for the Elucational Reform. Reorganization of social institutions such as schools in such a way that they help the individuals to rise above their limitations is mentioned as a way to reach the goals. Quality is a goal mentioned as frequently as quantity. By the use of technicians and experts who are able to design the best kin! of cirriculum, and who are able to evaluate the students so that the best ones are delected for more prestignous education and jobs, society will develop.

The Structure of the Education System

The interim structure of the education system imp emented from January 1983 is illustrated in Figure 1.



NOTES

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A Virious vocational programmes, e.g., Trades, Nursing, Teacher Training, etc., leading to a certificate.

Virious programmes, e.g., Agriculture, Tichnology, Commerce, Vursing, etc., lexding usually to a diploma.

"Jeiversity degree:

D = Doctorate M = Marter B = Bactelor: 4 years -- Ordinary, 5 years -- Engineering, Agriculture, etc. 6 years -- Veterinary Science, 7 years -- Medicine,

to A and B there are also serve courses which take less than 2 years.

From promary to service encoding an education year represents a grade.

Figure 1. INTERIM STRUCTURE OF EDUCATION SYSTEM

Source: Ministry of Education 1977, p.10.

Basic Education

The primary school cycle starts at the spe of seven, comprises seven years and leads up to the Composite examination at Grade 7. As long as there is a limited number of Grade 8 places the Composite examination is used for selection. The ultimate goal is to provide a nine-year universal Baric Education system but due to insufficient number of school places available at Grade 1, as Grade 5 in rural areas, and at Grade 8, this goal cannot presently be fulfilled. Priorities have been set to expand facilities so that more seven year old children can enter Grade 1. Over the last two years 20 per cent of the Grade 7 pupils that all for the Composite examination should begin Grade 8. English is the medium of instruction but ore of the seven official linguages can be used in explaining cifficult concepts. Repetition is used in all grades, but is more common in Grade 4 and Grade 7.

The two last years of Basic education are spent in the Junior Secondary Schools and at the end of Grade 9 the pupils sit for the Junior Secondary School leaving examination.

Senior Secondary Education

The pupils selected for this stage enter a full-time general education programme for Grades 10-12, or they follow vocational programmes such as Trades, Norsing, Teacher training, etc. leading to certificates. At this stage training programmes in various sectors of the economy and/or continuing (pari-time) education programmes and available. At the end of Grade 12 a joint Cambridge Overseas School Certificate is taken. The examination is administered and prepared locally by the Zambian Examinations Council.

Tertiary Education

A wide range of fields of study such as advanced specialized programmes leading to diplomar in teaching, agriculture, technology, nursing, etc. are found at this stage as well as programmes at the University of Zambia. There are at present eight schools at the UNCA:

School of Agricultural Science School of Education School of Engineering School of Humanities and Social Science, School of Law School of Med.cine School of Minea School of Natural Science

The university has been expanded on a federal basis with the Ndols campus outside Lucaka. A School of Veterinary Hedician is planned in Lusaka.

An ordinary Bachelor of Science Degree takes 4 years, in Reginsering and Agriculture 5 years, Veterinary Science 6 years and Medicine 7 years, Nasters and Doctorate Degrees are also offered.

Continuing Education

Aruit: or youth: who have never completed or never entered the formal education system can take up part-time studies. Literecy education, correspondence courses, and in-service education aiming at increasing competence in vocational and professional skills are offered.

Development Constraints in the 1970s

Zamble's landlocked position in the middle of the ongoing liberation struggle in Southern Africa has put political constraints on the country's development efforts ever since in hyperdeady. Not only has lamble's contribution to this at any momentuitated a great deal of clever statesmanship, but also, is spite of the successive liberation of neighbouring countries, a number of continuous changes of trade policies, transportation routes and other costly measures have have been imposed on the country's economy.

The indirect economic costs of the political situation have been estimated to be very high. Sambla succeeded, however, to increase its development budgets year after year up to the shill-1970s.

This wis largely due to the mineral production in the country, being not only the major foreign exchange earner, but also the principal contributor to state the revenues. Hence, the fall in copper prices in 1974 turned out to be the major factor creating serious economical constraints on development in Zambia. That event ruined the basis for the implementation of the Third National Development Plan. It turned the end of the 1970s into a period of continuous disappointments as to plan target fulfillment and of extraordinary measures to establish the economy.

There have, of course, been other constraints to development in the past decade. In general discussions, many factors may be heard as examples of political, economic and cultural limits on development efforts. Examples of such factors are negative attitudes towards minual work; unfortunate dilemma between agricultural development needs and the political objective of keeping food prices down; an industrialization strate; y relying too heavily on imported inputs and creating social and regional imbalances; too rapid irbanization; etc. For the purpose of this report, it suffices to conclude that the last five years of the 1970s and the first two years of the 1980s were marked by severe financial constraints imposed on development activities in practically all fields.

Detelogment Constraints an1 Education

Edication is not only a basic need and a major political objective in development. It has also a contribution to make towards the development process as a whole. Unfortunately, there is neither convincing evidence nor a unified theory as recards the sutual relations between education and developmert. Some theoreticians claim that a social system where the state represents the harmonicus unification of all conflicting interests will be moving towards equal opportunity, social equity and economic development by elucational expansion in itself. The problems of elucation in their turn are basically technical and economical: economic resources, good administration and teaching methods will combine to change mocisty.

On the other hand, other theories seem to heply that education in a class society will only reproduce that society and in itself be a reflection of its basic structure and contradictions. Then, social and economic problems of society will not be solved by educational development. Instead, society has to be changed by political means to enable the creation of an equitable and efficient education system that will form part of the process towards development.

In Sambia as in other countries examples may be found to illustrate both of the above sentioned contradicting and simplified theories. Let it be sufficient for the purpose of this report to point out that the analysis must include and consider the mutually dependent relations between politics, economics, culture and education: the mutual influences between changes in the educational system and societil changes.

The current situation in Zambia helps to simplify there analytical issues: the financial constraints in the years to comare no overwhelmingly tight that they do not leave much roce for discussion. The issue is rather how to mateguard, first of all, Sambia's economic independence; and secondly, in the meantime, how to prevent a serious setback in the provision of educational services. BASIC DEMOGRAPHIC AND ECODOMIC SETTING; THE 19738

This section of the repoort presents those basic desographic onl economic data which formed the macro context for the develosment of the education system in Zambia during the 1970s.

Referring to the statistical annex will avoid detailed figures in the text. The following paragraphs give those data and developments deeped to be crucial for the understanding of the costex of Lambian education.

Popula ion

Zarnie is a thuniry of the size of Norway and Sweder taken together. In 1930 its surface of abundant agricultural and mineral potentials was inhabited by 5.7 million people. (unless otherwise indicated, data in this section are taken from the Statistical Annex).

This population is one of the fastest growing in the world. Its growth rate of 3.1% per year during the 1970s bypasses the world sverage of 1.0% as well as the African average of 2.9% (Pso 1982, p.5)

The share of the population living in urbai areas has increased from 29% in 1969 to 43% in 1980, turning Zambia into one of the most urbanized countries in Africa. In fact, only South Africa (48%) and Algeria (54%) have higher urbanization rates. During the 1970s Zambia's rural population grew at the rate of 1.1% annually, while the urban areas witnessed at incre-se of 6.7% per year.

The high population growth has changed the age distribution of the population, implying consequences for educational planning. By the end of the 1970s the age distribution had the characteristics illustrated in Table 18.

As can be seen from the Table, the population of 14-year-olds and under made up 46.6% of the population. Almost 60% of the population is younger than 20 years of age.

Unless drastic measures are taken to reverse the migration trends, half of the population of Zambia will live in urban areas around 1990, aggravating further the problems of urban youth, unemployment, housing, education, food and criminality.

National Preduction

At the beginning of the 1970s this fastly growing population unequally shared a GDP per capits at K 301 in 1970. In the middle of the 1970s Zambia's GDP per capits ranked among the highest of Sub-Saharan Africa.

St.11, by the end of the 1970s, the real GOP per head has been estimated to be about half of its level in 1965 [Republic of Zambia 1982, p.4). During the last decade the GDP of Zambia grow at an average annual rate of 0.7%, leading to a fall in real GDP per capita by 2.6% annually This is an extremely sharp decline. That real COP per head is cut back in half in 15 years, as well as the quick decline over the last decade, requires an explanation.

Explanations are not difficult to find. First of all population growth, in its turn a reflection of falling death rates, account for part of the high pressure on GDP per capita. But population growth cannot explain the fall by 1% ennually in 1975-1900 of cotal real GDP.

Other factors explaining the declining Sambian economy are readily available: Zambia's role in the liberation struggle for Southern Africa, disrupting and rerouting of transport routes leading to higher transportation costs for the landlocked country. The dependence on minerals and the export of minerals becaue the most sensitive area of the Zambian economy. In 1980 minerals still made up 98% of Zambian exports. This indicates the major event to select, had one to single out one factor to explain the disrupting conditions of the late 19"Os: the midden fall in intenational copper prices in 1974, followed by the climb in international petrol prices, created a vicious circle.

The drastic cut-back in foreium exchange earnings had an immediate impact on imports, thus creating difficulties also for the copper industry itself (cf. Table 4, Arnex 1). Such difficulties and the sinking profitability have combined to cut back copper production during the 1970s. In 1981 it was one fifth less than in 1976. The copper industry is in great need of foreign exchange for maintenance, molernization and expansion. As long as copper prices remain at their present levels, capital will not be generated within the incustry itself, but will have to be borrowel. Measures have been taken in this direction as well as for the restructuring of the industry (Republic of famble 1982, p.5).

Due to the above mentiosed causes of the Zambian economic crisis, a restructuring of the composition of CDP has slowly taken place during the last decade. Most remarkable is the reduced contribution of the mining sector. In 1970 mining contributed 27.4% of real GDP, while its 1950 share was 16.1%, to be followed by the all-time low of 7.5% in 1981. Agriculture also decreased from 13.4% in 1970 to 11.4% in 1980. A major increase of contribution to real GDP can be found in "Community, social and personal services" rising from 15.3% in 1981.

The composition of GDP in 1987 is in itself major indication of where future development enforts in the country will be made: with "community, social and personal services" being the largest contributor followed by the manufacturing sector (17.98) and with agricultural and mixing contributing 17.78 and 7.5% respectively, it is not surprising that the powernement has recently brought its attention to the latter two mectors. In 1980 a major policy change vis-a-vis the agricultural sector was made when the unversioned dropped its longitudinal policy of keeping food prices down, and instead marted to pursue a policy with the objective of reaching self-sufficiency is food supplies (Republic of Zambia, 1962, p.i). In spite of its large potential in agriculture, Xambia may suffer an timited moortage of 200 000 tons or more of maize in 1983
[FAU 1982, 9.9].

Investment and Employment

Griss fixed capital formation of the Cambian economy showed alignming tendencies during the 1970s. In real terms it fell by an average rate of 7.9% per year. From the point of view of future economic recovery this marks a significant decline: from a peak in 1975, gross fixed capital formation was cut have by more than 70% in 1980s. In the mid-1970s, capital formation was almost 30% of real GDP, only to be reduced to leas than 15% in 1980s.

Were exployeent remained statmant over the decade. The numter of Zambian appropriations will, however, slightly increased; from 3.6,000 in 1970 to allocat 370,000 in 1980. Meanwhile, however, the unexployed backlog of preceeding years increased by about 58,000 persons per year. This is estimated on the assumption of 48 annual growth rate of the labour force (numbar of people aged 15-5: working or seeking work). The increise in employment for 1980/81 was estimated at 2,810 pertors. Over the years 1977-81, the unexployed constituted 78-80% of the labour force (NCDP 1982, p.53).

Government Finance

During the 1970s the government budget held an average share of 33% of GDP, reaching a high of 48.5% in 1970 and a low of 23.5% in 1978. This meant in actual decrease of public expenditure in real terms by an average of 2.7% per year. Capital expenditure was reduced by an average 10%, while recurrent expenditure increased by 0.2% annually.

The logics of this decrease of public expenditure in real terms are simple; one single source of current income decreases from 252.2 million in 1974 to an estimated K 2.0 million in 1982 (zero in 1982). This was, of course, mineral revenue. It made up almost 39% of the government recurrent revenues in 1974. The corresponding figure for 1981 was 1% (NCPD 1983, p.48). The tax ratio to GDP has fallen from around 30% in the good copper years to an average around 20% after 1977. Again, we find the fall of copper prices directly effecting a crucial root the Tambian economy.

Turning briefly to the policy aspects of government finance, it may be pointed out that the necessity of international financing has forced the government to introduce budget restrictions as lemanded by lenders. First in the 1978-79 stabilization programme and then again in 1982-03 (devaluation of the Kweicha by 20% in January 1983 linked with outbacks on social budget expenditures).

Major increases of the Zambian government budget in real terms cannot be expected in the years to come unless they be finan ced by increased public debt (or major increase of copper prices).

Public Expenditure on Elucation

While in the 1970s the total government budget saw an average annual increase by 7.8% (current prices), the education budget increased by 10.2%, i.e. considerably more than the government total. Over the decade the share of public expenditure devoted to education averaged 12.5%. This places Sambia among those African countries spending the smallest share on education (Comparative Education Indicators, ISRD, 1978).

The growth of expenditure in current prices still implies a decrease of 0.5% annually in real terms. The education capital budget was drastically reduced during the second half of the past decade. During 1970-75 the annual increase was 20.1%, while the following five years siw a decrease of -11.2% annually (constant prices). A similar tendency can be seen in recurrent expenditures increasing by 8% annually in 1975-80 compared to 11.2% for the total government budget. In real terms this brought an annual decrease of recurrent expenditures on education by 0.6%.

The major finding in terms of changes in the education budget turns out to the sharp break between the pre-1975 period and the post-1975 period. This break coincides with the sconceric decline but also with the discussion of the educational reform programme (for details, see Tables 5 and 16 in Annex 1).

Some Significant Trends 1970-1980: The Hadden Bresk Around 1975

The above presentation of basic data in Zambian demographic, economic and educational development already indicates the impact of the sudden change in the middle of the 1970s. The major reason for this was the spectacular fall in copper prices, copper production and mineral revenues to the state buiget.

In order to illustrate how serious a break it was that occurred around 1975 some trends will be shown divided into the first and second half, respectively, of the 1970s. Is doing so we restrict ourselves to just some of the more significant trends. It is worthwhile to point out that ten years is a rather short term in economic development, which implies that our breakdown of figures into five year periods may exaggerate the speed and drama of the trend breaks. Still it scens justified to be aware of the shifts, as the decline of production and revenue are extremely large in many respects.

To begin with, one has to bear in mind that population growth represents the major trend that did not go through a break or even slow down in the 1970s. Less serious, but may be of interest to note, is that government recurrent expenditure in real terms fell very little and that the service sector increased its share of GDP.

But, for all other indicators which we are stilliging to project further developments in the education sector, there were dramatic breaks around 1975. If the first half of the decade real 3DP increased by 2.48 per year on the average. After 1975 it decreased by 1%. The fall of GDI per tapita (real terms) accelerated from a slow pro-1575 of 0.8% into a rapid post-1975 of 4.3% per year. The mass type of change occurred in total government expenditure is real terms it went from -1.9% per year to -3.4%.

For the public expenditure on education, the above mentioned changes seen to have multiplied their effects: total spending on education in real terms increased by 5.6% in the first half of the 1970s, but decreased by 6.9% in the second half. The break is dramatically illustrated by the capital expenditure grawth rate in real terms: from increase by 20.1% annually to a bour size by 33.2%.

The trand broaks mentioned in this section and a few others are if ustrated in Table 16 in the Statistical Annes.

RDUCATIONAL OBJECTIVES AND PAST ACHIEVEMENTS

Educational Objectives

At Independence, some of the most important educational pricrities for Zasbia were to eliminate racial segregation in schools, and to increase opportunities for education and training at various levels in order to minimize the nation's dependence on foreign countries for skilled manpower. During most of the pariod before independence there had been a dual system of African and European education, the latter receiving the larger shire of available resources. In 1964 Zarbia had 1,200 secondary school graduates, and only 100 had a university degree (Sanyal, et al., 1976). Expansion and diversi-fication of the educational system were given priority in the First National Development Plan (1966-1970) (Office of National Development and Planning, 1966). Some advantages were given to urban areas cospared to rural. In 1966 the government decided to work for adequate facilities in urban areas to enable all children in Grade 4 in the urban areas to continue to Grade 5. According to the Ministry of Ecucation Annual Report for 1955 and restated under the PNDP, the objectives were to move further towards a system of universal primary education by increasing facilities so that:

- all seven-year-old children can enter Grade 1 in 1970, or as soon as possibe;
- b) in orban areas all children at present in school and children antering school in 1966 and subsequent years can complete a full privary course;
- c) in rural areas about 75% of Grade 4 pupils can proceed to Grade 5;
- about one-third of all Grade 7 primary school leavers can enter Form I.

(Ministry of Education, 1967, p.5).

Over and above the emphasis on Primary and Secondary education, technical and vocational programmes were implemented both on a full-time and part-time basis. In technical education, mechanical, electrical and automobile engineering should be offered, as well as chemical and metallurgical technicias's work and applied physics, such as electronics and telephonenic cations. Steps were taken for vocational training in nameling and sursing (Pwanasatwe, 1958).

After Independence reorganization of the teacher training system was inevitable. The new scheme for training teachers had to satisfy the needs of the nation during a period of acceltrated Primary school expansion. Hefore Independence, 98% of the Primary school teachers were trained. To starf both old and new primary schools more than 2,000 teachers were needed and an expansion of the teacher training institutions was envisaged in the PNDP (Nwanukatwe, 1968). It was obvious that an independent Zambia could not continue the traditional recruitment of Secondary school teachers only in the United Kingdom. After Independence steps were taken to diversify areas of recruitment so that in 1967 there were teachers from at least thirty different countries serving is the Secondary schools. Under the PNDP, allocations were mode for establishing an institution in Kabwe for the training of Secondary school teachers.

In 1946, the University of Zambia (UNZA) was founded after mony years of struggle against an unwilling colonial government. Schools of Medicine, Engineering, Agriculture, Law and Education were envisaged in the FNDP.

A new Education Act came into operation in 1966: intended to regulate the whole of the national educational system. However, its provisions did not apply to the University of Limbia or to those educational institutions which were not under the direct control of the Ministry of Education.

