

SUPPORTING ZAMBIAN EDUCATION IN TIMES OF ECONOMIC ADVERSITY

**An Evaluation of Swedish-Zambian
Cooperation in Education 1984-1989**



Report of a SIDA Consultancy Team

**Suya Chidumayo, Ingemar Fägerlind,
Annika Idemalm, Christine McNab,
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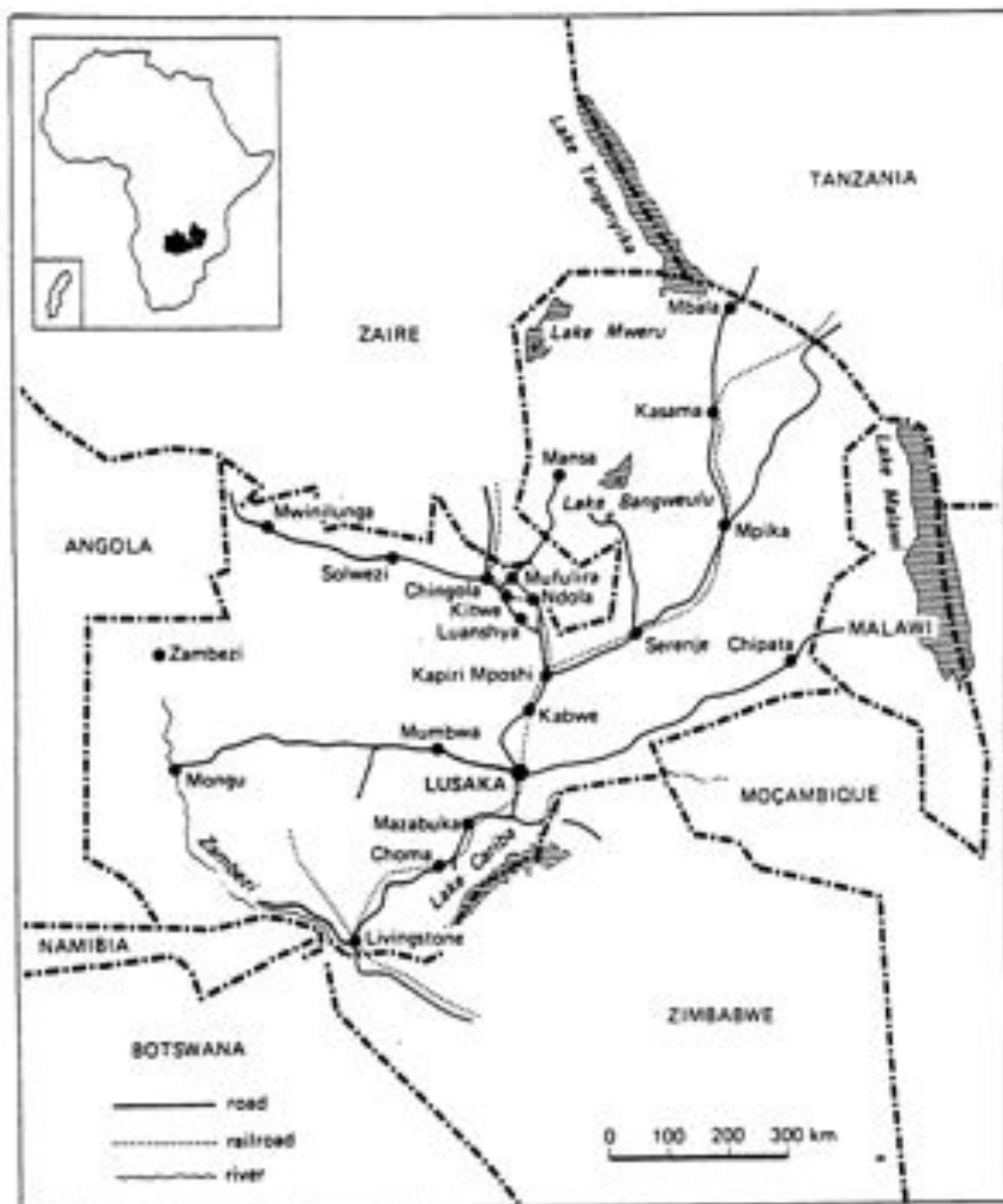
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August 1989



ZAMBIA



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ABBREVIATIONS

CDC	Curriculum Development Centre
DCO	Development Cooperation Office
DTEVT	Department of Technical Education and Vocational Training
EEC	European Economic Community
ESSP	Education Sector Support Programme
FINNIDA	Finnish International Development Agency
FNDP	Fourth National Development Plan
GRZ	Government of Republic of Zambia
IMF	International Monetary Fund
K	Kwacha
KKF	Kenneth Kaunda Foundation
KTH	Kungliga Tekniska Högskolan (Royal Institute of Technology, Stockholm)
LCTH	Lusaka College for Teachers of the Handicapped
MDEC	Ministry of General Education and Culture (now renamed MGEYS)
MGEYS	Ministry of General Education, Youth and Sport
MHE	Ministry of Higher Education (now renamed MHEST)
MHEST	Ministry of Higher Education, Science and Technology
NCDP	National Commission for Development Planning
NISTCOL	National In-Service Training College
NORAD	Norwegian Agency for Development Cooperation
PTA	Parent-Teachers' Association
SHAPE	Self-Help Action Plan for Education
SEK	Swedish Crown
SIDA	Swedish International Development Authority
TEVT	Technical Education and Vocational Training
TNDP	Third National Development Plan
TVTC	Technical and Vocational Teachers' College
UNZA	University of Zambia
WID	Women in Development
ZEMP	Zambia Educational Materials Project
ZNUT	Zambian National Union of Teachers
ZIT	Zambia Institute of Technology