The Second National Development Plan (1972-1976) emphasized both quantitative and qualitative aspects of educational development. Reshaping objectives and curricula were important targets at the same time as the number of students should increase in most areas of the elucational system. A range of practical subjects ware included in the Secondary school curriculus. For the first time, the educational needs of hundicapped children weil given attention.

By the mid-seventies it became clear that the modern economy had no possibilities to create employment opportunities for the increasing amount of school leavers pouring out of the education system. The government took two steps: [1] to declare rural development to be the key development strategy; and (2) to launch a major exercise for a reform of the educational system under the theme "Education for Development". Between May and December 1975, study groups visited countries engaged in radical educational reform programmes, such as Cuba, China and Tautanie, and countries like Kenya, Botswans and Guyana, "here alternative programmes had been launched (Lulet, 1982). In March 1976, after thorough consultations and discussions with representatives of different sectors of the economy, and interpretation of political and ideological documents, a group let by the Permanent Secretary of the Ministry of Education, 1976).

The report suggested a radical transformation of the education system. Ter years of universal Basic Education, comprising study and work, would be followed by non-formal education consisting of work and study, to be followed by National Service would come. Efficiency and utilization of resources, and the abalishment of the hierarchical division of primary, secondary and higher education were important goals. The proposed new system should no longer be hierarchical and differentiating. A curriculum reform was suggested, in which the integration of productive work with the studies was one of the most radical aspects. The transformation of the examination system was to improve efficiency at the same time as elitism within the system could be abolished.

The existing privite schools, including any that may be established later, were to be converted into cooperative schools under government supervision, managed jointly by parents, and run on a non-profit-making basis. The practice of sending children abroad, usually to England, for Primary and Secondary education would be prohibited. Under the heading "Education of Jambians Abroad" it was stated: "The national education system is designed to promote the social, cultural, vocational and political aspirations of the people. It is essential that all Zambian children should share in its benefits. It is therefore contrary to the principles of the educational revolution for any Hambian child to be sent abroad for studies at the present primary or secondary level (Grades 1-12). Permission will be required from the Ministry of Education for any Zambian student to undertake studies outside Zambia. In the case of studies at the Grade 1-12 level, such permission will not be granted" (Ministry of Education, 1976, p.23). In the section on "Private Education" it was stated: "It is a fundamentle principle of humanist socialism that the State is responsible for the provision of education for the citizens, and this principle underlies the new national structure of education Morevover, an educational institution whose objectives are considered by the Party and Government to encourage capitalism and elitism will be regarded as working against the principles of humanist socialism. In terms of theeducational revolution, such an institution shall be provibited" (Minis ry of Education, 1976, p.26).

A Literacy Campaigs with the goal of eradicating illiteracy was also proposed. The text reads: "The majority of our adult population cannot read or write. Tens of thousands of youn; people will add to their number, unless dramatic measures are taken, because they have not been able to get a school place or because they have left school too early to retain the skill of literacy.... This means that, as an immediate measure, the Party, Government and people of Zambia must declare war on illiteracy. The goal must be the provision of functional literacy to all illiterate persons in the nation who have misme schooling. An early target date for schieving the goal must be fixed, and the nation oust solenly pledge to meet it"(Ministry of Education, 1976, p. 20).

Other aspects were also dealt with in the 1916 refers orge, sal. One part of the report treated the provision of special education for handicapped children. Measures to docen ratizy the administration of the educational system were suggested.

About 40,000 copies of the reform proposal were produced and distributed. Summaries of the Draft Statement in ocal langsages were prepared and distributed to each province, and a vational Debate on Educational Reform was launched by the Prisident in May 1976. Members of the Central Committee for the province organized the debate in each province and all educational institutions. Ministries, churches, trade unions, and voluntary associations were asked to make arringements for discussion among their members. Radio, television, and the dilly newspapers were delating the report. When the National Debate should in November 1976 about 1.500 written comments on the proposal had been received from individuals, schools, organizations and groups over the whole country (Kaluba, 1982). The discussions were summarized and discussed at an Evaluation Seminar in January 1977 at the University of Zambra. In October 1977 a new document, taking into account the contours of the National Debate, was published under the title: Evaluational Reform: Proposals and Recommendations (Ministry of Education, T977).

The 1977 document differs from the 1976 one in many respects. The earlier document emphasized the reform in the ideological context of socialism more than humanism, while the latter is streaming humanism as the gaiding philosophy of Zambian levebonent from Straity repardless of race, tribe, creek, status or ability is pointed out as a guiding principle in a humanistic modiety. Equal opportunity for a pupil "means being provided with the tools to develop one's own special talents to the point of excellence" (p.5). This means that the new document advocates the meritogratic principle for organising the education system.

This new structure has many similarities with the three stages of the former system. The ultimate goal for the first stage is to provide nine plars of universal, Basic Education. The second stage comprises Grades 10-12, while the third includes various programmes in agriculture, technology, commerce, nursing, stc., usually leading to a diploma. University education also falls into this category.

Special education for mentally or physically handicapped children is also stressed upon in the new proposal. In curriculum development the technical process is emphasized more than the ideological aspect. Examinations are senticed as important tools of selection.

we chapter is devoted to production activities in educational institutions. In 1975 the President announced that all educational institutions would be Production Units. The combination of study and production has as its main purpose "the interest of the child's own proper upbringing" (p.43). The social value of production, the formation of desirable attitudes, and the educational value of production are topics discussed. However, very little is said about the integration of productive work with the rest of the curriculum.

The private schools will be able to continue as before if they follow the approved curricula and syllabuses, and open their doors to inspection. No restrictions over and above an approval from the Ministry of Education is mentioned for students who want to study abroad.

Under the headline "Literacy Campaign" it is said that "The Party and Government must persistently seed ways and means of aloing and effectively promoting literacy programmes through the Department of Community Development and other appropriate agencies in this field" (p.56). The goal of total eradication of illiteracy is no longer mentioned. Even if the document does not suggest revolutionary changes of the system it is a very important document for Zambian educators. Many important innovations are advocated and it is important for the teachers and the administrators to consult the document in many practical matters.

The Third National Development Plan (1979-80) wanted to recrient the educational system towards the needs and apirations of the nation to implement the reform. At Primary level the TNDF aimed at mobilising resources for all neven-year-olds to enter school and for all children who completed Grade 4 to enter Grade 5 and continue until they have reached Grade 7. An increase is primary smrolment from 950,000 in 1978 to 1154,000 in 1983 was anticipated. In order to ensure equal opportunities for enroleent throughout the country, planning and provision of Primary schools were to be coordinated on a National basis. Self-help schemes, provision of school buildings, teachers' houses and school furniture were recommented. Improvement of quality through better teacher training and teacher support by adequate teaching materials and equipment was suggested.

At Junior Secondary School level the aim was to maintain the progression rate from Grade 7 to Grade 3 at approximately 20 per cent. A total of 11,000 Grade 9 places were to be created.

No expansion of the Senior Secondary Scoool Education was planned during the TNDP. However, the growth of the population meant 980 additional places for Grade 32. New carricula for Grades 10-12 were to be designed and intoduce1.

As regards teacher training, there was a need of 5,000 new Primary School Teachers for the period 1979-1983 in order to avoid a situation of untrained teachers in the schools. This was to be achieved through enrolment of day students in the colleges, additional boarding places in eight colleges and the construction of a new teacher training college with a capacity for 500 students.

The need for more Secondary School Teachers was to be met through increasing enrolment at the UNIX School of Education and at two other colleges.

A two-year residential course to educate lecturers at Primary Teachers' Colleges was planned and lectures for Secondary School Teachers' Colleges were to be educated through in-service programme and traching at MNZA.

For Special Education teacher training and in-service training programmes, sutablishments of new schools and units for handicapped children were mentioned as matters of priority.

The objectives for Technical Education and Vocational Training were to improve the existing ones and to design now training programmes relevant to the needs of rural, industrial and commercial development, to increase the supply of teachers in order to accelerate the Zambianisation of staff, so espand the facilities in which investment had already been made, and to establish three new Trades Training Institutes. As regards the University of Zambia (UNZA), the most important objectives were to develop on a federal basis, with ne compaser at Ndola and Solwetti.

Po Continuing Elecation, the most important als was to exponant intensity the work at the National Correspondence College, which was to move to tomaka.

Past and Actual Achievements

Primar / Education

The structure and organization of Primary Education remained on the whole the same from Independence to 1982 (Figure 2).

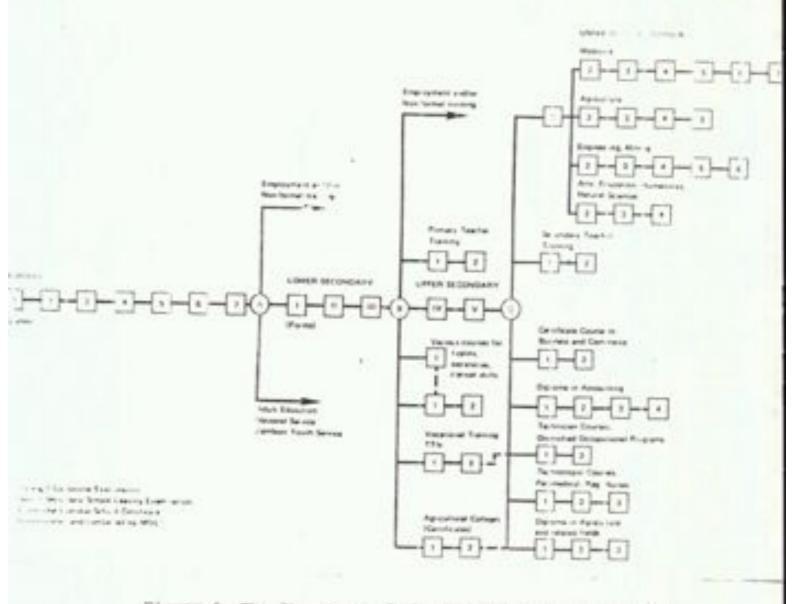
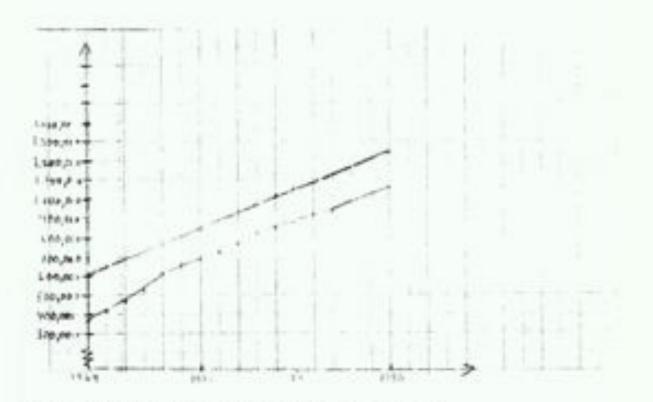
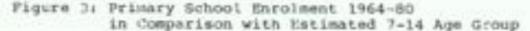


Figure 2: The Structure of the Elucational System, 1982 Zembia The seven-year course was divided into four years of Lower Primary and three years of Upper Primary Courses. As seen from Figure 3, the total Primary School enrolment has been expanding rapidly from 378,000 pupils in 1964 to 1,042,000 in 1980 (Table 23 in Annex I).





Since 1974 the total enrolment each year in the whole Primary School system has been approximately 82-85 per cent of the 7-14 year-olds the same year (Table 24). However, there are differences between the sexes, and approximately 90 per cent of all boys in the age-group 7-14 years have been enrolled in the Primary School system between 1974 and 1980, while less than 80 per cent of the girls in the same age-group took part. No notable changes are found from 1974 to 1980, eccept a slightly lower percentage of boys in 1900 compared to 1974.

Enrolment rates in Grade 1 differ between regions the lowest rate found in Lusaka, the Copperbalt, and the Wessern region. From 1974 to 1980 enrolment in the Western region had dropped more than 10 per cent (Table 26).

From 1974 to 1980, 150 new Primary Schools had been built in the whole country and 3,672 new classes had been created. The school building programme has been spread evenly in the different provinces, except in the Eastern Province, where the amount of schools were the name in 1980 as in 1974. In spite of 19 more schools in 1980 than in 1974 and i very he-vy expansion of classes, Lusaka has only 33 classes per 00,000 inhabitants while all other provinces have more than 40 (Table 27). In 1960, 67 per cent of the 7-year-old population in Lusaks could enter Grade 1. Other provinces with low enrolment rates is Grade 1 are the Copperbelt and the Western region. In all provinces the enrolment rate in Grade 1 was lower in 1980 than during the late 1970s (Table 26). If we look at the overall Primary School enrolment per region, Susaks has a lower percentage in 1980 than in 1974, but also the sparsally populated North-Western region had a much lower percentage on their school-age children in their primary schools in 1980 compared to 1974.

This avirage class sizes are lower in the Western and the North-Western regions than in the other regions. The figures for public per class have been stable between 1974 and 1980, except in Loneta where the highest number of pupils per class ere found. As long as stendard deviations are not available, these sports are weak. From visits to some Lusake schools it has been observed that some classes have more than 40 pupils, and in extrime cases 70 or 80.

The progression rate for the whole country from Grade 4 to Grade 5 has been increasing from a low of 72 per deut in 1972 to 86 per cent in 1980. Boys have a slightly higher tendency to continue than girls. The percentage of girls in Grade 5 has increased from a low of 39 per cent in 1965 to 46 per cent in 1980 (Table 29). We progression rate from Grade 4 to Grade 5 is much higher in the urbanized than in the rural regions (Table 30), which do us back to the advantages given to the urban areas already in 1966 where all children were to continue education to Grade 5, while many schools in the countryside were not upgraded to include Grades 5 to 7.

If the number of pupils in Grade 7 in 1980 is compared to the number of pupils in Grade 1 in 1974 a progression rate of 88 per cent is found. This rate has been increasing since 1973, when a low of 74 per cent was found. It is known that this way of calculating progression rates gives false figures. As repetition in Grade 7 is possible, the figures become higher. None pupils who stopped school some years ago can also return u "I raise the percentages in Grade 7.

In 1970 the proportion of untrained teachers varied between 27 and 15 per cent in different regions. In 1980 all regions had a lower percentage of untrained teachers than four years earlier.

The curriculum of the Primary Schools concentrates on the following areas of learning:

- Cormunication skills including speaking and listening, reading and writing;
- b) Mathematical skills;
- c) Prectical skills and science:
- d) Creative arts;
- e) Physical and health education;

f) Political education and social studies;

g) Spiritual and moral education;

h) Production units.

(Ministry of Education, 1977)

In 1965 English was designated as the medium of instruction from Grade 1. Teachning materials, teaching aids and assessment exercises are all in English in the Primary Schools. Since most Zarbian children do not speak English at home considerable problems arise. If a teacher finds that there are concepts which the children cannot understand, the teacher can explain in one of the seven official Zarbian languages, usually the language dominant in the region. This language is also taught as a subject in the schools.

In 1971 a Curriculum Development Centre was established within the Hinistry of Education, and a new Primary Curriculum has been developed with a content suited to Zambian society. At the curriculum is subject oriented the work has a med at syllabl, contents of the subjects, textbooks, trachers' handbooks, and follow-up material and tests for the different sobbooks, and follow-up material and tests for the different sobbooks. Many of the textbooks are of good quality and they have usually been evaluated in an experimental version. Also on how to teach the specific topic in each lesson. They can be useful, especially for less experienced teachers.

In 1982 curriculum committees, one for each subject, have been working. Such a committee has representatives of the inspectors, the subject specialists from the University of Zambia, the teacher trainers, the teachers' union, the research courcil, and the Examination Section at the Hinistry of Education and Culture.

During recent years efforts have been made to include sore practical knowledge in the syllabus. However, with curriculum committees designed the way they are, practical knowledge could also be made theoretical. The most impressive work is being done with the assistance of PINIDA where the objective is to establish the teaching of practical subjects both in Primary Schools and in Teacher Training.

Since 1975 progress has been made in the introduction of Production Units. In 1983 almost every school has such a unit. However, only a few units have economic relevance and more cooperation between knowledgeable people in equivalence and the school is needed.

In spite of all the work done in the Curriculum Development Center the most important problem in Zambian Primary Schools is the lack of books and other material. The Kenneth Kaunda Foundation is responsible for the printing of books and material through the National Diugation Company of Zambia (NECZAM) and the distribution through the National Education Distribution Company of Zambia (NEDCO1). Mist schools suffer from the lack of textbooks and teachers' handbooks. The restricted funds avaiable per pupil as seen in Table 9 is one reason why the material produced by the Curriculum Development Center is only to some extent available in the schools.

Very little can be said about the quality of Zambian Primary enucation. The "raw scores" from the Grade 7 examinations are not comparable over time. The increasing proportion of qualified teachers in the system is a positive component. The larp classes, in extreme cases up to 50 and 60, lack of material such as books, notebooks and pencils are negative components. The use of a foreign language as the medium of matruction is another problem which might influence the results.

Special Studiation

Since Independence Zambia has made important progress in the field of Special Education. The number of pupils has risen from 724 in 1972 to 1.169 in 1980. There are 8 small preschools, 14 Special Schools at the primary level, 33 special units for primary and 8 for secondary integrated in ordinary schools, and one college for the teachers of the handicapped (Jonsson, 1981: Table 6.4). A great demand for more Special Education is foreseeable as a result of the National Campaign to Reach Disabled Children carried out in 1992. The policy of the country is to integrate the handicapped children in ordinary schools and to integrate the handicapped children in ordinary schools and to integrate the handicapped children in ordinary schools and to deducation of these children. Teacher training for the blind, deaf physically and mentally handicaped, and remedial education is in progress. The capacity of the College is under-utilized and it is possible that Zambia can in the future offer places for other SADCC countries at the Lusaka College.

Second iry Education

In 1964 Sambia found itself in desparate need of high-level maipower and one of the first steps was to formulate an ambitious programme of Secondary school expansion. In 1965 more than 20 schools were built, geographically scattered in all the provinces. The government's main objectives under the Transitional Development Plan (1965-1966) and the First Nationa Development Plan (1966-1971) were:

- a) that one-third of the local Primary school leavers proceed to Junior Secondary school;
- b) that two-thirds of all Form II leavers should proceed to Senior Secondary;
- c) that the curciculum at the Senior Secondary level should be diversified to some extent without prejudicing the acadenic progress of pupils with the potential for graduate studies or higher professional courses;
- d) that selection for higher education for the University of Sambia and for certain courses should be at the 'O' level or its equivalent;

e) that the efficient of mecondary schools should be improved through the use of better equipment and the increased supply of qualified teachers.