FOREWORD

This report has been prepared by a joint Zambian-Swedish team of consultants for the Swedish International Development Authority. The team consisted of two education specialists, an education planner, an economist and a SIDA evaluation officer. The team leader was Professor Ingemar Fägerlind of the Institute of International Education (IIE) in Stockholm. Christine McNab, also of the IIE, has had the main responsibility for writing this report and Annika Idenalm, SIDA, has been responsible for the gender aspects of the study. Professor Ben Mweene, who is an advisor to the Ministry of Higher Education, Science and Technology in Zambia, has provided the data on education in Zambia whilst Mrs. Suya Chidamayo has investigated the economic background to developments in education in the 1980's.

The team's fact finding mission in Zambia has been facilitated by the generous cooperation of the Ministry of General Education Youth and Sport, the Ministry of Higher Education Science and Technology, the University of Zambia and the Zambian National Union of Teachers. We would like to thank all the people in these institutions who have contributed to the evaluation and likewise the SIDA staff, both in Stockholm and Lusaka, who have facilitated the work of the team.

The evaluation has been carried out over the period April to August 1989. On the 30th June, the President of Zambia announced a wide-ranging set of economic measures. It has not been possible to more than mention these measures in the text of the report. As, however, they are in line with previous economic adjustment packages, the team considers it unlikely that they will lead to any major changes in the patterns of educational provision and participation outlined in this report.

Ingemar Fägerlind,
Stockholm, 30th August 1989.

EXECUTIVE SUMMARY

1. **The ESSP** In 1980, Swedish support to Zambian education changed from project to sector support. The Education Sector Support Programme (ESSP) has six sub-programmes: educational planning, educational materials and equipment, teacher training, special education, technical education and vocational training, and support to the School of Engineering at the University of Zambia. The main emphasis is on support to the qualitative improvement of primary education.
2. **The Evaluation** The third agreement period of the ESSP is in its final year. As part of the preparations for a new sector support agreement, a joint Zambian - Swedish evaluation team consisting of two education specialists, an educational planner, an economist, and a SIDA evaluation officer, have prepared this evaluation report on the ESSP for the period 1984-1989.
3. **Terms of Reference** The evaluation team has, in accordance with the terms of reference for this study, concentrated on three main areas:
 - the development of the education sector in Zambia in the light of economic development plans,
 - the achievements, effects and impact of the sub-programmes in the ESSP in the period 1984-1989, and
 - the involvement of women in the education sub-programmes and the potential and actual benefits for women.
4. **Sources of Information** The study is based on materials such as national economic development plans, education plans, project documents, evaluation reports and other consultancy reports. It is also based on discussions with staff members of: the two Ministries of Education in Zambia, with the University of Zambia, staff involved in implementing Swedish-supported programmes, the Zambian National Union of Teachers, and SIDA staff in Stockholm and Lusaka. Preliminary findings and recommendations were presented at a meeting with representatives of the above mentioned institutions on 24th May, 1989 and views expressed at the meeting have been incorporated into the report.
5. **Outline of the Report** The first section of the report deals with background economic and social factors which have an impact on the development and implementation of the ESSP: the economy; employment; population size, growth and distribution; the position of women in Zambian society; and the incidence of absolute and relative poverty. The second and third sections deal with education in Zambia in the 1980s, including the impact of the economic crisis and donor support to education, and the Swedish support to education in Zambia over the same period. Findings and

recommendations are presented in the final section of the report.

6. **The Economic Crisis** Zambia has been in a situation of economic crisis since the mid-1970s. The economic crisis is related to mineral dependency (copper) which makes the economy very sensitive to external shocks. Corrective measures have included devaluations of the Kwacha, freeze on public sector employment, foreign exchange restrictions on recurrent spending, and efforts to diversify the economy including the development of agriculture. There have been a series of agreements with the IMF but the Government of Zambia (GRZ) has since May 1987 withdrawn from IMF agreements.
7. **Employment** The economic crisis has led to a decrease in the number of formal sector jobs. Only 10 per cent of the labour force are in formal employment. The majority of the workforce is therefore in the informal sector including subsistence farming, non-farm activities or in the urban informal sector. The informal sector is the main source of income for women.
8. **Poverty** Zambia's decline from being a middle-income to a low-income country has increased the incidence of absolute poverty and changed the pattern of relative poverty. Economic decline has most seriously affected the urban population so that the income gap between urban and rural dwellers has declined. However, absolute poverty in rural areas is still widespread, it being estimated in 1980 that almost 80 per cent of rural households cannot satisfy their basic needs. The extent of poverty has to be taken into account when the costs for education are being increasingly shifted to family and community.
9. **Gender Inequalities** Despite government commitment to the eradication of gender inequalities in Zambian society, traditional attitudes to women are still evident in the higher dropout of girls from school, in their low level of participation in tertiary education, and in their difficulties in gaining employment in the formal sector.
10. **Participation in Education** Participation in education in Zambia has been remarkably resilient in the face of economic decline but the limits to this resilience may now have been reached. The gross enrolment rate for primary education is over 90 per cent. There are, however, bottlenecks in primary school provision, at Grade One level in urban areas, and Grade Five in rural areas. The Grade Five enrolment problem is being successfully tackled by multigrade teaching whilst the Grade One problem is proving more intransigent. Some progress has been made in providing special education for handicapped pupils. Enrolments in secondary education have remained at around 23 per cent. Facilities for technical education and vocational training are being increased but this sub-sector suffers from lack of staff and problems in acquiring consumable teaching materials. Teacher training enrolments have been stable at about 4,500 students