(Nwanakatwe, 1968, p.(1)

The first of these objectives could only be fulfilled up until 1968, after which there has been a decreasing progression rate mainly because of a growing Grade 7 population (Table 33). Still, the total enrolment in all secondary schools has increased from 12,.853 in 1964 to 94,595 in 1980 (Table 32).

For some years during the 1960s it was possible to allow two-thirds of the Form II pupils to continue to Form III. In 1972 the Junior Secondary course became three years, after which the Junior Secondary School Leaving Certificate (J.S.S.)..C) wis issued.

During the decade 1964-74 the number of schools increased from 72 to 113. In 1960 there were 128 secondary schools in the country. The total enrolment of pupils has been somewhere in between the two estimates to neet the manpower needs of the country (cf. Table 32). In 1962, 16 new Junior Secondary Schools are projected with loans from the World Bank, the African Development Bank and other sources. Three self-help Junior Secondary schools were built. The progression cate from Grade 7 to Form I was 18.5.

The number of girls constitute approximately 35 per cent of the Secondary School population. No large differences are found between districts and the percentage has been fairly constant during the 1970s (Table 35). In the selection to Ferm I and IV boys and girls are ranked separately. A certain number of girls are chosen irrespective of their results in the tests. During the last years it has been somewhat easier for girls than boys to enter Secondary education.

The number of pupils per teacher has been varying between 21 and 25 over the whole country. Government schools have a fire more pupils per teacher than the private schools. Differences between provinces are found. Lusaka has less pupils per teacher than other provinces (Table 36).

The number of pupils per class has been increasing a little during the late 1970s in all districts except in Lusaka. For Junior Secondary education there are almost enough traised Zambian teachers, with the exception of agricultural and science teachers. The majority of Upper Secondary teachers are still expatriates. Progress towards the post to Zambian me the teaching staff has been successful for the whole system (Table 37).

Examinations as indicators of quality are difficult to use over time as they only give the deviation from the average score which is set at the same level each year. The higgest problem is the quality of the students aiming for studies in the School of Natural Sciences at the University. There is also a shortage of qualified teachers for the Natural Sciences. buries: the last years the Socondary school curriculs has been d versified by the introduction of four practical subjects, neely industrial arts, home economics, arts/crafts, and commercial subjects. The introduction of these subjects have not here without problems. In spite of more teachers and equipment for this field, priority means to be given to academic subjects in many Secondary schools.

Technical and Vocational "raining

There are 1d institutes for full-time pre-employment technical and volational training programmes. The Department of Technica' Elecation and Vocational Training (DTEVT), responsible for this kind of elucation, his not been able to actieve the goals set by the hird National Development Plan. Nowever, the Sambiumissterio of staff has been actieved to a high extent in the Tride Training Institutes and at the Vocational Teacher Training College (TVTC) at Loanshya. The total amount of students in Technical and Vocational Education programmes decreased during 1979 and 1980 after a rise in 1978 (Table 38). No new Tride Training Institutes have been established. Most of the problems mentioned b, the SUBA-mission in September 1979 are still prevailing (SIDA, 1979).

Shortage of equipm at technical materials, inadequate allocations for maintenance and repair of buildings, lack of staff housing, continue, pushing up of entry requirements, and students with unsatisfactory qualifications in technical subjects and lack of practical skills are still mentioned as the main problems.

As it is unclear where the graduates from TVTC at Luanshya are going after graduation, a follow-up study of the graduates is recommended.

Teacher Training

As seen from Table 40 there has been an increasing graduation of teachers from the 10 Primary Teacher Training Colleges during the last decade. The need of 5,000 new Primary School Teachers for the period 1979-83 in the schools will be achieved without the construction of a new teacher training college. In 1979-80, 3.368 Primary School Teachers graduated.

Table 41 shows clearly that the graduation programme of Secondary School Teachers has been successful. The increasing output of graduates from teacher training institutions for Secondary School (especially UNZA and Nkrusa) means that the country is self-sufficient with trained teachers for Junior Secondary education. However, there is still a need of teachers for Upper Secondary School where the sajority of the teachers are still expatriates. Graduated Sambian teachers for this level still leave teaching for other professions. Plans are now underway to upgrade Junior Secondary school teachers for the Senior Secondary level.

University Education

The growth of the University of Sambia has continued during the 1971s. From the start in 1965 with 312 students, the university had 1.231 full-time students in 1970 and 3.425 in 1980 (Table 19), and the number of diplomas has been rising considerably during the late 1970s. A new school of teterinary Medicine, with an intake of 36 students, is being planned and the priorities are now to increase the intake of students in the Schools of Engineering, Medicine, and Mines, while a decrease of the intake in Numanities and Social Sciences is being planned. The Ndola Campus and the Luanshys Technical and Vocational Teachers' College have been attached to the University.

The new Ministry of Higher Education is now responsible for ther University of Zambia (UNEA), the Department of Technical Education and Vocational Training, the National Council for Scientific Research, the Teacher Training Colleges, the College for the Teachers of the Handicapped, the National Commission for UNESCO and the Kenneth Kaunda Foundation. THE COSTS OF EDUCATION

Pibli Expenditire

F us official statistics as summarized in Tables 5. 6. 1 and H of the Statistical Annex a few points stand cut.

From the sub-division into functions of the education system it will first be noted that the largest shifts in shares of copital expenditure have occurred from Technical Education and UNTA to "Other Administration", making the latter the only function that has increased its capital expenditures in current prices. This is an extraordinary outstanding tendency. The shares of functions of education capital expenditure are its capital expenditure are its capital expenditure are

We arive at the conclusion that rising recurrent expenditures on education cannot be explained in terms of capital expension of the producing functions of the education system during the 1970s. This conclusion will be further justified in the discussion of the composition of recurrent costs below.

Turning to recurrent expenditure by function it will be noted that "Other administration" has lost shares together with Technical Education, while UNZA is the major share winner. An a whole, however, we shifts are marginal as compared to the shifts of capita' expenditures. Shares of recurrent expenditure are illustrated in Table 7.

The "Cirrent costs" as accounted for in official statistics are, of course, arrived at from the government hudget. Recurrent costs per student/pupil are consequently derived from budget and enrolment figures. From Table 8 it will be seen that the cost per student at UNZA was about 94 times larger than the cost per pupil in Primary education. In 1971 the corresponding figure was about 70 times larger. The relations between cost per student/pupil over the 1970s are illustrated in Table 8.

It follows from what has been noted above, that there figures on "costs" only reflect budgetary expenditures. Thus, they reflect a mixture of costs and political allocations of resources. The falling "costs" of primary schools per student beer witness, not of more efficient production, but of the accumulation of needs not satisfied by the system.

One way of obtaining a rough idea of the extent of this falling internal efficiency of the school system is to estimate "real rosts" and compare them to actual allocations of expenditure. Using figures from the Development Research and Planning thit (Ministry of General Elucation and Culture, November 1982) we are able to get an idea of the accumulated deficit between "real needs" and actual expenditure.

The estimated costs of part of the recurrent expenditure (boarding expendes, student requisites and service charges) have been arrived at from information supplied by experts on nutrition and from current prices of basic requisites. With the help of reasonable assumptions as to price changes over time, the results shown in Table I have been produced.

In spite of the wide range of uncertainty connected to the estimates shown in Table I, the resulting deficits are a valid indication of the degree of imposed fall of internal efficiency of education in the three functions.

A note of caution is necessary as to the possible explanations of differences of the absolute size of deficits between the three functions. As the cost estimates consist of boarding expenses, student requisites and service charges, it will be understood that in Primary Education practically all the deficit falls on non-boarding expenses. In Secondary Education and Teacher Training boarding expenses weigh heavily in the total. Of course, this also means that there is an absolute limit to the possible deficits in secondary education and Teacher Training.

Table I: ESTIMATED PARTIAL REAL COSTS OF RECURREN' EXCENDITURE 1979-1982

	101000	Primary	Secondary	Teacher Training
1979	Cost	27.13	183.51	320.76
	Allocation	3.66	76.09	205.08
	Deficit	23.47	107.42	114.68
1980	Cost	30.17	206.06	355.40
	Allocation	3.67	74.19	215.76
	Deficit	26.50	131.87	139.64
1981	Cost	33.51	224.21	394.00
	Allication	2.56	72.44	202.39
	Deficit	30.95	151.77	193.61
1982	Cost	37.21	248.54	440.00
	Allocation	3.28	33.01	281.84
	Deficit	33.93	165.53	150.16

[K per student/pupil 1979 prices]

Source: Calculated from figures of the Planning Unit, Ministry of General Education and Culture, 1982.

Looking insteal at the grand totals, the deficit of Primary schools over the four years would amount to more than § 121 million. For Secondary schools and Teacher Training, the accurulated deficits amount to almost K 12 million and less than K 3 million, respectively. These are impressive figures.

In attempting to arrive at a total deficit it would be necessary to also estimate costs of other functions, such as maintenance, furniture and equipment, etc. Such figures not being available, we turn to a division of recurrent expenditure of Primary schools (excluding the expenditures of the Headquarters and Regional Headquarters) in 1971-1976. (SINA Mission 1978, p.1. Annex 7). On an average over the six years we find the following proportions (Table II):

TADIS III AVERAGE PROPORTIONS OF RECURRENT EXPENDITURE OF PRI-MARY SCHOOLS 1971-76.

The second second contract and particular	(8)
Personal Empluments Administration Costs Students' Consumables Furniture and Equipment Maintenance Bounding Expenses	86.63 3.87 8.25 0.1 7.63 0.66

Source) Calculated from SIDA Mission 1978, Anne: 7:1.

As will be seen from the above Table, the derived deficits of 1979-8! only touch upon slightly over 10% of the total recurrent expenditure.

Furthermore, it must be pointed out that personnel costs are the overwhelmingly cominating factor in recurrent expenditures.

Given that the number of teachers is not determined by capital investment in physical expansion of the school system, it cannot be concluded that such investment provoke a lagged increase of recurrent expenditure. On the other hand, such capital investments which aim at increasing the number of teachers will have the direct effect of increasing recurrent costs of the school system.

Private Expenditures on Education

Such an all countries with free aducation, costs of schooling in Zambia are incurred also by the parents. This implies differences in costs between parents of different social strata as well as differences in quality between schools.

Private contribution may take the form of cash payments or the supply of materials and labour. From the outset of the expansion of the Zambian school system, self-help has played an important role. Although it has not been possible to estimate the amounts of such contributions it seems possible that the cash payments dominate today. This would tend to further underline the above mentioned tendencies towards social inequality.

It is invident from the figures on "real cost deficits" given above, that many schools are functioning only thanks to private contribution to recurrent costs. Our figures seem to indicate that the 1970s may have brought a transfer of expenditure from the public budget to the parents. In spite of the importance of such a development there are no ways at present to estimate the extent of such transfers. Consequently, the effects on rural-urban or income differences cannot be evaluates.

From informal interviews and discussion with officials, very

rough indicators in the form of examples may be given for the individual costs of having one pupil in school (Frimery and Secondary). Such costs do not include collective contributions.

One Lusaka taxi driver estimated his annual cost for one child in secondary school at K 15 for school fund, K 24 for uniform and K 50 for stationery. This amounts to K 89 and excludes PTA, shoes, transportation, and lunch food. Another wage-employed Lusaka parent (a female cleaner) judged her cost for one child in primary school to be 1 K for school fund, K 25 for uniform, K 17 for shoes, about K 70 for food and K 10 for stationery (no transportation costs to the compound school). Her estimate totals K 104 and excludes PTA fees.

The point about these examples from Lusaka is that nest parents living in Lusaka would be able to afford these costs, whereas many parents in rural areas would not.

To illustrate urban differences it is worthwhile to quote the costs of a parent having a son in one of most prestigious schools (Woodlands) in Lusaka. The example is from a state official on salary level GPS 7 (around X 67D per month). For the first year his estimated costs are: school uniform K 30, sports kit K 15, PTA K 5, shows K 6, transport K 375, school fund K 1, fool K 18, stationery and exercise books K 6.30 and briefcame K 15. Allowing for the fact that some items may have a longer duration than one year, the annual costs for this boy would amount to around K 450.

The Costs of the Basic Education Reform

Although aggregate figures of future education costs (cf. below p.) slready serve to indicate the squeeze between increasing needs for funds and restrictions imposed by necessity, it has some interest to investigate the costs of implementing the Blucational Reform.

One method of doing this would be to take the original cost estimate from the reform document of 1977 as regards the Basic Education part of the reform. This means that we restrict the costs to a) the physical expansion to allow all 7-year-old children to start school and, b) to allow all of them to continue through to Grade 9.

Furthermore, by assuming the same relations of total government budget to GDP, of education budget to sovernment budget, and of capital budget to recurrent budget as we have observed in the 1970s, it is possible to estimate the future elucation budget with the help of the alternative GDP projections.

It sic Data Projections 1980-1990

If order to produce some reasonable bases for our discussion of future developments of the education sector in Zambia, this section will present briefly the results of calculated projections of basic data.

Population

Zambia's population growth in the 1980s can be estimated by at least two methods. One would be to use the projection based on the 1969 census and leading up to 1999. These estimates have been used in this report to project the future number of people aged 7-14 years. The results are summarized in Table 19 of the Statistical Annex. The total population .989 is projected to be 7.5 million using fertility assumption 2 of the CBO (Slowly Declining Pertility).

Anothe: method would be to project future population on the basis of the 1980 census by applying the growth rate of the 1970s, i.e. 3.1 %. As can be seen from Table 17 of the Statistical Annex this method leads to the same result as for '969: '.5 million. For the year 1990 the total population of Janhia is projected to be 7.7 million. On the assumption of inchanged migration patterns as compared to the 1970s, this growth would imply th ' more than 50% of Zambia's inhabitants will live in urban areas, making more than 3.8 million people

Seven to Fourteen Year-Olds

It has been shown that in 1980 46.6% of the population were 14 years old or younger. By applying demographic methods to the population projections as presented in Table 18 of Annex I, ago groups have been split in order to arrive at a projection of the number of 7-14 year-olds, i.e. the relevant ages for the present Primary school. The results are illustrated in Table 19.

The percentage of the population legible for primary school was in 1980 19.13 and will rise to 19.98% in 1994.

Gross Lomestic Product

The future rate of growth of GDP is anybody's guess. With wery dim prospects of swift improvements, the continuing decline of all economic activities in the first two years of the decade seem to confirm that growth rates will stay low for some time to comm. In order to provide some examples of what alternative growth rates may imply for the education sector (at given population growth) a projection of three alternatiwer has been made. Alternative I is based on the assumption of the same average growth rate as the 1970s; alternative II is based on the better first half of the 1970s; alternative II average population growth. In spite of the risk of being prover wrong by history - so such better for Nambia - we judge alternative III to be an optimistic alternative. The resulting future GDP-growth in constant 1970 prices is illustrated in Table 20 of the Statistical Annex.

As a result of the combined effects of population growth and economic growth, the 1980 GDP per capita (at constant 1970 prices) of K 232 will fall to K 190 in case I and to K 225 in case II. Only in case III will there be a moderate mounting of GDP per head to K 251 (an average annual growth of less than 0.8%).

To conclude, we refer to the following section where projections of educational data will be matched with those above in order to arrive at the future chances of meeting educational needs. Projections of Educational Costs

The Clists of Expension

In this section a testative projection of the major factors influencing the education budget of the 1980s is made.

From Table 19 in the Statistical Annes it is possible to obtain one of the major components, i.e. the number of children eligible for Grades 1.7 of Rasic Education. These numbers have to be combined with the number of 15-19 year-olds to arrive at figures for what is presently called Secondary achool. In the following Table (Table III) the size of this latter group is given.

Table III: HUMBER OF 15-19 YEAR-DLDS 1980-1994 (00.)

1 100	1982	1984	1989	1994
5.95	631	6".0	7/13	973

Source: CSO, n.y. The estimate uses fertility assumption No.2 (slow1/ decling fertility)

The group of 7-14 year-olds is estimated to grow at an average annual rate of 3.41% during the 1980s. For the 15-19 year-olds the corresponding figure is 3.58%. It can be concluted that at given costs for 1980 the annual rate of growth of GDP must be between 3.0% and 3.5% in order to avoid Bisic Education taking an increasing share of GDP in the coming years.

This conclusion holds only if the system continues to have the stee structure as in the past, including the continuous deterretation of efficiency due to accumulating deficits of budgets as compared to real costs.

In order to arrive at a rough but indicative estimate of the global educational costs in the 1980s, allowing for some improvements in terms of acceptance rates according to the objeci was of the Ministry, one has to introduce a number of simp-11 ying assumptions. First of all, for the purpose of simplification, it will be assumed that other functions than Basic Education and Secondary School will not increase their size of costs in terms of 1980 constant prices. All calculations will be made in 1980 prices. Second, it will be assumed that 100% of the children eligible for Grade 1 will start schooling and continue up to and including Grade 9. This assumption is made in order to obtain an estimate of the implications of an implementation of the quantitative aspect of the Basic Education Reform. Third, the rate of pupils which costinue from Grade 9 to Grade 10 is assumed to be 10%, i.e remain unchanged from the present situation. Finally, a simplifying assumption is made as to the split of age-groups among the 15-19 year-olds: they are assumed to be evenly distributed over the respective years.

is build on continued budgetary negligence of supplies and militinance.

However, it gives an indication of the sharp increase of education budgets as a result of the quantitative increase only: instead of iveraging around 5% of GDP as in the 1970s, the education budget makes up 5.3% in the most favourable case in 1994, and as much as 7.7%% in the worst case. A share of 6% implies an increase of the budget of 20% from its earlier average size. The share of education in the total state budget would increase from just above 12% to more than 15%.

From this simple estimate we conclude that physical expansion of Grales 1-9 according to the objectives would affect only repurrent expenditures to an extent that the project seems in conclude to realize. To this should be added increases in the capital budget and a return to normal expenditures for supply of traching materials, books, maintenance, etc.

Taking these cost increases into consideration, it is evident that expansion of education functions, where the cost per pupil/student is higher than in Basic Education, will have to be car-fully balanced egainst the effect of cuts on Basic Edusation.

The immediate danger is a continued increase in the absolute number of illiterate sung people, due to the economic impossibility of expanding Basic Education.

Objectives and Savings

Due to the economic constraints it is our opinion that some objectives will necessarily have to be abandoned during the 1900s. For the purpose of illustration only, some savings on expenditurts, which would follow upon changes of objectives, are presented in the form of rough estimates from the above calculations.