per year but will need to be expanded because of the growth in population. University enrolments have remained constant at about the same figure.

11. **Economic Crisis: The Impact on Education** The impact of the economic crisis on education has been severe. There has been a drastic reduction in the budgetary allocation to education. Whilst enrolments have been maintained, the economic crisis has seriously affected the quality of education. Schools are short of learning materials and furniture, and maintenance and repair of the buildings is a major problem. Primary schools are particularly adversely affected by the lack of funding. The State is now paying only teachers' salaries and these salaries have fallen in real value. School supplies including furniture and books are being financed by donors and by parents and communities. School buildings have also become the responsibility of parents and communities. Boarding costs at secondary school must now be met by parents. By the transfer of costs to parents, high enrolment rates for primary education have been maintained. Transfers of costs to students and parents are now being planned for tertiary education. The transfer of costs, or "cost-sharing", is placing a heavy burden on parents already being impoverished by the economic crisis. It is also placing on them responsibilities for which they are unprepared, for example school building, maintenance and repair.
12. **Employment and Education** The lack of prospects for formal sector employment for school leavers raises questions as to the relevance of schooling for the majority (75%) whose schooling encompasses only primary level. Lack of opportunities for wage employment also raises doubts as to parents' abilities to meet costs of schooling and therefore questions as to whether present enrolment rates in primary education can be maintained in the coming decade. If enrolment rates decline, there is a real danger that already marginalised groups -- the rural and urban poor and in particular girls and handicapped children -- will become increasingly under-represented in the school population.
13. **Impact of Population Growth** The maintenance of the quantity and quality of the education system is also threatened by population growth. The Zambian population is growing rapidly. From 5.7 million in 1980, it had grown to 7.5 million in 1988. With an estimated growth rate of 3.7 per cent per annum, the estimated doubling time is only 18 years. In 1988 the age-group 1 to 25 years accounted for 43 per cent of the population. This population growth increasingly endangers efforts to provide universal basic education of nine years duration. The situation is made even more acute by the uneven distribution of the population with more than 43 per cent living in urban areas. Urban schools are working on double and even triple shift to maintain enrolments at between 70 to 80 per cent of the local school age population.
14. **Donor Funding** The education sector is being supported by

donor funding from many countries. About 26 per cent of development aid went to education in 1987, making it second only to agriculture as beneficiary of donor funding. Sweden is the second largest donor to education after the UK and is the most important donor for primary education and the sole donor for special education. For primary education, the main donor-supported programmes are teacher training and provision of teaching materials. Support to secondary education is predominantly the provision of teachers, especially in maths and science. TEVT receives support from a number of donors and the university system continues to be a major beneficiary of foreign aid, the largest component of which is personnel.

15. **SIDA Guidelines** The ESSP is largely in accordance with the SIDA guidelines for education assistance. These indicate that there should be an emphasis on basic education and a concern to improve internal effectiveness within programmes and projects. The guidelines also indicate that there should be a limited amount of institutional cooperation within higher education and research. The ESSP reflects rather less well the SIDA guidelines for Women in Development which indicate that assistance as a whole should become more women-oriented and designed in accordance with the special needs of both men and women.
16. **ESSP** In the following paragraphs, 17 to 26, the ESSP sub-programmes are summarised.
17. **Planning Unit** Support to the Planning Unit of the MGEYS has the objectives of capacity building and improving output of educational statistics. The Planning Unit plays a key role in the functioning of the education system including the collection and publishing of educational statistics necessary for a master plan for educational development. It also coordinates the ESSP. There is technical assistance to the central unit and some training abroad for Zambian staff, but there have been problems with maintaining staffing levels at central level. There are some successful training programmes mounted for officials working at other levels of the system. These include the mobile training programme and university level short courses for educational planners. Another successful activity is the organization and expansion of multigrade teaching in rural schools. Support to self-help activities for the construction and maintenance of primary schools by local communities is at pilot project stage.
18. **Educational Materials and Equipment** The main sub-programme of the sector support during 1984-1989 is the educational materials and equipment programme which includes support to textbooks, teachers' handbooks, exercise books and school desks.
19. **School Desks** The school desk programme has made very uneven progress with serious difficulties encountered with the design, production and distribution of desks. Recently, school desk production has been decentralized to province

level and the quality of production has increased. There are still problems with shortages of raw materials in some areas, and transportation. A local consultant has been employed since 1988 to monitor the programme.