Fi st, in case the Junior Secondary School continues to enroll 20% only of pupils from Grade 7, the expenditures would fall by K 61 million in 1984, K 71 million in 1989 and K 88 million in 1994. This would reduce education's share of GDP I from 6.12, 0.86 and 7.78 to 4.23, 4.62 and 5.10 per cent respectirely. In the case of GDP III, the share of GDP would become less than 4% in all years. Secondly, in case Pirst Grade encolment was put at 80% instead of 100%, expenditures would decline by approximately K 32 million, K 36 million and K 44 million in the years of 1984, 1939 and 1994 respectively. A major share of these reductions stem from the effects on the number of pupils in Secondary school of reductions in Primary school. As is understood from these figures, the major cost builden of the educational objectives for expansion lies on the expansion of the present Secondary School involment. With the help of these assumptions the following numbers of pupils are estimated to be enrolled (Table IV):

TABLE IV: EST(MATED NUMBER OF PUPILS 1984-1994 ('000)

	1984	(989	1994
Grades 1-7 Grades H-9	1259 268	1499 313	1760 389
Grades 10-12	40	-47	58

Source: Calculated.

To estimate the future costs of an education system comprising the above number of pupils a few simplifications have been used. First, the total costs for other functions than Grades 1-12 have been taken to remain as they were in 1930 according to Tables 6 and 7 of the Statistical Annex. Secon1, the capital costs and the recurrent cost per pupil from 1980 have been taken as given for the 1980s. This implies a continued degradation of the quality of the system because of the unler-budgeting that took place in 1980.

By using these assumptions the estimation will be the reflection of the simple growth of the number of jupils in the reformed system as compared to the system up to now.

For purposes of comparison a GDP estimate at constant 1980 prices has been made with the same growth assumptions that were used above (cf. Table 20), i.e. 0.7%, 2.4% and 3.5% respectively.

All of the above mentioned assumptions and simplifications have been used to calculate the estimates of Table V below. The purpose of the estimates is not to help planners, but only to serve as a very rough indication of what the targeted expansion plans imply in terms of money.

TABLE V: ESTIMATED TOTA:, EDUCATION BUDGET AND GOP AT 1980 CONSTANT PRICES, (K million) HUDGET SHARE OF GDP (%) (Selected Years)

	Education Budget	100.555	1.18.1			cus. 111	
1984 1989 1994	191 219 256	3070 3179	6.27	3283 3696 4162	5.82 5.9 5.15	3427 4070	5.57 5.36 5.30

Source: Calculated in accordance with assumptions presented in the text above.

It must immediately be pointed out that the estimate thus calculated completely neglects the capital investment needed to expand the physical capacity of the system. Furthermore, it FUTURE PRIORITIES AND CONSTRAINTS IN EDUCATIONAL DEVELOPMENT

Priorities and the Severe Financial Constraints

In terms of allocation of external resources Zambia will probably retain its present priorities for some time to come. This means that the scarce resources available for capital investment will be channelled first of all into agriculture and mining. To achieve self-sufficiency in food supply is a national top priority and to increase foreign exchange earnings again is a necessity for the proper functioning of other sectors.

When it comes to recurrant expenditure the government so fir has tried to would decreasing the number of wage-employed people. Consequently, labour intensive service productions such as health and education have retained their shares of recurrent expenditures.

Within education the constant lack of resources over a number of years has created a situation where, in the final analysis, priority rankings of needs is no longer very meaningful. With capital budgets shrinking and recurrent budgets swallowed up by the salaries of the permanent teaching and other staff, the discussion of priorities has been limited to a question of dialogue with donors within the given framework of their respective preferences.

Our attempt to look into the future ends with the pesimistic conclusion that the present situation will remain during the 1980s. Due to economic pressure, Zambia's dependence on foreign assistance for education will increase, with subsequent difficulties for the country to set its own priorities.

Had there been an abundance of resources to allocate, on the other hand, there is no doubt that first priority would be given to the implementation of the Basic Education Reform. This means, above all, the following points:

I. External efficiency (physical expansion):

- a) expansion of the Primary school system so as to allow for all seven-year old children to ester the First Grade, and
- b) expansion of what are to be Grades 8 and 9 so as to allow for all pupils in the Seventh trade to continue to Grades # and 9.

II. Internal officiency (better educational services):

- maintenance and rehabilitation of the existing stock of Primary and Secondary schools, including furniture and equipment, and
- b) supply of student consumables and textbooks in (Primary and Secondary) Basic Education Schools.

In Leisu of physical expansion the above points may be further

1. Primary school expansion in urban areas;

2. Junior Secondary school expansion in rural areas.

As regards the internal efficiency, the urban-riral distinction is less evident in terms of Zambian priorities. The need exists all over the country. The supply of student consumbles ought possibly to be concentrated to roral areas.

THE NEED FOR ASSISTANCE.

The broad gap between Zambian educational and financial needs and the domestic availability of financial resources, has been a theme of the preceeding pages of this report. In order to arrive at conclusions as to strategic areas for Swedish support to the sector, we shall first look into the activities of other domors.

Other Domors' Activities in the Education Sector 1980-1982

According to the 1980 survey of donor activities made by the UNDP on the basis of replies from the respective donors, the education sector in Zambia received a total of US \$17,777,000 in the form of technical cooperation. No major commodity assistance was reported, while capital assistance resulted in distursements of US \$4,200,000. Future capital assistance was agreed for US \$25,000,000. All the reported capital assistance resulted from IBRD loans.

Education received 16.3% of the grand total of assistance to Zambia. The technical assistance was dominated by bilateral sources, the major domors being (apart from Sweder which was the second largest domor country) the UK, Jepan and Denmark.

This type of assistance was completely dominated by the supply of teachers and other personnel.

Details of the above brief summary of the UNDP report are given in Tables 10, 11, 12, 13, and 14 of the Statistical Annex. Further details of programmes are given in the UNDP report.

For 1982 contributions to the capital budget of the Ministry of Education and Culture are given in Table 10 of the Statistical Annex. It can be seen that very few donors are reported in the capital budget and that their total financing idds up to 57% of the total budget.

From 1983 and onwards some major loans have been spread upon for Secondary school expansion. The IBND loan of US 325 million will be complemented by one ADB loan of US 5 0 million and possibly one loan from Arab sources of approximately US \$6 million for the same purpose.

Alternative Strategic Areas for Swedish Support

Ongoing projects and programmes supported by SIDA have recently been evaluated in their cam right and will not be discussed here. unless profound changes were found to be necessary. The present discussion will focus rather on areas having high priority in Zambia's policy. One immediate consequence is that such education that fails within the Basic Education programme will dominate among the possible alternative areas for new and/or increased support. In this section alternative ves are presented. It is followed by a section where an The alternatives may be logically sub-divided into two principal categories; one is support to Basic Education and other programmes within existing production capacity, the other is support to the expansion of the physical capacity of the systre.

1. Alternative Support Areas within Present Capacity

1:1 Support to a programme of rehabilitation and maintenance of Primary school buildings.

The study his shown that there is an accumulated used of maintenance of Primary schools all over the country. Some schools need a profound rehabilitation effort. This problem is fural and grown.

Such a programme requires further and special study in order to play its implementation and organization. Special care should be taken to base rehabilitation and maintenance on locally available materials and skills, as well as possible combinations with self-help schemes. No cost estimate in available at this poit...

1:3 Support to the production and supply of student consumables and teaching materials.

Also with regard to the supply of student consumables (pencils, paper, exercise-books, chalk, teachers' handbooks and textbooks), the study has found the Basic Education situation in general to be one of almost total lack of basic necessitive. This is predominantly a rural problem.

Such support would also require some further study as to the possibilities of initiating local production of education materials based on locally available inputs to as large an extent as possible. A study would have to investigate the chances of combining existing local firms with Swedish import-support (paper), support to education, and possibly "conperation with Swedish firms. Special care should be taken as as to eliminate red tape and detailed regulations which could prevent or unduly raise the costs of such a project. The construction of the project sust be designed so as to encourage the growth of a "development block" in the interrelations of firms, education and Swedish support.

I:3 Support to the production and supply of furniture and other durable equipment in Basic Education Schools. Such support is a global problem valid for rural as well as urban schools.

This is basically a continuation of ongoing Swedish support, but as in alternative 1:2 above, some efforts ought to be made so as to investigate the possibilities of replacing the imported stell input by, for example, local wood input. Also, as in alternative I:2, there are good chances that this might be turned into a profitable local production employing and training skilled workers [cf. the study agreed upon in the Agreed Minuter, 1982]. As with the production and supply of comsumables, integration into existing production facilities and distribution outlets must be considered, while avoiding regulations and red tape. Possibly programmes such as 2 and 3 should be organized by independent bodies with profit responsibility.

 Alternative Support Areas Involving Increase of Physical Capacity

Alternatives to increase the capacity of the Basic Education School system are basically a question of which of several bottle-necks one wants to assist in eliginating.

II:1 Increase the capacity to accept pupils into Grade 1.

Such a programme would essentially consist of financing additional classrooms in existing Primary Schools whenever possible, on the one hand, and additional schools on the other.

The study shows that this bottle-neck is primarily an urban problem and it is probable that it will be aggrevated in the years to come.

It has not been found that new capital investment in schools have any considerable direct effects on recurrent expenditures, which are completely dominated by salaries.

There may be some rural areas where a few new primary schools would be a relevant support. Tentatively, we propose that such areas could be found in Western and Northern provinces.

II:2 Increase the numbers of Grade 4 leavers who continue in Grade 5.

The problem of high rates of school leavers between Grades 4 and 5 is basically rural. Unfortunately, it cannot be solved simply by increasing the number of schools as the bottle-neck lies elsewhere.

The study appears to indicate a few particular reasons for drop-out rates: girls are not encouraged to continue; distances increase when pupils move from fourth to fifth grade; private costs may increase due to increased distance and age. Tentatively it may be concluded that this problem is hardly solved by support to education, but rather in the long run by rural and community development in general.

II:3 Increase the capacity of the system to supply Grades if and 9 to all Grade 7 Leavers.

This is a global rural/urban bottle-meck at the core of the Basic Education Reform. The solution in the expansion of what is presently called Junior Secondary school.

III.Other Alternative Support Areas

IIIrl Support to measures simed at reducing the costs of Basic Education.

This type of support could very woll include expanded support

to Production Units and to measures of integrating these with integrated rural development programmis.

The study indicates, however, that the Production Usit progresume is presently not capable of assuming more support affectively.

One possible measure would be to increase support to planning and massgement so as to further raise the capacity of the Ministry to engage in a cost reducation programme. Experience from boost (dministration in Sweden may possibly be of some value.

Hence, as measures to reduce the costs of Basic Education, we propose first of all isproved management and the initiation of a proper cost-reduction programme.

Nerondly, a number of measures to increase internal efficiency through innovations in the Zambian school system might be investigated. Such innovations may face considerable resistance, and some may be impossible to implement in Zambia. Examples from other countries are the abolition of repetition grades, decreased teacher/pupil ratio through multi-grade classes, schooling every second day only in rural areas, etc. Examples particular to Zambia would be the abolition of teacher housing services and the implementation of a compulacry number of service years after graduation of teachers to lower teacher drop-out rists, as well as to increase Zambianisation of Secondary school teachers.

As will be understood from the above, there is a need for a Zarbian study of these sensitive areas. Support could be given to such studies and implementation of their recommendations.

Evoluation of Support Areas

To evaluate the alternative support areas certain criteria have been applied along with the findings of this study. The "inst writerion is made up of the objectives and priorities of the Zashian government as expressed by the relevant ministries and interpreted by the teas. The second criterion is the Swedish policy for international cooperation in general, amended by the specific priorities given in Zambia. Whenever these two criterie conflict, a balance has been struck between them, considering other factors such as costs, pust experience, estimates of implementation plans and the like.

Some findings of the study are particularly relevant for the evoluation according to the terms of reference. First of all there is the aspect of creating or not creating what is called "aid-dependence". The discussion on this issue takes place not only in Zambia, but also in Sweden. The study has shown that the number one reason for discrepancies between the national objectives in the field of education and actual performance over the last decade is the financial constraint imposed on the state budget. It has also been shown that this will remain so for a long time to come.

Ais-dependence then becomes a very delicat+ issue: Frimary

education has been aid-dependent for at least 5-7 years now. On the one hand, an increasing share of the necessary recurrent expenditure has been transforred to the private sector. i.e. it has been paid by the parents of the school-children in the form of so-called self-help. Strictly speaking this amounts to a massive transfer of the financial burden of education from the state to the private sector. This creates a tendency towards increasing social inequality. It could be seen as one form of heavy aid dependence of the recurrent hudget. The aid that comes from the parents has so far not been sufficient to keep up standards in the Primary schools. As regards the capital budget aid dependence has also been established for a long time: in 1930 almost 60% of the carital budget of education was financed by foreign donors or Icans. No physical expansion of the Frimary school is possible without foreign aid of aid from parents.

In our view the question of aid dependence in the sector of education should be posed in another way: is it better to allow the national objective of physical expansion of Basic Education be dependent on aid from parents only than to combine self-help with foreign aid? In any case, the findings of this study tend to indicate that without aid the targets of expansion of classrooms will not be obtained within the next seven years.

The next finding of significant relevance for the evaluation of alternative support areas also concerns the construction of buildings and other capital investments in education. The study shows that the major factor determining the size of the recurrent budget is the number of teachers in Primary education. The matter of teacher costs is of great importance in all functions but is, of course, less in these forms of education where boarding costs are incurred. The building of Primary schools has in itself only a slight influence on recurrent budgets. Consequently, programmes aimed at increasing the output of teachers are the ones which have the most serious implications for future recurrent budgets.

The third finding of particular relevance regarding the policy of Sweden concerns the rural/urban dichotomy. While the emphasis on support to rural areas may not be an objective in itself, other Swedish policies tend to concentrate assistance to riral areas in many countries. Such policies may relate to the fundamental ideas of how development may be achieved, to the wish to reach target groups such as the poorest or most neglected people, or even by linked to the overriding objectives of social equality. This study has found that in Zambia, due to its high degree and rate of urbanization, sume particular problems related to the majority of the people living in urban areas are specific or more aggrevated in urban areas than in rural areas. Such is the case, for example, with the admission to the first grade of Husic Education, where the rate of rejection is much higher in urban than in rural areas. ("Urban" is here taken to include regional growth points, which may in themselves still be very remote from large towns but which are amerging as centers).

The above findings have been strictly demonstrated in tables and figures in this report. Before proceeding to the specific conclusions and recommendations based on our evaluation criter s and findings, we will report two further findings, which are less strictly demonstrated, while not being of less importance.

The study has shown, from impressions during discussions and atsessment of past experiences, that isolated or one-time programmes in the education sector as regards supply of equipment or consumables, have a tendency to be non-efficient. This is parily due to the limited amount of such action in relation to the accumulated meeds and partly to the resulting difficultion of planning and administering the use of the support. Furthermore, it seems that such support is only vigual; related to economic development or to the increase of is free limits. To economic development or to the increase of is free point to other areas, respectively, it seems necessary to concentrate on support to long-term programmes creating linkages to domistic production and distribution.

With the above criterin and findings in mind, it is possible to proceed to an evaluation of the presented alternative support areas.

The first point to astablish is that existing relations letween capital investment and resulting recurrent costs do not constitute an obscille to support efforts to increase the physical capacity of the Basic Education system. The only type of support that must be avoided, in case increases of recurrent costs have to be completely avoided, is support which increases the quantitative output of teachers. Support to teacher training must then be geared to the raising of qualitative output only. It is, of course, difficult to imagine an expansion of the school system beyond a certain point without an increase in the number of teachers, but for Primary schools the bottle-neck lies elsewhere.

Consequently, there is no evident reason for not supporting the top ranked priority of increasing the capacity of the system to enrol 7-year-old children. The same conclusion applies to the expansion of Grades 8 and 9. The need for such expansion depends, however, on the capacity of the system to overcome the bottle-neck between the 4th and the 5th Grades. The study has found no evident way of assisting efforts to overcome the latter.

The government of Sambia is presently giving priority to additional classrooms in existing schools as the best means of expanding the Basic Education system. As this is within the boundaries of what PTA's can achieve, a major part of this effort may be effectuated by the parents themselves. Thus, the advantages of foreign support have to be weighed against the berefits of social mobilization in each community. This is why support towards this aim needs to be carefully studied and integrated into coherent programmes in order to have a good chance of successful implementation.

While the addition of more classrooms in existing schools would be primarily an urban activity, the rehabilitation and

maintenance of existing schools in rural areas is also needed. Such a programme ought to be studied and implemented as an integral part of the expansion programme. Such is the case also with the addition of classrooms to increase the capacity of Grades 8 and 9. Although this need is dependent on the success of the measures to eliminate the Grade 4 to Grade 5 bottle-meck, it should be integrated into one single plan for the expansion of the system.

With regard to the supply of student consumables, teaching materials, furniture and equipment within the existing capacity, the problems are much the same for all types of products. One-shot deliveries of a number of items do not appear to perve any other purpose than short-term relief for a few schools. It assumes the character of emergency relief assistance. What is really needed is support in such a form as to build up a long-term capacity of supplies, based on domestic inputs as far as possible. This means that the supply of soney and commodities from Sweden must be integrated into a local system of production linked to industry, agriculture, distribution and the production units of the school system itself.

Finally, cost reduction is a very sensitive area, as many of the proposals that might be found from the examples of other countries may be out of place in Zambia. Furthermore, cost reduction in itself becomes out of place in a system of Basic Education where expenditure reduction has been going on for a long time due to economic nocessity. Rather the aim must be to reduce costs of implementing the supported programmes. The major method for this should be to support planning and management within the Ministy of General Education and Culture.

A few of the above points have negative implications for some ongoing programmes. Teacher housing is such a programme: to support teacher housing is one way of keeping the costs of the system high. In view of the declared aims of the new school system, the team finds no justification for the provision of teacher housing by scarce foreign assistance resources. CAPILISIONS AND RECOMMENDATIONS

 The study has indicated that the most important function in Zambian education, in terms of accumulated as well as policy priorities, is Basic Education.

The teas recommends that Swedish support be concentrated and if possible increased - to Basic Education in Zasbia.

2. The study has shown that the propertion of seven-year-olds who cannot obtain places in Basic Education has been increasing over the last few years. Projections indicate that this serious tendency will be appravated in the years to come unless the physical capacity of the system to accept neven-year-olds is increased. It has been shown that one consequence of an increasing rejection rate is a rising absolute number of illiterate people.