20. **Textbooks** Support to textbook production is coordinated with Finnish support to the Zambian Educational Materials Project and is implemented through the Kenneth Kaunda Foundation. The Swedish support is confined to primary level. Although textbook production has improved, there is still a large backlog of titles waiting to be printed. There are also problems with distribution, particularly to communities off the line of rail. More limited Swedish funding has been used for the purchase and distribution of school maps and atlases.
21. **Exercise Books** The provision of exercise books to schools is a direct support to parents who otherwise are responsible for buying them but who cannot always obtain them or afford them. The main problems with the programme have included shortages of paper, and distribution off the line of rail. There was a huge backlog in 1987 but by September 1988 this had been cleared and nearly 5 million books printed and distributed to the districts.
22. **Teachers' Handbooks** Teachers' handbooks, developed by the CDC, are being printed with Swedish funds but there have been production difficulties. By June 1988, only 36 out of a total of 70 titles had been printed and there were still production problems.
23. **Teacher Training** Support to primary teacher training is a major component of the Swedish support aimed at making a direct contribution to the qualitative improvement of primary education. In the early part of the period under review, there were two sub-programmes, neither of which were successfully implemented: support to Resource Centres and to Production Units. These were replaced by the Self Help Action Plan for Education (SHAPE) in January 1987. SHAPE is a radical departure in support to teachers and schools. The programme is concerned with increasing the relevance of education for local and national needs through resource work in regions, districts and colleges, leadership training programmes at regional and national levels, and support and monitoring of ongoing resources and productive work. This support includes the purchase and distribution of basic materials, equipment and transport for resource development and education with production activities. The first phase of SHAPE ends in December 1989. A recent evaluation suggests that in the second phase there should be an increased emphasis on teacher support at school and zone (groups of nearby schools) levels.
24. **Special Education** There is a firm commitment in Zambia to the provision of educational opportunities for all children including those with handicaps. It is intended that provision for special education should be integrated into the school system. There is a special education

coordinating committee and a special education teacher training college (LCTH). There is Swedish support to a variety of special education sub-programmes including the committee and college, the braille press, curriculum development, TEVT, and the inspectorates of both education ministries. A recent evaluation suggests that future Swedish support should be concentrated on the integration of special education teacher training in all colleges and institutes, establishment of a professional infrastructure, and manpower training in the education system.

25. **DTEVT** The major component of the DTEVT staff development programme is scholarships for training abroad. There are also some staff development activities in Zambia. Whilst the support from SIDA and other development agencies has strengthened the DTEVT's training capacity, there are increasingly serious problems of attrition of trained staff, particularly lecturers in engineering and business studies returning from training abroad.
26. **UNZA** The support to the School of Engineering, UNZA, takes the form of institutional cooperation with KTH, Stockholm. The support is sub-divided into Land Survey, and Electronics and Telecommunications. There is also a limited general support to the university. The university as a whole has serious problems of staff attrition.
27. **Observations and Recommendations** The team has made a number of observations about the ESSP and recommendations for each sub-sector. Suggestions are also made for three complementary areas to be incorporated into the existing programmes: women in development, adult literacy, and distance education.
28. **Observations**
 - Given the positive findings of previous and present evaluations of the ESSP and its sub-programmes, the overall profile of the programme should be maintained.
 - The emphasis on primary education, in particular grades 1 - 7 and including special education, should be continued, both in view of the intrinsic importance of this level for basic literacy and numeracy skills but also because Sweden is the major donor to primary and sole donor to special education.
 - The support to the quantitative and qualitative improvement of education, especially primary education, means that inevitably substantial local costs will be incurred and will need to be met if Swedish-supported programmes are to function effectively.
 - As a long-term objective for development aid is to increase self-reliance, it is considered important that in the next agreement period there should be greater emphasis on in-country capacity building. Institutional cooperation is an effective tool for the strengthening or development

of such capacity and could be extended beyond the present support to the KTH/UNZA programme.

- The team has given special consideration to gender issues in Zambian education and suggests that as the participation of girls and women is lower than that of boys and men, Swedish support should include support to activities that positively discriminate in favour of females.