The team recommends that within Basic Education priority should be given to support the efforts to abolish the Grade 1 physical bothe-meck of the system.

3. The study has shown that the Grade 1 bottle-neck is first of all a problem for Lusaka and other urban agglomerations (including smaller growth points which have not been identified in this study). It is also a serious problem in the Western Provid W. For urban areas the reasons are easy to identify while for the Western Province the causes are less maxify identifiable. Pastoral population pasterns may be one of several causes.

The team recommands that support according to points 1 and 2 be directed towards the addition of classrooms in existing schools in urban areas, i.e. first of all Lusaks, but also smaller local growth points which can be identified. The team further recommends more profound studies of the causes of low enrolment rates in Grade 1 in the Western Province and other particular rural areas still to be identified. Such a programme ought to include also the rehabilitation and maintenance of existing classrooms and must be coordinated with the self-help schemes.

The study has shown that the second major capacity 4. bottle-neck of the Basic Education system - the passage between Grades 4 and 5 - is another serious problem. Contrary to the Grade 1 issue, this problem is predominantly or totally a rural situation. The high drop-cut rate after Grade 4 is a cause of great anxiety, as research indicates that four years of Primary school is not sufficient for the pupils to retain literacy and numerany. The causes of this problem, howaver, are not to be found in overall lacking physical capacity, but seem rather to stem from administrative difficulties resulting in low utilization of the existing number of classrooms. Measures of planning and administration could probably resolve the problem. The introduction of multi-grade classrooms is one possible way, for example.

The team recommends that support to efforts to abolish the

Grade 4 to 5 bottle-neck should be preceded by further studies of alternative solutions to this serious rural problem. Otherwise the support may be directed towards unnecessarily costly solutions. The support to this end may well be one of the tasks of the reinforced Planning Unit of the Ministry of General Education and Culture.

5. As regards the extension of Basic Education from Grade 7 to Grade 9, this is evidently an objective which depends partly on the success of the expansion of the lower grades and partly on future developments presently unknown. In terms of its effects on literacy it cannot be compared to lower grades.

The team recormends that for the time being this problem is given low priority for SIDA support.

6. As far as support to increased efficiency within the present capabity of the system is concerned, the study indicates that the lack of teachers' handbooks is the most serious setback. (As all needs are far from being met, one has to single out a key factor).

The team recommends that, among possible short-term supply alternatives, priority is given to teachers' handbocks. It is further recommended that a special programme is set up to channel such efforts.

7. The study indicates that the other key area of supply deficiences is exercise-books. As parents in urban areas in general have greater possibilities to help out in buying exercise-books than parents in rural areas have, the problem is predominantly rural.

The team recommends that priority number two amonist possible supplies is given to exercise-books for rural primary schools.

 The study has shown that all needs will not be covered in the years to come even with massive foreign support. One need that is financially unrealistic to try to meet is textbooks for everyone in all subjects.

The team recommends a limited support to the supply of textbooks, and that to begin with such support should he given to efforts to work out cost reductions in the supply of textbooks.

 Among subjects, the priority given to action to Gambian policies is no doubt well justified. The study shows that this direction will be followed at all levels.

The team recommends that the efforts of giving emphasis to science in the education system should be supported, but as far as Swedish assistance is concerned, it should be concentrated to primary schools.

 The study has shown that the programme of practical subjects since 1975 is making progress in the Basic Oducation system, and seems to be well received and used in schools. The team recommends that SIDA starts discussions with FINNIDA to investigate areas of possible cooperation in support to practical subjects.

11. The study has pointed at numerous examples of administrative problems in the sector. The split of the former Ministry of Education and Culture into two Ninistries may create further problems during the transitional period. It may also place primiry education in difficult administrative positions. CDC is, for example, responsible for curriculim development for Primary schools, but is now placed under the Ministry of Higher Education.

The team recommends that the forthcoming support to the administration of the Hinistry of Jeneral Education and Oulture should be care billy followed up from the beginning and that SHM shows willingness to increase such support if necessary. It is further recommended that SICA draws up very clear distinct on lines between the two Ministries as regards Swedish support and its priorities and use.

 The study has not gore very deeply into ongoing programmes with Swelish support outside Basic Education.

The team thus only makes a few recommendations as regards such programmes. Layond that reference is made to the joint annual review of September 1982 (SIDA, 1982). The team has found the support to Special Education to work well and recommen's continued support. As regards the CDC, the team recommen's that future support should be concentrated to teachers' handbooks, science subjects and practical subjects. In view of present priorities and existing teacher capacity, the team finds no justification for support to teacher training except for certain subjects such as practical subjects, primary school science, and production units.

13. Although the study has not included an investigtion made of special organizations, parastatals or business firms related to the production and distribution of education supplies (such as desks, furniture and equipment, student consumables and teaching materials), some observations have been made. There appears to be enough evidence to support the conclusion that ad hoc or one-time deliveries of goods (or support to purchase of goods) serve no other purpose than immediate and short-term relief to those schools which happen to benefit. However, this type of support offers wide opportunities of creating linkages between education and economic development, social mobilization, transfer of knowledge and learning. Such linkages pre-suppose and require, however, ongoing programmes where integration is secured of foreign assistance, foreign firms, and foreign technology with teachers' and parents' activities, lomestic firms and know-how, domestic skills and domeatic input materials. As this type of programme does not exist and the team has not been asked to study the area, it will be necessary to continue to study the matter.

The tear recommends SIDA to support the undertaking of a study with the aim of consolidating the foreseen programme for support to the supply of school input goods, with the final objective of phasing out to a domestically based "development block" within the education industry in Zambia. A similar study, restricted to paper and books, was agreed upon in the Agreed Minutes of the Joint Review of September, 1982.

ANNEXES

I Statistical Annex II verms of Reference III List of Persons Met

ANNEX I

STATISTICAL ANNEX

Table 1:	Selected	Fconomic	Indicators	1970-1989
the second se	the second se	the second se	and the second second second second second	1.2.1.2.1.2.1.2.1.2.1.2.1.2.1.2.1.2.1.2

	251.5	1979	1973	1912	2222	3926	3975	1925	377	2175	1122	1282	1911	1000	
1. ECULATION_INDER													44.0.1	128.01	
Rather of Dekahitants	+000	44251	4,385	4,571	4,475	4,829	4,981	5.100	5,302	5,472	3,643	3,680		2000	
147435 Delbeltes	1	2+3	3+2	- 17	2+3	2+3	2.7	1.1	3.0	de÷.	And	241	3,868	4,252	
Exployment of Emblan Exployment	2/*000	376	339	319	243	334	3621/	Junit/	345	343	251	347	371	1.1	
(All Industries Formal Sector)											0.0793			374	
11. EDGHGTIGH_THENHS															
1+ 10141_GRP															
(a) At stanyout prices	176	1,218	1,180	1,317	1,591	1,893	1,583	1,872	1,952	8,005	7,375	2,978	3,740		
(0) At Romatumi (1970) (21.048	878	1,278	1,277	1,224	1,381	1,474	1,428	1,100	1,428	1,405	1,315			3.811	
1. Dir. Casi ta Gir						22,220			10.00		4114	7,364	1,258	1,406	
(A) AL CONVENT DESCEN	Avetha	301	268	291	340	398	384	374	175	411	+45	524	518	102	
(b) At constant (1970) JFSCHJ	Teacha	385	221	208	235	305	254	216	875	272	2.01	284			100
 Gapper Production (value) (value) 					100		- 23						231	134	- 00
	1000 Solaves	683	634	838	681	708	640	713	#60	656	585	610	561	615	
if which experted 4. Naize Production	+000 tonnes	584	615	244	670	473	641	4 745	667	589	651	622	55.8	628	
L'udested]	*006 hage	2,791	1,388	6,539	6,347	4,,290	6,491	8,334	7,724	6,403	3,733	4,247	Y,708	5,421	
(uniling 30th April)															
 2035#200 Production (virginis five chard-ending 10th April) 	*200 kg	4,805	6,248	5,532	6,222	6,201	6,466	6,262	5,100	3,704	4,591	4,127	2,350	1,849	
 Instantion Index of the Instantoring Industry 	1973-900	8.2	90	15.	100		106	108	- 10	103	14	107		10000	
7. Typeduction of Electronicity	H111, INA		1,174	3,975	1,275	5,973	6,100	7,046	1,483	7,883			39	100	
A. Production Index of								. forder		14000	8,772	7,281	9,793	9,726	
Ocativetica (volume siled al constant 1970 prices)	1970+550	100	34	103	110	124	55.5	110		90	- 25	87	.82	85	
ort, Mathematication															
· COTTAGE ACCOUNT															
(a) Revenue	178	432	379	315	185	645	448	443	433	359	593	763	811		
(b) Expends ture	2*H	381	159	363	324	441	610	609	661	647	637	1,082	1,421	1,000	
(c) garping (-)./Beflicity	174	15.5		-48	-9		- 162	-165	-163	-97	-244		-420		
												1000		~231	

															_
Table 1: (continued)	11	1.1													
	MINE S	1279	1913	1213	3222	1528	1413	1110	3343	1018	1412		-	Address .	
P. SHELLAL ACCOUNT															
(a) Budeipta	876	839	184	100	210	150	135	147	130	137	263	2258/	422	122	
(b) Expenditure	8.44	829	253	160	366	194	245	172	160	168	165	1114/	158	TE*	
(0) Barplas (+) Bedscht (-)	1.14	0	-23	-22	-38	-64	-76	- 25	-21	-jrt	+98	-7	•25	+10	
3. Overall Burplus (+AF	E*H	+31	-64	-70	-107	+163	-237	-190	-18.	-129	=147	-121	-169	-176	
4- Total Public Ontos	E*H	309	378	426	582	635	2+5	896	517	1,000	1,963	1,475	1,162	1,761	
(a) Internal	8*m	177	196	850	254	282	306	344	341	179	394	438	477	158	
(b) External	E*H	132	177	194	317	254	406	152	557	621	766	1,637	1,186	7,415	
IN. BALANCE OF PARMINTS															
1. Trade_Balance															
(a) Exports	174	715	479	544	734	898	514	742	701	867	1,091	1,002	870	120	
(b) Imports	178	-341	-401	-405	-348	-509	-610	-482	=532	-405	~198	-世界上	=937	- 10	
<pre>(c) Balance, Burpius (+)/ Deficit (-)</pre>	1*H	+374	+78	+139	+384	+389	-53	+260	+169	+172	+495	+719	-67	- 61	
2. Balance of Current Account	178	+77	+176	-10	93	15	-454	-11	-179	-190		-408	-478	+542	55
3- <u>Overall Falsect its</u> v. HONEY SUPPLY (at the end of the year	2*H	134	-309	-108	-1	19	-250	-136	-234	-259	+168	-210	-970	-152	
Agregate Sceny Supply (H2)	1'8	354	318	341	415	441	493	424	499	629	858	972	980	1,20)	
(a) Money Supply (m ⁵)	X*H	186	199	201	243	266	322	377	387	291	513	579	162	641	
(b) Quasi Homey (H ²)	110	170	120	140	173	175	121	247	315	248	379	390	417	348	
VI PROFE THERDS															
1. Class of Living Indes															
(a) for Higher Income Group	(1975+100)	-	1.00	79	85	93	100	116	137	153	170	189	209	\$33.21	
(b) for Lower Income Group	(1975+100)	-		7 79	84	91	100	119	142	144	180	209	231	276 2/	
(c) weighted Average		-	-	. 79	84	92	100	118	139	159	176	194	530	344	
7. Annual Increase in dost of Living															
lotes															
(a) for nightry Income Group			-	. e. (7.2	9.0	8.5	16.1	17.8	11+5	11.3	11.3	10,4	1144	
(b) for Lower Income Group	3	-	-		6.5	8.1	10,1	18.8	1948	16.4	9+7	15.7	14.0	1645	
(c) Wugsted Average		-	-		7.0	8.5	9+3	17.5	19.4	14+5	(12+4)	11.2	1 deck	1++2	

Table 1: (continued)

		\$25A.2	1329	.222	2228	1973	1274	1273	2225	1972	1975	2822.	1219	2282	1222	
đ	wholesale Prices (40)	(1)66+100)	115	108		139	137	147	174	212	246	304	134	352	311	
	(1) About Increase of Wedlessle Prices	3	-2.5	-4.2	3.4	2.4	13	-6,3	19-5	20,4	10.4	34,1	9.2	5.3	5.1	
ł	Cooper Prices on LME (electrolytic wire bars- ELMR)	Manifia per metric ton	1,010	767	764	1,156	1,326	794	1,007	1,016	1.490	1,580	6.00	1,514	1.415	
3	. Index Deport Prices (Builde 1 Approxim)	(1970+100	100	105	111	126	157	104	-807	248	299	374	484	584	415	
4	. Index Export Prices [Mailonal_Accept12]	(1970+100)	100	18	80	117	134	84	300	97	123	165	201	118		
18	findes terms of trade	(1970-100)	100	74	72	. 35	85	42	+6	34	13	50	-41	34	180	
	SCHRITEC REPROLITING (National Accounts)															
	215:14	202	1222	20153	6333	1272237	19191245	2003	10603							S,
	 (a) at current prices (b) at constant (1970)prices of which c 	279 279	1,043	1,214	1,147	1,340	1,714	1,892	1,778	2,258 971	2,292	2,253 649	1,125	3,340	3,508 945	2
1	WEITHING GOING 2120															
	(a) at current prices(b) at constant (1970) prices	278 276	199 206	280 255	375 269	345 273	128 279	434	508 292	553 277	554 254	481 249	884 275	1,054	990 262	
1	Trianse.Steameiston													316305		
	(a) at current prices (%) at constant (1970) prices	678 678	481 490	453 865	336	530 443	664 501	015 245	843 935	940 488	1,144 529	1,278 317	1,580	1,646	1,758	
1	2018 fired finisal formation	£														
	(1) at current prices (5) at gonstant (1976) prices	178	312	393	445 199	423	102	408 294	845 237	483	437	450	645	440. 121	195	

2:2:2:0 of Taris Data: Monthly Target of Statistics (1970-1982) C.2.C.1 Economic Reports (1979-1982) ECD) anospi where indicated; Financial Reports (1970-1981) Ministry of Finance; Bank of Embla Annual Reports (1979-1981)

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1/ most of the 1982 signiful are provisional.

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2/ Excluding desentic servants, all figures pertain to employees only. Data on informal sector is not evaluate. However it is believed that about 50% of labour force will be in the informal paral urban Labla.

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61 Table 2: FOPULATION 1963-1980 (MILLIONS)

	1963 Census	Averag Annual Growth 1963-6	Census	Average Annual Growth 1969-80	1980 Census
Rural	2.8	0.5 1	2.9	1.1.8	3.2
Urban	0.8	8.9 1	1.2	6.7 %	2.4
% Urban	20.5		29.4		43
TOTAL.	3.5	2.5 8	4.0	3,1 8	5.7

Source: Central Statistical Office 1981. Tabel A-1.

THESE IS NOT AND BEAUST AT THIS CONSTRAIL POLICE.

					constraint and							
	1970	1871	1872	1973	2976	1975	1975	1977	1178	1979	1962	Average
609	3270	1533	12.94	5385	Ja7a	1438	1501	1478	11.6	1315	1768	
state supply dying	RLI.		0.000			1						
Capital expend. Par sext of 52F Recurrent exp.	239 18.20 301	184 14.41 219	137 9.42 310	188 13.65 312	138 9.38 219	183 11.20 402	. 82 6.13 354	68 4.78 353	17 4,12 41	19 3.73 308	63 4.61 253	9.11
Fer sent of GDP. Total erg.	29.80	24.98 503	22.26	22,59	21.04	27,96	12.87	35.22	19.34	22.27 10.6	25.30 ±14	24.11
Per cent of GOP	64.35	29.29	32.07	26.21	31.00	39,15	29.73	28.10	43.5*	17.00	30.41	10.28

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SOURCESs Table 1 in this Anney, JADPA 1981, g. 214, MIDP 1982, MIDP 1983 and calculations.

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Table 4: BANK OF ZAMBIA: FOREIGN EXCHANGE BOLDINGS 1970 - 1931

 1970
 1971
 1972
 1973
 1974
 1975
 1976
 1977
 1978
 1979
 1980
 1981

 270.6
 176.7
 110.3
 118.0
 124.3
 87.5
 72.8
 15.8
 38.5
 60.6
 60.4
 35.8

Source: Central Statistical Office 1982, p. 31.

TABLE 5 - EDUCATIONAL EXPENDITURES AND THEIR FELATEONS TO STATE MUDSELS AND NOT 187 1985

(8 Million: \$; cores _____rices)

	1976	1970	1.0	1973	1974	1975	1978	1977	1878	1978	1983	Sear age
\$0P	1279	11.60	1317	1591	1893	1580	1872	1952	2260	2571	2978	
STATE EXPENDITURES:			******				0.0.00.0.00					
Corital	.739	1.1228	10.0	100	51945	248	1.000	1242	3.2	0.57		
Per cent of COP	18,70	17,20	12.15	16.38	10.25		112	180	16.0	105		
Recurrent	361	35.0	38.2	394	44.1	15,54 818	9,18	8,20	7,62	5,42	7,19	12.50
Par cent of CDP	29.81	29,65	27.55	24, 28	23.30		608		61.7	3832	1001	
latal esp.	62.0	55.3	523	782	435	38,53	11.53	31,66	29,37	32,58	16.30	30,75
Fer cent of 60P	48,52	40.85	39, 71	45.15	31.54	85.5	781	821		1002	1314	- 0
					041.3*	54, 17	41.32	42.08	37,00	38.42	44.22	43.25
EDUCATION:								******		+++++++++++++++++++++++++++++++++++++++		
Capital aspend.	16.6	18.4	15	12.1	11.1	1.42.4						
Per cent of state	2.72	9.06	11.88	5.70		22.0	61.1	11.0	11.16	6.3	7.8	
far can't up upp	0.91	1,56	1.44	1.39	11,19	8,19	12,82	10,00	7,50	9,85	1.16	1,15
Recordent exp.	41.5	53.2	60.5	65.1	1.35	1,43	1,16	0.90	0.57	0,25	0.28	0.96
er cent ar state	10.89	15.34	18.67	16.57	10.7	72.4	16.1	95.8	101,2	109.5	129,4	
Fer cent of 604	3.28	4.55	4.40	4.09	15.40	\$2,83	13.45	16.61	15.,64	13.08	11,98	34.25
stal sup.	48	72.1	76.5	87.2	3,68	4.94	5.00	h.80	4.59	4.28	4.28	4.38
far zent of state	7.74	10.04	15.20	35.15	91.4	. 95	115.8	113.1	117.8	115.0	117.4	
før vent of 600	3,78	8,11	6.04	5.48	14.38	11,21	14.43	13,78	11,96	11,20	12.41	12.48
				3140	6,83	6.08	8.19	5,29	5.37	4,50	6.85	5.32
(* 188) Permit Tim			18	ent sidae	to all the							
apital exp.	6.	17	18	11	15	ES .		ernesid a	0.5494110	es 18.20		1.
REATTING BUD.	141	45	30	32	30	48	12	1.20		1	- 2	
otal advection	48	44	44	42	14		55	50	44	40	-42	
		*******						- 22	· · · · ·			

ar, 18140 1982.p. 212 and malculations from those sources.