29. **Recommendations** The recommendations are summarised by sub-programme in paragraphs 30 to 36.
30. **Planning Unit** It is recommended that the support to the Planning Unit should continue but the Unit be Zambianized as soon as possible with external inputs in the form of short term consultancies only. Overseas training at Diploma and Masters level should be phased out and replaced by in-country training. The Mobile Training Programme should continue to receive support. There should be evaluations of multigrade schools and of the experimental school building pilot project. There should be a feasibility study regarding support to communities and PTAs now responsible for maintenance and repair activities.
31. **Educational Materials and Equipment** This should continue to be a major item of Swedish support and continue to be coordinated with Finland's activities in this field. The backlog of books should be printed abroad in the region and exercise books should continue to be a priority item. Distribution still needs improving. The school furniture production at district level should be evaluated.
32. **Teacher Training** The second phase of SHAPE should be supported but the post of SHAPE executive secretary should be Zambianized from the beginning of Phase Two. Attention should urgently be paid to the locating of SHAPE within the structure of one of the two education ministries. There should be a new emphasis on school and zone level activities and support to training activities at district and regional level. NISTCOL should be supported as a training centre for key personnel. Local cost financing at school and zone levels will be vital for the continued development of SHAPE.
33. **Special Education** The effective development and integration of special education depends on the effective functioning of LCTH. When the staff situation has been improved, support should be given to the development of LCTH as a training and resource centre for special education teachers. In-service training courses for special education should be supported at LCTH, as should the costs incurred in curriculum development for special education as a component of regular pre- and in- service courses at other teacher training colleges. Other support could include minor research in special education, exploration of possibilities for regional cooperation in this field, and regional study tours. Steps should be taken to improve the functioning of the Braille Press.

34. **DTEVT** DTEVT training abroad should be phased out and replaced by in-country training, possibly at the new Copperbelt University. There should be support to cooperation with other TEVT institutions in the region and to study tours and staff workshops and seminars. The TEVT courses for handicapped school leavers should be evaluated after two years before decisions are taken regarding further support.
35. **UNZA** The support to the KTH/UNZA School of Engineering should continue as should the general support to the university. The possibility of using the UNZA School of Education for training in educational planning should be explored and supported, for example by short term consultants or institutional cooperation, if found to be a viable alternative to training abroad. It is also suggested that there should be support to cooperation between the School of Education and LCTH.
36. **Complementary Areas** Feasibility studies should be carried out regarding the viability of including in the ESSP three new areas which could make a positive contribution to the development of the present sub-sectors. These areas are Women in Development, Literacy and Post-Literacy, and Distance Education. The provision of support to WID projects outlined in the FNDP should also be considered.

1. INTRODUCTION

1.1 The Objectives of the Study

Swedish support to educational development in Zambia was initiated shortly after independence in 1964. In 1980 there was a change from project support to sector support. The Education Sector Support Programme (ESSP) has six sub-programmes: educational planning, educational materials and equipment, teacher training, special education, technical education and vocational training, and support to the School of Engineering at the University of Zambia. The main emphasis is on support to the qualitative improvement of primary education.

The first ESSP agreement covered 1980-83 with MSEK 56.0, the second agreement covered 1984-85 with MSEK 47.5. The current third agreement covers 1986-89 and amounts to MSEK 107.5, and a total amount of SEK 203,5 million for the whole period.

In the Agreed Minutes from the annual consultations held in September 1988, it was agreed that a joint evaluation should be undertaken in 1989 with the main purposes of evaluating the impact of SIDA-funded activities during the previous and present agreement periods, providing background information for decisions on future Swedish support, and making recommendations for future support within the framework of national needs and priorities.

The details of the scope and focus of the evaluation are given in Annex 2, the terms of reference for this study. There are three main areas for investigation:

- the development of the education sector in Zambia in the light of economic development plans,
- the achievements, effects and impact of the sub-programmes in the ESSP in the period 1984-89, and
- the involvement of women in the education sub-programmes and the potential and actual benefits for women.

The investigation has been carried out by a consultancy team consisting of two education specialists, an educational planner, an economist, and a SIDA evaluation officer with special responsibility for the gender aspects of the study.

1.2 Methodology

This evaluation study is based on materials readily available in Zambia and Sweden such as plan documents, evaluation reports, and other consultancy reports. The documents all

mainly cover the period 1983-89 and are listed in the bibliography, Annex 4.

Prior to the meeting of the whole team in Zambia, 14 May to 24 May, the members of the team worked separately to prepare background documents for the evaluation. These documents cover developments in the education sector, the economic and social context of these developments, the Zambian-Swedish cooperation in the field of education, and the gender aspects of education and development in Zambia.

With these desk studies as a guide, the team discussed the ESSP with staff members of the Ministries of General Education Youth and Sport (MGEYS) and Higher Education, Science and Technology (MHEST), the University of Zambia (UNZA), with staff involved in implementing Swedish-supported programmes, with the Zambian National Union of Teachers (ZNUT), and SIDA. The team also made a one day field trip to visit a primary school, secondary school and the National In-Service Training College (NISTCOL). The persons met are listed in Annex 1.

Following these discussions, preliminary findings and recommendations were prepared which were then presented at a meeting to the Ministry, University and SIDA staff concerned with the ESSP. The views expressed at that meeting are incorporated in this report.

2 THE ECONOMIC AND SOCIAL CONTEXT

2.1 The Economic Situation

At Independence, in 1964, Zambia had a dual economy with the modern sector completely dominated by just one activity -- copper mining. The share of mining in GDP was 47 per cent. The dominance of the copper industry was reflected in many other important economic variables: in total exports it accounted for 92 per cent, in government revenues 53 per cent, and in African employment 18.1 per cent (Elliot, 1971). This mineral dependency has made the Zambian economy very sensitive to external shocks. Prosperity and poverty closely follow the pattern of world copper prices. The Zambian economy experienced economic boom during the first ten years of independence, but since 1975 there has been a serious decline that set in with the collapse of primary commodity prices in 1973/74.