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Year Punction	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Primary Expenditure	3.37m	3.68m	3.97m	3.77m	4.05m	2.84m	2.88m	2.26m	1.00m	2.08m
1 of Total	18.3	19.3	13.4	17.4	17.9	13.1	16.3	18.0	15.9	26.7
Secondary Fxp.	2.57m	5.36m	10.52m	11.61m	8.138	6.28m	4.63m	2.20-	0.2-	
N of Total	13.9	28.1	47.6	53.5	36.0	29.9	26.3	2.30m 18.3	.92m 14.6	.93m 11.9
Teacher Training Exp	0.50m	0.81m	1.61m	1.33m	1,18m	t.09m	1.61=			
of Total	2.7	4.2	7.3	6.1	5.2	5.0	1.61m 9.1	0.77m 6.1	4.6	.52n 6.7
echnical Education										
X2000/174 (100%	7.52m	6.79=	5.40m	3,70m	4.60m	5.682	2.99m	1.80m	.58n	1.72m
of Total	40.8	35.7	24.5	17,1	20.4	26.1	17.0	14.3	9.2	22.1
niversity of Cambia										
xpenditure	3.85m	2.09m	1.33m	0.99m	3.17m	3.64m	3.47m	2.00m	.17m	.75m
of Total	20.9	11.0	6.0	4.5	14.0	16.7	19.7	15.9	2.7	9.6
ther Administration										
specializere	0.63m	0.30m	0.26m	0.30m	1.47m	2.21m	2.94m	5.45m	3.34m	1.79m
ve letal	3.4	1.6	1.2	1.4	6.5	10.2	11.6	27.4		22.0
245	18.43m	19.03m	22.10m	21.70m	22.60m	21.74=	17.67=	12 58-	6.100	7 700

Table fr Concerns

Sector: "Plocational Statistics 1979", Ministry of Education and Culture, Planning Unit, Sectorers for 1980 from unpublished figures received from the Planning Unit.

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Table 7: Recurrent Expenditure on Education 1971-1980. Classified after Function

Year Function	1971	* >72	1973	1974	1975	1976	1977	1978	1979	1.980
Primary Schools	23.89m	27.00m	38.70m	31.22m	34.16m	44.71s	44.73=	47.72≡	52.16=	54.52m
% of Total	44.5	44.6	44.2	44.8	45.3	47.1	47.1	47.1	45.8	42.1
Secondary Schools	11.83m	13.93m	14.40m	15.71m	16.75m	20.96m	21.695	23.34m	24.06m	27.00m
% of Total	22.8	23.0	22.1	22.6	22.2	22.3	22.7	23.1	21.9	23.8
Teacher Training	1.60m	1.71m	1.57m	1,90m		2.41m	2.65m	2.81m	3,41m	3.73m
% of Total	3.0	2.8	2.4	2.7	2.8	2.6	2.8	2.8	3.1	2.9
Technical Education	5.63m	5.80m	5.84m	5.64m	6.69m	7.690	7.42m	8.028	8.16m	6.76m
% of Total	10.5	9.6	9.0	8.1	8.9	8.2	7.8	7.9	7.4	6.8
University of Zambia	3.70m	3.85m	6.39m	6.40m	5.898	8.64m	9.Om	9.60m	11.29m	16.83m
% of Total	6.9	6.4	9.8	9.2	7.8	9.2	9.4	9.5	10.3	13.0
Other Administration	6.988	8.21m	8.08m	8.80m	9.798	9.72m	9.77m	9.74m	12.39m	18.798
% of Total	13.01	13.56	12.43	12.64	13.0	10.3	10.2	9.6	11.1	19.3
GRAND TOTAL	53.63m	60.50m	65.06m	69.69a	73.41m	94.14m	95.468	101.23	109.4	5m 129.64

Source: "Educational Statistics 1979" and amendments from the Planning Unit.

Note: Expenditure shown in this tabel for the year 1971-1974 for various levels of education system differs from details provided by category for these functions. Expenditure for these years has been arrived at by making certain inter-vote and inter-function adjustments.

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Table 8: Enrolment and Current Costs 1971-1980

Year Function	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Primary Enrolment	706,825	774,515	806,462	854,717	872,392	907,867	931,165	964,475	996.597	1,041,938
Cost per pupil K	33.79									
Secondary										
Enrolment	54,259	58,646	59,091	64,294	73,049	78,805	83,889	88,980	91,795	94,595
Cost per pupil <u>K</u>	218.00	238.00	240.00	244.00	229.28	265.97	258.50	262.31	262.10	
Teacher Training										
Enrolment	2,419	2,428	2,588	2,834	3,070	3,425	3,752	3,923	4,406	
Cost per pupil <u>K</u>	665.00	705.00	605.00	669.00	694.46	706.52	706.29	716.29	773.69	0.02.02.02.0
Rechnical Education	3,365	4,123	4,609	5,666	5,421	5,569	5,692	5,788	5,284	5,338
Cost per student \underline{K}	1,540.00	1,407.00	1,268.00	995.00	1,233.35	1,380.86	1,303.35	1,385.63	1,543.44	1,641.06
iniversity of Lamba	a									
Enrolment	1,566	1,765	2,244	2,612	2,354	2,569	3,111	3,183	3,400	3,425
fort par Student \underline{z}	2,363.00	2,181.00	2,846.60	2,450.00	2,501.00	3,363.18	2,892.96	3.016.02		

1.7

Source: Ministry of Education and Culture, 1982, p.118

Region	Primary Schools	Secondary Schools	Teacher Training Colleges
COPPERCENT	242	29	3
1 · BME	246	11	2
LUSAKA	12.4	18	2
SCUTHEFN	463	21	2
LCAPPER.	246	9	1
NOB T LPN	503	14	1
E7 STERN	432	10	1
NCRTH-WI JTERN	202	5	1
WESTERN	327	9	1
TOTAL	2.785	126	14

Table 9: NUMBER OF INSTITUTIONS BY REGION 1979

Source: "Annual Seport for the year 1979", Ministry of Education and Culture, 1981; Table 2, p.20.

Expenditure 1982 1. University of Zambia Lusaka (Zampas 2,528 - Engineering and Mines - Agriculture SIDA 2. Lusaka Primary School Project 1,860 IBRD Loan 1 3. Planning Unit 50 SIDA Grant 1 4. IBRD Education Project 1,241 IBRD Loan 1 5. IB*D/ADM Education C 1,400 IBRD/ADM Loan 1 6. Eight Resources Centres 688 SIDA Grant 7. Extensions to Copp.belt*s Teacher Training College, Xitwe 50 Netherlands Grant 8. Extension to Nkhrumah Teachers Training College 50 SIDA Grant 9. Production Units 300 SIDA Grant 1. Education for the Mandic. 274 SIDA Grant 1. Education Explores Centre Phase II 110 IBSD Loan 2. Education Explores and Materials 900 SIDA Grant 3. Netherlands Grant 10 Dan 4. Headquarters (DTV?) 100 Netherlands Grant	(K 1000)						
Lusaka Campus 2,528 - Engineering and Mines - Agriculture - 2. Lusaka Primary School Project 1,860 IBRD Loan 1 3. Planning Unit 50 SIDA Grant 4. IBRD Education Project 1,241 IBRD Loan 1 5. IBRD/ADD Education C 1,400 IBRD/ADS Loan 1 6. Eight Resources Centrus 688 SIDA Grant 7. Extensions to Copp.belt's Teacher Training College, Kitwe 50 Netherlands Grant 8. Extension to Nkhrumah Teachers Training College 50 SIDA Grant 9. Production Units 300 SIDA Grant 1. Education for the Mandic. 274 SIDA Grant 1. Education Services Centre Phase II 110 IBRD Loan 2. Education Equipment and Materials 900 SIDA Grant 3. Evelyn Fone College of Applied Arts & Science 117 IBRD Loan 4. Meedquarters (DTVT) 100 Netherlands Grant 5. Luanshys Technical and Vocational Teachers			xpenditure	Organisation	Тура	Amount	
Project 1,860 IBRD Loan 1 3. Planning Unit 50 SIDA Grant 4. IBRD Education Project 1,241 IBRD Loan 1 5. IBRD/ADD Education C 1,400 IBRD/ADB Loan 1 6. Eight Resources Centres 688 SIDA Grant 1 7. Extensions to Copp.belt's Teacher Training College, Kitwe 50 Netherlands Grant 8. Extension to Nkhrumah Teachers Training College 50 SIDA Grant 9. Production Units 300 SIDA Grant 1. Education for the Madic. 274 SIDA Grant 1. Education Services Centre fhase II 110 IBRD Loan 2. Education Equipment and Materials 900 SIDA Grant 3. Evelyn Hone College of Applied Arts & Science 117 IBRD Loan 4. Meedquarters (DTVT) 100 Netherlands Grant 5. Luanshys Technical and Vocational Teachers 100 Netherlands Grant	۱.	- Engineering and Mines	2,528	SIDA	Grant	1.303	
 4. IBRD Education Project 1,241 IBRD Loan 1 5. IBRD/ADR Education C 1,400 IBRD/ADR Loan 1 6. Elight Resources Centras 688 SIDA Grant Grant 7. Extensions to Copp.belt's Teachers Training College, 50 Netherlands Grant 8. Extension to Nkhrumah Teachers Training College 50 SIDA Grant 9. Production Units 300 SIDA Grant 9. Production Units 300 Grant Grant 9. Education for the Handic. 274 SIDA Grant 1. Education Services Centre Phase II 110 IBRD Loan 2. Education Equipment and Materials 900 SIDA Grant 3. Evelyn Fone College of Applied Arts & Science 117 IBRD Loan 4. Headquarters (DTVT) 100 Netherlands Grant 5. Lusnshys Technical and Vocational Teachers 114 	2.			IBRD	Loan	1,660	
 5. IBRD/ADN Education C 1,400 IBRD/ADB Loan 1 6. Elight Resources Centres 688 SIDA Grant 7. Extensions to Copp.belt"s Teacher Training College, Nitwe 50 8. Extension to Nkhrumah Teachers Training College 50 9. Production Units 300 9. Production Units 300 9. Production for the Handic. 274 9. Education for Centre Phase II 110 9. Education Services Centre Phase II 110 9. Education Duipment and Naterials 900 9. Evelyn Fone College of Applied Arts & Science 117 9. Readquarters (DTV?) 9. Netherlands Grant 	3.	Planning Unit	50	SIDA	Grant	50	
 Elight Resources Centris 688 Elight Resources Centris 688 SIDA Grant Netherlands Grant Extensions to Copp.belt's Teacher Training College, Xitwe 50 Netherlands Grant Extension to Nkhrumah Teachers Training College 50 SIDA Grant Production Units 300 SIDA Grant Production for the Handic. 274 SIDA Grant Education Services Centre Thase II 110 IBRD Loan Education Equipment and Materials 900 SIDA Grant Evelyn Hone College of Applied Arts & Science 117 IBRD Loan Headquarters (DTVT) 100 Netherlands Grant Lusnshys Technical and Vocational Teachers 	4.	IBRD Education Projec	t 1,241	IBRD	Loan	1,030	
SIDA Netherlands Grant Grant 7. Extensions to Copp.belt's Teacher Training College, Kitwe 50 Netherlands Grant 8. Extension to Nkhrumah Teachers Training College 50 SIDA Grant 9. Production Units 300 SIDA Grant 9. Production Units 300 SIDA Grant 1. Education for the Handic. 274 SIDA Grant 1. Education Services Centre Phase II 110 IBSD Loan 2. Education Equipment and Materials 900 SIDA Grant 3. Evelyn Hone College of Applied Arts & Science 117 IBRD Loan 4. Meadquarters (DTVT) 100 Netherlands Grant 5. Luanshys Technical and Vocational Teachers 111 110 111	5.	IMPD/ADM Education C	1,400	IBRD/ADB	Loan	1,000	
Teacher Training College, Kitwe 50 Netherlands Grant 8. Extension to Nkhrumah Teachers Training College 50 SIDA Grant 9. Production Units 300 SIDA Grant 0. Education for the Handic. 274 SIDA Grant 1. Education Services Centre Phase II 110 IBSD Loan 2. Education Dylipment and Materials 900 SIDA Grant 3. Evelyn Hone College of Applied Arts & Science 117 IBRD Loan 4. Mesedquarters (DTVT) 100 Netherlands Grant	6.	Elight Resources Centr	as 688			600 28	
Teachers Training College 50 SIDA Grant 9. Production Units 300 SIDA Grant 0. Education for the Handic. 274 SIDA Grant 1. Education Services Centre Phase II 110 IBSD Loan 2. Education Equipment and Materials 900 SIDA Grant 3. Evelyn Hone College of Applied Arts & Science 117 IBSD Loan 4. Headquarters (DTVT) 100 Netherlands Grant 5. Luanshys Technical and Vocational Teachers 101 Netherlands Grant		Teacher Training Coll-	ege,	Notherlands	Grant	27	
 Education for the Handic. Education Services Centre Phase II Education Equipment and Materials Education Equipment and Materials Evelyn Hone College of Applied Arts & Science Evelyn Hone College of Applied Arts & Science Headquarters (DTVT) Metherlands Grant Luanshys Technical and Vocational Teachers Evelyn Hone College of Applied Arts 	B.			SIDA	Grant	50	
the Handic. 274 SIDA Grant 1. Education Services Centre Phase II 110 IBSD Loan 2. Education Equipment and Materials 900 SIDA Grant 3. Evelyn Hone College of Applied Arts & Science 117 IBSD Loan 4. Headquarters (DTVT) 100 Netherlands Grant 5. Luanshys Technical and Vocational Teachers	9.	Production Units	300	SIDA	Grant	300	
Centre Phase II 110 IBRD Loan 2. Education Equipment and Materials 900 SIDA Grant 3. Evelyn Hone College of Applied Arts & Science 117 IBRD Loan 4. Headquarters (DTVT) 100 Netherlands Grant 5. Luanshya Technical and Vocational Teachers 111 IBRD Loan	0.		274	SIDA	Grant	274	
Materials 900 SIDA Grant 3. Evelyn Hone College of Applied Arts & Science 117 IBRD Loan 4. Headquarters (DTVT) 100 Netherlands Grant 5. Luanshys Technical and Vocational Teachers 111 Netherlands Grant	1.		110	IBRD	Loan	90	
Applied Arts & Science 117 IBRD Loan 4. Headquarters (DTVT) 100 Netherlands Grant 5. Luanshys Technical and Vocational Teachers	2.			SIDA	Grant	900	
5. Luanshya Technical and Vocational Teachers	3.			IBRD	Loan	45	
Vocational Teachers	4.	Headquarters (DTV?)	100	Notherlands	Grant	50	
674 SIDA Grant	5.	Vocational Teachers			127155		
6. Staff Development 250 SIDA Grant	2				Grant	294	

Table 10 (Continued)

TOTAL FOR EACH OFGANISATION

	Loan	Grant	Total	
CIDA		115	115	
IBRD	2,935		2,935	
IBRD/ADB	1,000		1,000	
Notherlands		105	105	
SIDA		4,021	4,021	
			8,176	

Source: Government of .ne Republic of Zambia 1982, pp. 328-329.

Table 11: CAPITAL ASSISTANCE TO EDUCATION 1980

(.000 US \$)

BOURCE	DISBURSEMENTS 1980	FUTURE
IBRD III	1270	
IV	2930	
v		25 000

Source: UNDP 1981, p. 117.

Table 12: TECHNICAL ASSISTANCE TO EDUCATION: MAJOR ACTIVITIES BY DOND# 1980

(Sweden excluded)

DENMARK

TAPAN

1. UNEA, School of Medicine, 1980-85

Ministry of Education: 250 Secondary School

UK

Teachers, 15 experts

DTVT, 52 locturors, UNIA

Review of manpower use

1. Teachers and lecturers at: secondary schools. teacher training, UNZA

2. DTVT:lecturers, teachers, electronic engineer

3. MAWD: lecturer

Source: UNDP 1981, pp. 74-82.

U	NDP	UN SY	stem	Bilat	eral	Ot2	or	Total	
US #	1	US 🕫	١	us \$		US \$		US \$	8
22	0,5	295	4.3	17435	16.1	25	0.4	17777	16.3

Note: Amounts are given in '000 and the percentage shows % of grand total of assistance (108602).

Source: UNDP 1981, p. 8 and corrections by us.

Table 14:	BI LATERAL	COOPERATION	BY COUN	TRY:	EDUCATION 198	0
-----------	------------	-------------	---------	------	---------------	---

('000 US #)

COUNTRY	TECHNICAL ASS, AMOUNT
CANADA	166
CRER	21
DIONMARK	1248
PINLAND	940
FRANCE	480
CDR.	678
TRELAND	53
JAPAN	1300
SPAIN	7
SWEDIN	2047
UK	9880
DANISH VOLS	415

TOTAL TO EDUCATION: 17777

Source: UNDP 1981, p.10.

					PERCEN	TAGE					85.07
EXPENDITURE	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	10-YEAR AVERAGE
Recurrent	36.2	26.9	24.8	23.3	38.5	31.4	32.6	28.6	32.6	31.6	30.7
Capital	17.0	11.9	24.4	10.2	15.5	16.9	7.9	7.5	5.8	13.9	13,1
TOTAL	53.2	38.8	49.2	33.5	54.0	48.3	40.6	36.1	38.4	45.6	43.8

Table 15: Government Expenditures as Percentage of GDP at Current Prices 1971-1980

Source: JASPA 1981 p. 212 and calculations.

d.

TABLE T-6 phonestrue should have been seen

sublimental and and delivery of the local data and

	descent in	mil growth rate 1	In man lines
	1870-1875	1975-1980	1870-1990
WARENT PADOLSI			
OF .	6.6	33.5	34.0
OP per capita	1.1	10.4	1.1
ecurrent state expenditure	8.8	13.2	.12
apital state expenditure		-1.2	~1
otal state expanditure	519	9.7	2,8
ecurrent educational ava-	14.5		11.9
ispital educational exp.	5.23	-19.2	-8.1
etal educational exp.	15.8	4.7	18.2
ONEIANT 1870 PRICES:			
DP	2.4	-1	0.57
of any coolita	s d	+++1	-7,6
ecorrent state expenditure	1.1	8	3
spital state expenditure	-7.5	-12.4	-10
itai state expenditure	4.1-	-2.4	+7,1
ecurrent educational evo.	7.2	-2.6	
apital educational esp.	30.3	-28.2	-10.4
tal educational exp.	5-8	-8-9	3
OFFER PRODUCTION	-1.J	5	
WALLED WALLE PRODUCTION	10.4	-33.5	

SOURCE: Calculated From data in this Armen

Table 17:

POPULATION OF ZAMBIA PROJECTED FOR 1981-1990 AT 3.1 & GROWTH RATE

				(MI)	LLIONS	8.)					
Census	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Population	5.7	5,9	6.0	6.2	6,4	6,6	6.8	7.0	7.3	7.5	7.7
Annual increase		0,17	0.18	0.19	0,19	0.20	0.20	0.21	0.22	0.22	0.21

Source: Calculated.

Table 18:

		1.	000)	00000000000000000	
Ago	Malo	Pemale	Total	Percent	Accumulated
0-4	552	538	1.090	19.16	19.16
5-9	431	42.4	855	15.03	34.19
10-14	354	350	706	12.41	46.60
15-10	300	295	595	10.46	57.06
20-24	251	250	501	0.81	65.87
75-29	206	211	417	7.33	73.20
30-14	152	176	128	5.77	78.97
35-39	124	146	270	4.75	83.72
0.1-44	104	521	225	3.96	87.68
45-49	90	99	189	3.32	91.00
50-54	74	80	154	2.71	93.71
55=59	59	6.4	123	2.16	95.87
60-64	44	49	93	1.63	97.50
65-69	31	35	6.6	1.16	98.66
70-74	19	23	42	0.74	99.40
75-79	10	13	23	0.40	99,60
80-	5	7	12	0.21	100.01
TOTAL	2880	2881	5689		
PERCENTI	49.36	50.64	100		

PROJECTED ANE AND SEX DISTRIBUTION OF POPULATION IN 1980

Source: Population Projection 1969-1999, CSO, Lusaka, n.g.p. 19 The projection used here assumes "slowly declining fertility rate".

Note: The accuracy of this projection as compared to the 1980 Census results is impressive.

	1980	1982	1984	1989	1994
TOTAL POP:	5,692	6.052	6.440	7,526	8.807
7-14 :	1,089	1.179	1,259	1.499	1.760
7-14 % of	19.13	19.48	19.55	19,92	19.98

Table 19: PROJECTED SIZE OF AGE GROUP 7 - 14 1980 - 1994

Source: Calculations on data taken from "Projected Population 1969-199", CSO, n.y. pp. 19-20.

Note: The total population has been taken from the above source (fertility assumption 2). The age group 5-9 has been split by the age group interpolation method using the Sprague multipliers. Our acknowledgements to Senior Statistical Officer E.N. Silanda at the Planning Unit, Ministry of General Education & Culture, for introducing us this demographic method.

Table 20: GDP PROJECTED TO 1990 AT CONSTANT (1970) PRICES

ALTERNATIVE GROWTH RATES

# MILLION						
1980: 1370	I		11		III	
1980 per capital 2028	0,2%		2.48		3,58	
	1	er cap	ita J	er cap	ita 1	Per capita
1981	1380		1403		1418	
198.2	1390		1437		1468	
1983	1399		1471		1519	
1984	1409		1506		1572	
1985	1419	x215	1542	K233	1627	K2.46
1986	1429		1580		1684	
1987	1439		1617		1743	
1988	1449		1656		1804	
1989	1459		16.96		1867	
1990	1469	K190		#225	1933	

Source: Calculated from the data in this annex.

Notes

Growth rate I is the same as the average of the 1970's. .ate II corresponds to the years 1970-75 and Eate III is just over population growth.

	Annual Averag 1978-72	re (K Million) 1983-87	Total Costs
PRIMARY (1-7)			
Capital exp.	22.27	31.9	270.9
Recurrent exp. (Additional)	1.9	2.8	23.5
PRIMARY (8-9)			
Capital exp.	141,36	67.07	1042.2
Recurrent exp. (Additonal)	7.3	3.1	52

Table 21:1977 ESTIMATE OF REFORM IMPLEMENTATION COSTS

	Total cost a	t 1970 constant	prices
Additional	Capital: Recurrent:	287.9 45.3	2012/07/23

	Projected or	ost of imple	ementation 1983-92
			constant prices
		1983-87	1983-92
Additional	Capital: Recurrent:	98.2 5.5	59.4 3.5

Sources: Calculated from data in this annex and original Boform Cost Estimates given in <u>Discational Boform 1977</u>, p.15. The table is calculated under the assumption that the reform were to be carried out from 1983 on with some programme and 1970 costs as originally foreseen. Includes only expansion of Basic Education.

THELE ZZ DEFERRE COSTS AS TO	 TENT OF PROJECTED GOVERNMENT I 	LUCATIONS: INTERPOSE AV	ALTERNATIVE SET-INTEL DATE AND INTERNET
special station of the second state of the sec		THE PART OF THE PA	Which have the second of the second s

			Contraction (1)						
1981	1942	1943	1194	1985	1996	1987	1997	1946	1445
1380	1292	1399	14-55	1418	3429	14.39	244.8	1,14	1486
542	5.98	802							1.0.0
74	34	14	- 14	100					632
								- 31	177
		114	144	2.42	122		1.00		
2011/175			187	130	112	124	- N.	47	80
14-53	34.37	2471	1516	754T	1540	1617	169.0	1414	1727
801									
									P+T
	900 B					- 44		81	-03
		111	124	125	122	116	1.11	1.44	87
									and areas
1458	14月月	19.28	19.25	18.27	1186	1752	1826	1929	1125
810	8.01	852	8.76	700	124	74.0			831
- 76	79								
	- 62		100			1			104
	1380 543 34 1443 823 75 1458 810	1380 1392 583 598 34 34 2443 3437 623 848 75 27 14.58 5488 818 831	1380 1392 1299 583 568 802 34 35 35 35 138 2443 3437 2471 833 838 823 75 77 29 131 1438 1488 19.75 839 853 853	1380 1390 1395 1395 54.55 583 598 602 506 34 34 34 568 34 34,0 568 502 1388 1397 34,0 568 1388 14,9 568 568 138 14,9 568 568 1443 34,37 24,71 1506 613 6138 620 548 75 277 19 81 151 1296 129 1438 14,88 19,28 1438 14,88 19,28 1438 54,83 54,95	1380 1392 1395 54.05 1418 583 598 602 556 616 34 34 34 34 34 138 139 34 34 34 138 139 1395 54.05 1418 34 34 34 34 34 138 139 34.37 24.71 1508 754.7 813 618 833 848 16.47 83 75 77 79 81 83 83 131 128 125 131 128 125 1438 14.88 18.78 18.77 18.77 151 6.53 8.36 700 14.77	1380 1390 1396 5455 1418 3429 580 598 602 556 616 616 654 34 34 34 36 538 536 612 655 34 34 34 36 538 536 612 655 138 139 34 36 536 612 655 536 138 139 34 36 36 54 55 55 1438 34.37 34.71 1506 754.27 1560 613 618 623 844 16* 129 75 277 29 81 83 65 131 129 81 83 65 122 14.38 14.88 18.29 19.75 18.37 19.84 14.38 54.31 553 8.26 700 725	1380 1390 1395 1455 1418 1428 1439 583 598 602 556 615 854 615 34 34 34 34 34 56 615 854 615 34 34 34 34 34 34 56 615 854 615 34 34 34 36 35 35 35 34 34 138 139 139 135 135 135 134 3439 1438 3437 3471 1506 7542 1560 1517 603 608 823 848 1974 129 895 895 76 277 19 81 83 85 82 119 1438 1448 1939 1937 1937 1948 175 7 1438 1448 1939 1937 1937 1948 175 7	1380 1390 1395 54.55 1418 34.28 34.39 54.88 583 568 602 55.65 610 85.4 615 622 34 35 35 36 56 610 85.4 615 622 34 35 36 36 36 136 85.4 615 622 138 36 36 36 136 135 85.8 622 138 36 36 36 36 36 37 39 39 138 36.37 26.71 1506 155.7 1560 161.7 1656 613 618 623 564 17 ⁴ 129 685 712 75 77 19 81 83 85 82 87 1438 633 126 125 122 119 71 1438 1643 1978 1977 1984 <td< td=""><td>1380 1390 1395 14.05 1418 1487 1487 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 <t< td=""></t<></td></td<>	1380 1390 1395 14.05 1418 1487 1487 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 1488 <t< td=""></t<>

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sources between the enter

apportionis from table II and data from the 1970is as given in the table; refere cost data from table 27.

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Table 23: Primary School Enrolment 1964-1980

	CRA	Dit							
YEAI:	1	2	3	4	5	6	7	8	Total
1964	74143	72064	70847	67654	33820	31602	14781	13002	376417
1965	84:196	75926	72950	71581	39311	34390	18090	12949	
1966	103/07	84741	77384	74962	57023	39430	36076	-	473432
1960	115-103	:01010	84302	77799	61601	56712	41971		509352
1965	122863	115125	101333	84921	64477	60932	59242	4	608893
1965	127103	121194	113938	100596	69868	63578	64659	-	661281
1970	127.159	122974	119962	112902	75741	68402	67222	-	694670
1971	129331	124672	123796	121783	81410	74828	73859	-	729801
1971	1425-45	128944	126227	120501	90826	82131	80506	-	777873
1972	142.312	140155	129431	127390	95530	90089	85213	-	810234
1974	146555	245519	142124	133778	100076	96107	93891	-	858191
1975	146715	142094	141188	140684	103915	97974	99693	-	872392
1976	1501-62	148163	144262	142843	113326	105013	103499	-	907867
1971	155-04	151165	148694	145897	115864	112075	107145	-	936817
1975	158786	156402	152160	148945	118796	114379	114876	-	964475
1979	1623-60	161027	156596	152777	123205	119070	121279	-	996597
1980	169038	165744	162385	157696	130706	126900	129360	- 3	1041938
-									

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Educational Statistics 1979, pp. 1-3, Ministry of Education and Culture, 1982.

Annual Report 1979, Ministry of Education and Culture, 1981. Educational Statistics 1980, Ministry of Education and Culture, 1983,

Table 24:	Enrolment in Po (7-14 years old	ercentage of 1) 1974-1980	all School	l-age children
		BOXE	GIRLS	TOTAL
	1974	93	76	85
	1975	90	76	83
	1976	88	75	82
	1927	20	7.6	84

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Sources: Educational Statistics, 1974 to 1980, Ministry of Education and Culture.

Table 25;

Primary Education, Enrolment per Region, Percentage of All School-Age Children per Region, Selected Years

					1974			1979			1980	
Region	1962	1966	1970	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Copperbelt Kabwe				89.1	77.8	80.5	70.4	71.4	70.9	71.3	69.9	70.6
Lusaka				84.8	74.8	79.8	93.8 71.1	85.7 69.4	89.8 70.2	97.8 69.4	89.3	93.8
Southern Luapula				106.2	94.8	100.6	116.2	106.9	111.6	116.0	68.3 110.3	68.8 113.2
Northern Bastern				100.4 99.8	79.3 74.5	89.9 87.2	107.3	89.5 83.7	98.4 93.7	111.0	94.5	102.9
forth Western				94.1	68.8 74.5	81.6 88.8	92.3	69.7	80.9	86.1	70.6	78.5
festern				97.7	81.1	89.5	101.0	76.8 75.1	88.9 80.3	98.4 83.4	74.4	86.4 77.1
ambia	63**	70	88***	93.2	78.0	85.7	88.6	79.1	83.9	88.3	79.0	83.7

** Source: Colonial Office Report on North Rhodesia pp. 33-34. In Lower Primary 47 % girls, In Upper Primary 25 1 girls. (In 1961 42% are girls, see Sanyal et al. 1976, p.89.)

*** Source: Mwanakatwe, 1968, p. 35

Ministry of Education, Educational Statistics 1974 - 1980, Lusaka.

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Table 26:	Primary Education, Per cept Enrolment in Grade 1 as murtin of Retimated T-year-old Population
	by Region
	Palashad Nasaa

Selected Years

		1974			1976			1979			1980	
Region	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Copperbelt	82.1	84.9	83.3	82.7	82.9	82.8	74.3	77.9	76.1	76.9	79.6	78.6
Central (Kabwe & Lusak	95.4 a)	91.2	93.3	90.9	90.7 Lusak	97.9 a 76.3	86.0	90.2	87.8	108.1 66.4	107.0 68.0	107.5
Southern	122.5	122.2	122.3	128.2	128.4	128.3	13" 2	133.0	131.7	130.7	133.7	131.4
Luapula	118.1	10.3	113.7	115.7	115.9	115.8	124.5	99.5	110.9	124.7	125.4	125.0
Northern	117.9	106.8	112.4	116.4	116.2	116.3	121.5	115.6	118.6	125.2	120.3	122.8
Eastern	121.0	106.5	113,8	111.5	111.5	111.5	88.1	92.8	89.9	94.6	91.9	93.3
North-Western	134.9	115.7	125.4	119.5	119.6	119.6	100.8	95.5	98.2	105.5	92.6	100.1
Western	114.6	112.3	113.5	107.4	106.1	106.2	79.7	76.6	77.7	80.3	78.2	78.8
Zambia	105.8	101.0	103.4	102.9	103.0	103.0	94.2	94.0	94.0	95.7	95.1	95.4

Sources: Educational Statistics 1979, p.31. Third Development Plan, p.72.

Grade 1 enrolment in a number of regions is slightly higher than the population aged 7. This shows that there is considerable enrolment of children under or above age 7 in Grade 1.

	35	974		1980							
REGION	SCHOOLS	CLASSES	CLASSES PER 10,000 INHABITANTS	SCHOOLS	CLASSES	CLASSES PER 10,000 INHABITANTS					
COPPERBELT	222	4,695	44,9	248	5,422	43,4					
KABWE	230	1,846)		249	2,361	45,9					
LUSAKA	110	1,8437	40,1	129	2,330	33,6					
SOUTHERN	444	3,024	56,6	466	3,569	52,0					
LUAPULA	240	1,747	54,4	247	1,967	47.6					
NOTHERN	481	2,874	49,2	516	3,365	49,6					
EASTERN	433	2,513	44,1	433	2,839	43,2					
NORH-WESTERN	N 191	1,174	48,5	204	1,359	45,0					
WESTERN	318	2,071	45,0	327	2,247	46,0					
ZAMBIA	2,669	21,787	46,6	2,819	25,459	46.C					

TABLE 27: Number of Primary Schools and Classes by Region

Sources: Calculations from figures in Educational Statistics 1974 and 1980, Ministry of Education, and 1980 Census of Population and Housing, Frelimary Report, Central Statistical Office, 1981.

Table 26:

PUPILS PER CLASS	AND	REGION	IN	PRIMARY	SCHOOLS;	\$ELECTED	YEARS.
------------------	-----	--------	----	---------	----------	-----------	--------

REGION	1974	1976	1979	1980
COPPHREINT	40	40	41	41
KABW1:	39	39	39	41
LUSAKA	43	44	46	47
SOUTHERN	40	41	40	40
LUAPULA	40	40	39	39
NORTHERN	39	40	39	39
EASTIRN	38	39	38	38
NORTH WESTERN	*7	37	37	37
WESTION	37	38	37	37
EAMBIA	39	40	40	39

* Table 3.6 divided by Table 3.1 in Annual Report 1976.

L'Aurces: Annual Report 1976, pp.32, Ministry of Education, 1979. Annual Report 1979, pp.20-21, Ministry of Education and Culture, 1981.

Educational Statistics 1979, p.5, Ministry of Education and Culture 1982.

	G	RADE 4		Girls in per cent of
_	DOYS	GIRLS	TOTAL	Total in Grade 5
1965	61	53	58	39
1966	86	72	80	40
1967	87	76	82	40
1968	88	77	83	41
1969	86	78	82	42
1970	79	71	75	43
1971	75	69	72	43
1972	78	71	74	43
1973	78	72	76	43
1974	82	74	79	43
1975	80	75	78	44
1976	82	78	81	45
1977	83	79	81	46
1978	83	80	81	46
1979	84	81	83	4.6
1980	87	84	86	46

Table 29: Progression Rate from Grade 4 to Grade 5

1965-1980

Source: Calculations from figures in Educational Statistics 1979 and 1980, Ministry of Education and Culture, 1982.

Table 30:

Progression rate from Grade 4 to Grade 5 1979-1980 for boys and girls in different Regions.

Rogion	Boys	Girla		
Copperbelt	1.06	1.01		
K-abwe	.91	.89		
Lusaka	1.04	1.11		
Southarn	.86	.84		
Luapula	.82	.72		
Northarn	.77	.71		
Eastern	.68	+63		
North-Western	.76	.69		
Western	.81	.75		
2-mbin	.79	.84		

Calculations from figures in "Educational Statistics 1979, 1980". Table A1. Ministry of Education and Culture, 1982.

Table 31:

Progression rate from Grade 1 to Grade 7, 1970-1980.

	GRADE 1 to GRADE 7	girls in percent of total pupils in Grade 7
1970	90	35
1971	86	36
1972	78	36
1973	74	37
1974	76	38
1975	78	38
1976	81	38
1977	8.2	39
1978	81	40
1979	85	41
1980	88	41

Sources: Calculations from figures in Educational Statistics 1980, Ministryo of Education and Culture, 1982.