There has been no shortage of policies to deal with the economic problems: economic plans, position papers, IMF adjustment packages and the GRZ's own packages. Corrective economic measures began to be taken in the second half of the 1970s. These included devaluations of the Kwacha since 1976 and agreement in 1981 to an International Monetary Fund economic programme designed to reduce inflation and restore the balance of payments. This was converted in April 1983 to

a one-year standby agreement when performance criteria could not be met. This was in turn replaced by a new agreement with the IMF in July 1984, and there was a new stand-by arrangement with the IMF from February 1986 designed to last for 20 months. The measures taken during this period, with the intention of curbing overall expenditures and reducing budgetary deficits, included a freeze on public sector employment, foreign exchange restrictions on recurrent spending, and efforts to increase economic diversification and domestic production in agricultural and primary commodity sectors.

In the 1987 study "Education and Economic Crisis" (Johnston et al) it was found that in Zambia the economic crisis had manifested itself in the following ways:

- GDP had fallen in real value,
- the contribution of minerals to GDP had dropped from 44 per cent (1964-1970) to 14 per cent in 1985, with the contribution to government revenue declining from 59 per cent to 13 per cent over the same period,
- the value of the Kwacha had steadily declined over the previous six years (1982-April 1987),
- the per capita growth rate for 1984-85 stood at -1.0 per cent,
- and there was a huge foreign debt, 4.63 billion USD.

A statistical summary is set out in Table One.

This economic crisis has been analysed by Andersson and Kayizzi-Mugerwa (1989) in terms of the Zambian social, political and economic experience: mineral dependence, failure to attain stated goals, and the issue of equity. Regarding the first of these, mineral dependency, it is noted that:

This has not only influenced the pattern of the country's colonial experience, economic structure, rate of urbanization, and size of the public sector but also is a major factor behind the current debt crisis, balance of payments difficulties and the dim prospects for future economic growth. The issue, with regard to the nation's much diminished income, is how to reverse the production and expenditure structures that evolved from this dependence. (page 1).

Regarding failures in goal attainment, Andersson and Kayizzi-Mugerwa comment that underlying reasons include the plans being too unrealistic, management too lacking in talent for successful implementation, which has been accentuated by the "shuffle-syndrome", changes of key personnel within ministries and parastatals being too frequent and disruptive. As for the issue of equity, it is commented that although the case for an egalitarian society in Zambia is stated unambiguously in all

policy statements, the gap between the rich and poor groups has not been reduced over the past twenty five years.

Anderssen and Kayizzi-Mugerwa analyse the IMF packages for Zambia in terms of five policy areas in which they sought to bring about change:

pricing policies -- getting market prices right in order to improve the economy's incentive structure and efficiency, especially higher prices for agriculture produce (agriculture being the main feasible economic alternative to copper mining) and "economic prices" in the parastatals.

budgetary and fiscal policies-- to tailor government spending to revenue generation. This entails reducing government employment, reduction of subsidies to consumers and producers, putting or increasing tariffs on certain government services, and improving administration of taxes.

monetary policy -- to reduce domestic credit and control inflation.

trade policy -- to liberalize the exchange rate, import licensing and foreign exchange allocation policies of the government, with the aim of increasing the efficiency of domestic firms and stimulate non-traditional exports.

institutional reform -- in particular to streamline and increase the efficiency of the Bank of Zambia, government departments, and parastatals, some of the latter to be divested by the government.

The policies pursued were not effective for the achievement of the economic goals which have been consistently stated by the government since independence: economic diversification, employment creation, removal of regional and sectoral inequalities, bringing about sustainable external balance, and expanding the socio-economic infrastructure.

On 1st May, 1987, the Zambian government abandoned the IMF economic programme because of the lack of economic progress but also because of the social hardships and political unrest it was entailing. For example, when food subsidies were removed, there were riots. The difficulty in following the economic recovery measures prescribed by the IMF are a sign of the social and human dimensions of the crisis as Zambia has declined from being a prosperous, middle-income country to being a low-income country.

The IMF packages were replaced by the New Economic Recovery Programme and more recently by the Fourth National Development Plan. This is based on the concept of "growth from our own resources". It contains the usual GR2 objectives for economic progress but adds to these a focus on population, women and youth issues. The plan covers the period 1989-1993 and its economic objectives include:

- a growth rate of 3.0 per cent per annum.

- reduction of the budget deficit to 3 per cent of GDP in 1989 and to 2 per cent in 1993,
- reduction of inflation to 30.35 per cent in 1989 and below 20 per cent in 1993,
- reduction in the growth of money supply to 40 per cent in 1989 and only 19 per cent for the rest of the period.

Andersson and Kayizzi-Mugerwa comment:

"Unfortunately, the objectives of the plan seem not to be consistent with the economic reality of Zambia. Though interrelated, they are internally conflicting in terms of demand on resources and cannot be reached simultaneously. For example, if the government managed to reduce the fiscal gap, through a deep cut in subsidies, the inflation rate will definitely be reduced. However, when the coupon system* is phased out in 1992 and consumers face market prices, it is easy to see a scenario where most Zambians, already living at the subsistence level, will demand increases in incomes, which eventually will result in an accelerating economy." (1989:27).