			FC	IRM .				for beu tion to	ed enrolment ondary educa- meet the man- eeds by two es*
	1	11	111	τv	v	17	Tota:	1959	1973
1964	4693	4978	2176	1720	783	403	12853		
195	0601	4496	2855	1754	1033	448	17187		
1966	10976	6327	3128	2334	1034	190	23989		
1967	14963	10727	4353	2:95	1601	_	34139		
1968	.4969	14818	6986	1690	2145	-	42388		
1969	15721	14571	8469	6141	3255	-	48157		
1970	15175	15418	8578	7797	5509	-	52472	51300	
1971	15753	15411	9937	7894	7010	-	56005	53700	
1972	15747	15423	14743	6883	7255	-	60051	60500	
1973	17570	15383	15032	6955	6436	-	61354	73700	61000
1974	19254	19210	15173	7581	6546	-	65764	68600	63900
1975	21462	15060	17041	8145	7341	-	73049	74900	67400
1976	22413	21263	18867	8838	7724	-	78805	81200	72000
1977	22659	22185	21460	9276	8307	-	83887	87700	75725
1978	23237	23099	22536	10988	9120	-	88980	94600	78640
1979	23240	23609	23398	11122	10426	-	91795	101600	82634
1980	1 1437	24258	23683	11478	10734	-	94595	108600	n.a.

Table 32: Secondary Education: Enrolment 1964-1980

Source: Educational Statistics 1979, pp. 57-58. Ministry of Education and Culture, 1982.

Education Statistics 1980, Ministry of Education and Culture (in print).

*From Manpower Report, that estimates the need for 1970 and gives the prospect for 1980 - Referred to in Bikas C. Sanyal et al., 1976, p. 68.

Pr	ogression rate to For	m I in per cent o	f all pupil
	Grade 7 the preceedi	ing year	
1965	36		
1966	60		
1967	41		
1968	35		
1969	26		
1970	2.3		
1971	23		
1972	21		
1973	2.4		
1974	23		
1975	23		
1976	22		
1977	22		
1978	22		
1979	20		
1980	20		
1981*	16.8		
1982*	18.5		

Table 33: Progression Rate from Grade 7 to Form I in the Junior Secondary School 1965-1982

Source: Calculations from figures in Tables 24 and 32.

*Economic Report 1982, NCLP, p. 318.

Table: 14	Progression	Rate	from	Porn	III	to	Form	IV
	1972-1983							

	all pupils in form III the preceeding year
1972	69
1971	47
1971	50
1975	54
1975	52
1977	49
1973	51
1974	49
1980	4.9

Source: Calculations from figures in Table 32.

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Region	1970 8 Girls	1976 % Girls	1979 N Girls	1980 % Girls
Copperbelt	29	36	37	38
Kabwe	32	34	36	32
Lusaka		32	32	33
Southern	36	33	34	33
Luspula	34	36	36	37
Northern	34	34	34	34
North-Western	31	32	32	32
Western	37	35	34	32
ZAMBIA	33	34	34	35

Table 35:	Girls' Enrolment in	Secondary Education by Region
	Selected Years 1970	to 1980

Source: Calculations from figures in Educational Statistics selected years.

	1970*	1974*	19	78	19	79	19	60
Region			Government	Private	Government	Private	Government	Private
Copperbelt	23	23	26	23	25	23	23	22
Kabwe	18	20	24	22	23	14	22	21
Lusaka			2.2	2.0	21	20	19	19
Southern	21	20	25	23	23	21	20	20
Luspula	21	2.4	28	22	27	23	28	24
Northern	22	23	2.6	21	26	21	23	22
Eastern	21	22	24	26	25	20	22	20
North-Western	21	2.3	26	25	2.3	31	25	27
Western	2.2	22	23	21	26	22	22	21
Zambia	21	22	25	22	24	22	22	21

Table 36:	Pupil/Teacher	satio in Secondary	Education,	T Regine
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Sources: Calculations and data from "Educational Statistics 1979, 1980". Tables B 11, 1, 5 11, 2. Ministry of Education and Culture, 1982.

*Sanyal et al., 1976. pp. 99, 101.

_		Zani	-in				1	ion-Za	mbian						
Year	т	rained	Unt	rained	Tota)	Zant	ia Tre	ined	Untra	ined	Tot Non-3	al ambian	Total	Zambia	in
	a	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G.	NG	A11
1970	47	227	9	20	56	247	1,126	696	273	67	1,399	763	1,455	1,010	2,585
1971	46	267	5	20	51	287	1,225	618	230	74	1,555	692	1,606	979	7,465
1972	75	331	14	30	89	361	1,240	656	351	82	1,591	738	1,952	1,099	2,779
1973	79	425	8	1.9	87	444	1,271	618	403	57	1,674	675	1,761	1,119	2,880
1974	104	56*	25	27	132	594	1,283	594	370	68	1,653	662	1,785	1,256	3,038
1975	146	798	5	25	151	823	1,314	516	354	44	1,668	560	1,819	1,383	3,202
1976	207	1,047	3	27	210 1	,074	1,346	480	314	54	1,660	534	1,870	1,608	3,478
1977	228	1,330	11	12		, 342	1,461	422	241	50	1,702	472	1,941	1,814	3,577
1978	255	1,438	33			,488	1,2 2	354	206	41	1,498	395	1,786	1,883	3,669
1979	295	1,759	13			,789	1,222	340	190	29	1,412	369	1,720	2,158	3,878
1960	323	2,132	+1			,162	1,327	321	128	25	1,459	346	1,789	2,508	4,297

Table 37: Secondar	/ School	Staffing b	by Qualification	and	Nationality,	1970-1980
--------------------	----------	------------	------------------	-----	--------------	-----------

Note: G = Graduatee - X ! = Non-Graduatee

Sources: Educational Statistics 1979, Table B8, Ministry of Education and Culture, 1982. Educational Statistics 1980, Table B8, Ministry of Education and Culture, 1983.

139 138 402 25 416 76	1180	124 126 334 80 326 60	153 160 320 120 371 105	160 59 369 173 365 159	141 100 288 191 368 229	141 65 347 166 290
138 402 25	209 359 71	126 334 80	160 320 120	59 369 173	100 288 191	63 347 166
138 402	209 359	126 334	160 320	59 369	100 288	61 347
138	209	126	160	59	100	61
139	125	124	153	160	141	141
336	290	203	262	296	219	220
602	578	453	524	445	299	385
506	426	482	498	540	365	411
106	114	177	203	302	321	342
213	267	254	160	96	119	95
765	682	487	561	515	512	60
894						84
.046	955	1,216	1,204	1,221	1,170	1,29
	.046 894 765 213 106 506 602	.046 955 894 1,026 765 682 213 267 106 114 506 426 602 578	.046 955 1,216 894 1,026 1,245 765 682 487 213 267 256 106 114 177 506 426 482 602 578 453	.044 955 1,216 1,204 894 1,026 1,245 1,068 765 682 487 561 213 267 256 160 106 114 177 203 506 426 482 498 602 578 453 524	.044 955 1,216 1,204 1,221 894 1,026 1,245 1,068 1,088 765 682 487 561 515 213 267 256 160 96 106 114 177 203 302 506 426 482 498 540 602 578 453 524 445	.044 955 1,214 1,204 1,221 1,170 894 1,026 1,245 1,068 1,088 962 765 682 487 561 515 512 213 267 256 160 96 119 106 114 177 203 302 321 506 426 482 498 540 365 602 578 453 524 445 299

Table 18: Full-Time Pre-Employment Training Programmes Enrolment by Institution and Year, 1974-1979

Note. *Enrolment Includes Craft Courses.

+Grant-aided.

55 Green: Educational Statistics 1979, Table C6:1, Ministry of Education and Culture, 1982.

Biucational Statistics 1980, Table C6:1, Ministry of Diucation and Culture, 1983.

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Table 39: University of Zambia Full-time Students 1970-1980

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					Enrolm	ent					-
School Courae	1970	1971	1974	1973	197475	1975-76	1976-77	1977-78	1978-79	1979-80	1980-8
Humanities and Social Sciences	454	664	736	921	623	538	677	730	927 442	741	798 551
Natural Sciences	366	518	498	790	820	782	742	159	189	204	
Engineering	70	93	144	148	165	149 82	84	59	70	99	119
Agricultural Science Medicine	52 56	25 84	42	56 54	87 131	161	130	197	195	184	235
Mining	-	-	-	81	73	84	184	221	206	134	
Law	89	59	79	101	117	123	457	924	978	961	772
Education	-	-	-	-	491	395		20	10.00		
Diploma in Social Work	48	35	32	31	38	26	22				
Post Graduate Cert. in Education	47	42	25	-	-	-	-	-			
Diploma in Teachers' Education	-	-	-	30	27	24	20	60			16
Diploma in Library Studies	-	-	13	15	-	-	-	10	***		- T)
Associateship in Adult Education	39	36	37	-	-	-	4		+ * *		- 7
Centre for Continuing Education (Certificate in Adult Education)	10	10	12	14	18	-		-	52	51	12
Certificate in Library											
Studies	-	-		-	22	-	-	-		42	
D.N.E. C.P.N.	-	-	-	-	-	-	-	39			
Business and Industrial Studies	-		-	_	-	-	-	-	04	360	
Total	1,231	1,566	1,765	2,244	2,612	2,354	2,569	3,111	3,268	3,400	3,425
Diplomas	113	136	195	and a state of the second seco	284	447	401	477	549	461	589

Note: "The University of Zambia Calendar was changed this year. Before 1974-75, under-graduate students in Education were registered in School of Humanities and Social Science and School of Natural Sciences for the B.A. with Education and B.Sc. with Education respectively.

... Figures for these courses are included in their respective Schools.

D.N.E = Diploma in Nursing Education. C.P.N = Certificate in Public Health Nursing.

Sources: Educational Statistics 1979, Tables D1, D2, Ministry of Education and Culture, 1982. Elocational Statistics 1960, Tables D1, D2, Ministry of Education and Culture, 1983.

	-			- 0	stput o	f Tuaci	hora			
College	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Chas les Laonga										1.5.60
Pr imary	116	108	115	118	121		130	.22	175	140
lknecraft	17		22	23	20		28	16	20	140
Total	123	122	127	137	141		158	138	195	140
The second s									and and a	
Juirata			14.23							
Primary Benecraft	114	128	119	126	1.21		1.30	145	150	152
the second second second second				18	15		16	22	20	
Total	145	138	129	144	136		146	167	170	152
and Livinastene										
Pritary	97	76	96	71	1/12		92			2220
10 weraft	13	12	13	16	16		18	91	130	101
* ca1	110	88	109	87	118					
				07			110	109	150	101
asaraa										
Primary	80	1.38	109	127	145		136	124	150	130
/Cuscraft	12	. 9	18	1.8	14		17	20	20	1.30
Total	92	147	119	145	159		153	144	170	1:30
***************					******	******	******	******		******
ltwo	1000	100	1200							
Primary Resecraft	98	73	110	93	196		276	227	300	330
and the second state of th	18	16	12	24	49		55	59	30	
Tot. 1	116	89	122	117	145		331	186	330	-330
				*****					******	******
alom Moffat		1.2.4								
Primary Honocraft	110	128	110	101	116		98	131	150	124
and the second s			12	14	15		12	18	20	
70152	110	128	122	115	1.31		110	149	170	124
0001										
Primary	47	55	37	69	48		100	100	12.23	122
Honocraft	16	12	12	11	16		64	24 19	150	136
Total	63	67	49	80	67		73	and the second second		1.37
								43	170	136
folira							22-11	1010100		
Primary	100	134	129	127	110		117	110	150	1.50
Renorraft	agint .		17	16	19		16	19	150 20	130
Total	100	134	146	143	129	-	133	129	170	130
			*****	****						
1761										
Primary				-		-	-	122	150	111
Rescraft				_		-		16	20	
Total						-		138	and the second second	1.0.0
							100	1.90	170	111

Table 40: Output of Primary School Teachers from Primary Teacher Training (2011-980), 1971-1980

Table 43: (continued)

	Output of Teachers											
College	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980		
Solweri												
Primary			-						150	139		
Homecraft		+							20	1		
Total									170	119		
				т	OTAL PR	IMARY	0.0759.07					
Primary	782	840	825	832	959		1,043		1,665	1,493		
Primary Romocesft	782 87		825 116	10					1,665	1,493		

Note: "Manusa and Solwer: Teachers" Colleges had the first graduates in 1978 and 1979, respectively. t

Table 41: Output of Secondary School Teachers from Teacher Training Institutions, 1971-1980

	Output of Teachers											
Institution	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980		
University of Sambia	47	54	60	1.35	191	155	199	181	183	211		
Vicronali "Reactions" Colificati	60	90	133	207	156	190	180	179	159	234		
Training College	-			-	108	80	108	126	137	140		
lav nebya 1.V.T.C.		-			-	63	51	101	98	78		
x.3.5.c.	12	12	20	16	-	18	27	13	16	13		
te, and Music Evelyn Iona Colloge			-		-	-	11	,	12	25		
Det al	119	156	233	338	455	506	576	609	605	701		

T.V.T.C. - Warmical and Weational Worksrs' Obliggs.

W.E.D.C. + Watural Resources Development (billoge.

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TELDES DE REFERENCE FOR À SWEDISH TEAM 10 STUDY AND EVALUATE PAST ACHIEVEMENTS AND TRINDS DE EDUCATIONAL POLICIES IN ZAMOIA

BACKERDUND

The first Sector Agreement in the field of education between Zambia and Sweden was signed June 24, 1980, amounting to 37 HSEK and covering the period 1980 to 1983. Frior to this agreement there had been Swedium support to the Technical and Vocational Teacher's College (TVTC) in Luanshya, and to the Schools of Mines and Engineering at the University of Zambia (UNZA). For each of these projects there wire separate agreements. Swedish support to education within the 1980 agreement has mainly been confined to primary education, teacher training, education of Handicopped children, Lechnical education and vocational training.

The total allocation available for the Swedish-Jambiar Development Cooperation Programme for the calendar year 1983 amounts to 165 MSEK, out of which 26.7 MSEK have been allocated to the education sector. The distribution per sub-sector in 1983 in the following:

SEX.

1	Primary Education (Education Material & Equipment)	12	670	000	4.8	
	Teacher Training		790	000	3	
	Education of Handicapped	3	755	000	14	
	Technical Education	1	975	000	7	
	Vocational Training	1	150	003	4	
	Educational Planning	1	060	000		
	University of Zambia	- 5	315	000	20	
		26	715	000	100	

For a number of years the economic situation of Jackia has been deteriorating. Consequently, the proline of Jambian counterpart funding of projects and programment is becoming increasingly difficult. There is a strong need for realistic estimates regarding capital investment bearing in mind the tight financial situation for recurrent expenditure.

PURPOSE OF THE STUDY

In order to obtain background material for a decision on future Swedish support in the field of education to Zambia SIDA would need a summary of past national achievements and a survey of future plans. Thus, it has been proposed that a Swedish team will undertake a study of the education sector.

The study will be undertaken by a team of two Swedish consultants in close cooperation with the Zasbian authorities concerned and in particular with the Drut of Planning and Research of the Ministry of Education,

It is ansured that the fudy could be based mainly on deterroadily available such as National Development Flams, educational statistics, evaluation reports as well as Proposals for the Recommendations for Educational Heform,

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Through study of relevant documents, visits to educational institutions and discussions with Zambian authorities concerned the team should:

- a) Analyse the crends of educational policies in the light of economic, political and cultural development in the country since independence, with special emphasis on the period following the approval of the Educational Reform in 1977/78.
- b) Summarize the fulfilment of national objectives in the field of Primary and Seconary Education, Technical and Vocational Training, Teacher Training, University Education and Research, and Non-formal Education,
- Identify the reasons why the objectives indicated in the foregoing paragraph have not been set.
- Analyse data on costs and financing of education in Zambia in short and long term notional planning. Particular attention should be paid to

- the overall drvelopment of costs for education in relation to the expected growth of GNP and total budgetary expenditures.

- recurrent cost implications of allocations within the capital budget, particularly for programmes supported by Sweden.

- unit cost per student at various levels of the education system.

- Describe the objectives for the future development within the education sector contained in national plans and projections.
- f) Assess the prospects of attaining these objectives taking into consideration the financial constraints imposed by the current econosic development. Assess plans and ideas to reduce the costs of the education budget.

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- g) Identify other donor activities within the sector."
- Identify needs for assistance in areas of strategic importance for the implementation of Zambia's educational policy.

REPOR! INC

A final written report in English should be completed not later than 25 February 1983,

MEMBERS OF THE TEAM

The team should comprise two Swedish consultants with experience of research and evaluation in education.

DURATION

The work shall be undertaken during January-February 1983. 3 weeks will be spent in Zamuia. The consultants will be employed for a period not exceeding a total of 6 weeks.

D0515

Costs induced by the work of the two consultants, including their field trips, will be met by SIDA.

ANNEX III

LIST OF PERSONS MET IN ZAMBIA

Mr.	N.K.	Banda	Permanent Secretary, MGEC
Mr.	3.2.	Bando	Hoad of Planning Unit, MGEC
Mr,	h.E.	Bande	Sunior Sconomist, MCDP
Mr.	P.,	Chikoti	Assistant Director, CSO
Mr.		Chinyama	Education Officer, Planning, Lusaka
Mr.		Chom!-a	District Chief Education Officer, Lusaka Region
311.	24	Coontar	Prof., MNEA, School of Education
Mrs	14	Fisher	Assistant Director, DTEVT
Mr.	10,	Jonsson	IPDP Coordinator, MAWD
Nr.	N.	Junnila	CDC, Practical Subjects Department
911 -	32.	Lupahla	Planning (Buildings)
${\mathbb M}^{-}*$	L.	Makomani	Senior Planning Officer, Planning Unit, MGEC
hE.	B.N.	Mbambara	Wadmaster, Chongwe Primary School
Mr.	Lee	Mbobela	A/District Education Officer, Lusaka Urban
Mr.	$1_{11}, \mathrm{H}_{11}$	Milimu	Head of Planning Unit, MHE
Mr.		Molotsi	Chief Inspector of Schools, MGEC
Mr.	A+ .	Monsen	Assistant Director, Zambia Education Project
Mr.	E.C.	Mulenga	Planning Officer, UNZA
Mr.	\$i	Mwufuliwa	Headmaster, Chitanda Primary School
Mr.	1º.D.	Naube	Senior Regional Planner, NCDP
Mr.		Nkasi	Headmaster, Mabatma Gandhi Primary School
Mr.	с.	Norrby	MAND
Mr.	P+	811	Under Secretary, MGEC
Mr.	E.M.	Silanda	Senior Statistician, Planning Unit, MGEC
No. +		Simuchopa	Chief Education Officer, Lusaks Region
Mr.	I.	Vertinen	Head, FINNIDA, Lusaka
Mr.		Zulu	Headmaster, Jacaranda Primary School
			A POP CONSTRUCTION AND AND AND ADDRESS OF A START POP CONSTRUCTION

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