On the 30th June, 1989, the President announced a far-reaching package of economic measures (GRZ, 1989b)***:

- devaluation of the Kwacha by 60 per cent**,
- decontrol of all prices except mealie-meal,
- revision of the "coupon system" so that only those with an income of less than K25,000 p.a. will benefit,
- public sector pay rises of up to 30 per cent for the "high-income" group and 30 per cent for the "low-income" group, and
- adjustments to bank interest rates for loans and deposits.

* Coupons are a subsidy on mealie meal for urban and peri-urban dwellers. Rural villagers and farmers are excluded from the system as they are expected to grow their own maize.

** The Kwacha was devalued by 32.8 per cent, from SDR 0.0746 per Kwacha to SDR 0.0501 per Kwacha. In Dollar terms this means a change from 0.095 US Dollar per Kwacha to 0.065 Dollar per Kwacha. This is roughly equivalent to a change from 10 Kwacha per Dollar to 16 Kwacha per Dollar and therefore the announcement of a 60 per cent devaluation.

*** The Presidential address has been followed by a series of further directives but it has not been possible to take account of them in this report.

Although some improvements of the indicators did occur during the 1987-1988 period, the future outlook remains rather bleak unless this new economic package succeeds in stimulating the economy. Unresolved problems include the expected continued decline in the quality and quantity of the copper ore: the output and export levels which have already started falling will continue to do so at a faster rate. Furthermore, the world copper prices which picked up during 1987-1989 may fall again due to technological changes and increased supply on the world market. This means that the reduction in per capita incomes will continue as will the social problems this generates. While much has been done to stimulate agriculture, the main viable alternative to mining, much more remains to be done by way of provision of inputs and the collection and storage of harvested crops.

It is against this background of continuing economic crisis and uncertainty that the provision of development aid to the education system needs to be seen. However, before the impact of the crisis on the education system is reviewed, four other features of the socio-economic system which are of relevance to how the education system develops are considered: employment, population, the position of women, and relative and absolute poverty.

2.2 Employment

The growth in formal sector employment in Zambia has consistently been less than planned, even in the period of economic success between 1964 and 1974. From 268,920 workers in formal employment in 1964 there was an increase to 342,920 in 1974. This did not meet the First National Development Plan of an increase by 100,000 jobs during the plan period. Formal sector employment peaked in 1975 at 393,490 jobs, or 20 per cent of the labour force, before setting on a downward trend which is still continuing. By the end of 1988 only 360,000 workers were in formal employment, representing less than 10 per cent of the labour force. Recent policies have sought to promote job creation in small-scale industries and in the rural sector as the prospects for employment promotion in the formal sector appear to be limited. K50 million was set aside in the 1988 budget for public works and resettlement schemes but by March 1989 money had mainly been disbursed only for the preparation of projects (Institute of African Studies, UNZA, 1989).

The informal sector provides over 30% of household incomes, employing three times as many people as the formal sector (FNDP). In 1986 it was calculated by the Labour Force Survey that 1.8 million persons were engaged in subsistence farming, in non-farm activities or in the urban informal sector (GRZ, 1987). The survey was the first attempt to cover the informal sector for the whole country. Andersson and Kayizzi-Mugerwa estimate that in 1988 the informal sector employed 2 million persons. Mhone (1988) comments that the informal sector has

not shown any tendency towards viable economic growth but is prone to lateral expansion and involuntary growth. This can mean a decline in real incomes in this sector as more sellers try to capture the shrinking formal sector demand.

The informal sector is the main source of income for women. Although they mainly have some years of primary schooling, they often lack formal educational qualifications or practical experience and are therefore unable to compete with men for the few jobs available in the formal sector.

2.1 Population Size, Growth Rate and Distribution

The results from three national censuses show that the population of Zambia is growing rapidly. In 1963 the population was 3.5 million, in 1980 it was 5.7 million, and by 1988 had further increased to 7.5 million. The rate of growth of the population is estimated to be 3.7 per cent per annum in the current period 1985 to 1990. This is higher than the African average of about 3 per cent per annum and is among the highest in the world. At this rate of growth the doubling time for the population will be only 18 years. This has serious implications for the provision of education in terms of both quantity and quality. In 1988 the age group 1 to 25 years was estimated to have reached 3.2 million (43.1%). This imbalance in the population creates a high demand for school places and job opportunities (FNDP).

The population is very unevenly distributed. Zambia is the third most urbanized country in Africa, after Algeria and South Africa. 43 per cent of the population lives in urban areas. In the rural areas there is sparse and scattered settlement. Although the tremendous growth in Zambia's urban population has occurred mainly since Independence, the roots of this phenomena lie in the colonial period when men moved to the towns as migrant workers without their families. At Independence, two thirds of households lacked male heads. The subsequent abolition of the restrictive regulations governing migrant labour allowed families to move into the urban areas. However, the pattern of male migration from rural to urban areas has persisted. The 1985 population census showed that 35% of the households in the three northern provinces lacked male heads, and 50% in certain areas. Over the whole country at least 200,000 small peasant households are managed by single women (Chr. Michelsens Institutt, 1986; SIDA 1987).

This drain of the rural areas of working age men has led to severe economic and social consequences: divorces, split families, undernourishment are all common. The situation is made even worse by the neglect of social services in the more sparsely populated areas. Furthermore, women who are left behind by their husbands do not have control over any small profit they might make from agriculture. This group of women and their children are one of the most neglected groups in Zambian society (SIDA, 1987).

2.4 Women in Development

The Zambian Party and Government have adopted a very clear policy in favour of the advancement of women equally with men. This policy has, however, to be seen against the background of socialization patterns in Zambia which are clearly based on gender lines. For example, traditional attitudes towards the education of girls still persist. Girls are expected to provide help in the household as well as in agricultural tasks. Many parents are thus reluctant to encourage their daughters to continue their education after Grade 5 and this is where the attrition of girls from education begins.

While a few women have been successful in some areas, the majority of women lag behind men in all areas and have more limited access to infrastructure facilities and services. While women make up 60 per cent of the working age population in rural areas, development programmes have reinforced traditional and cultural attitudes, which view women as housewives rather than producers. This has led to women and children in female-headed households lacking access to capital and security services necessary for agriculture. Development efforts have been limited to traditional activities of sewing, cooking, gardening and homecrafts without the opportunity of involvement in decision-making or planning.

In the Fourth National Development Plan, a set of objectives are presented for Women in Development. The overall objective is to ensure that women are participants in and beneficiaries of development. Among the long- and short-term objectives are the following:

- ensure the improvement of socio-economic conditions of women,
- bring about a fuller integration of women in the development process,
- improve the collection, processing, analysis and storage of statistics,
- improve the living conditions and general welfare of rural women,
- reduce maternal morbidity and mortality rates,
- increase and sustain the rate of women in wage employment.

There is a set of strategies laid down in the FNDP for fulfilling these objectives. They include awareness-building and as part of this there will be a review of school curricula and elimination of all sex-role stereotyping and gender bias in educational programmes and textbooks. The activities will also include establishing Women in Development sections in the planning units of sector ministries and parastatals and establishing a Training and Research Centre on Women.

2.5 Relative and Absolute Poverty

The extent of poverty, in particular absolute poverty, is an important consideration in the planning of education sector support given the increasing financial burden being placed on families for the education of their children. Andersson and Kayizzi-Mugerwa (1989 op cit) analyse the impact of the structural adjustment policies on incomes. They found that the gap between rural and urban incomes had diminished because urban groups are experiencing substantial reductions in real incomes whilst rural groups have maintained and maybe improved their incomes. Wide disparities, however, still remain within the rural sector. They estimate that absolute poverty in the urban areas has increased from 26 per cent of the population unable to satisfy their basic needs in 1980, to 31 per cent in 1988. Regarding the rural population, they comment: "While the rural population has experienced an improvement in relative poverty, the alarming 1980 estimate of almost 80 percent not satisfying their basic needs probably is as high in 1988." They further comment. "An increase in absolute poverty is evident from the deterioration in Zambian health standards and the increases in malnutrition, that have reached alarming levels." (page 12).

3 EDUCATION IN ZAMBIA

1.1 Education Objectives

Since 1964, the GRZ has attached particular importance to education both as a way of correcting the imbalances of the colonial era and in recognition of the importance for national development of human resources. Thus in all development plans since Independence two education objectives have persisted:

- the quantitative development of the formal school system, and
- qualitative integrity.

These objectives for the education system in Zambia were incorporated into the "Educational Reform Proposals and Recommendations" published in 1978, following a three year period of discussions and analysis of a reform proposal for education. The 1978 Reform Document devotes considerable attention to the design and development of curricula that will have real significance in meeting the needs of individuals and the country. Special attention is given to: mathematics; science and technology; education with production; the needs and requirements for rural development; and cultural, social and political relevance. Redesign of the curriculum was seen to have wide implications for the production and supply of educational materials and equipment, and for the supply and quality of trained teachers. During the 1980s, there has been an increased emphasis on community self-help in education.

There has also been an emphasis on science and technology education.

In 1986, a University of Zambia research team (UNZA, 1986) noted that the two objectives have consequences in terms of teacher education and supply, evaluation, technical education and vocational training, continuing education, special education, pre-school education, and the organization and management of the school system. As will be shown in sections 3.2 and 3.4, in the prevailing situation of economic crisis the two main objectives have come into conflict: access to education has increased, but there has been no corresponding increase in resources with the result that the quality of education has declined over the years. In an effort to resolve this problem, a third formal objective for the education sector was included in the Fourth National Development Plan i.e. the "cost-effective strategy" which includes cost-sharing between government and users.

In the 1980s, there is a further major objective: to provide nine years of basic education for all children, beginning at the age of seven. The first step towards this is the development of sufficient facilities to allow every seven-year-old child to enter the system and proceed to Grade Seven. As there is at present a bottleneck at Grade One and again at Grade Five, there is an immediate concern to expand educational provision at these levels.

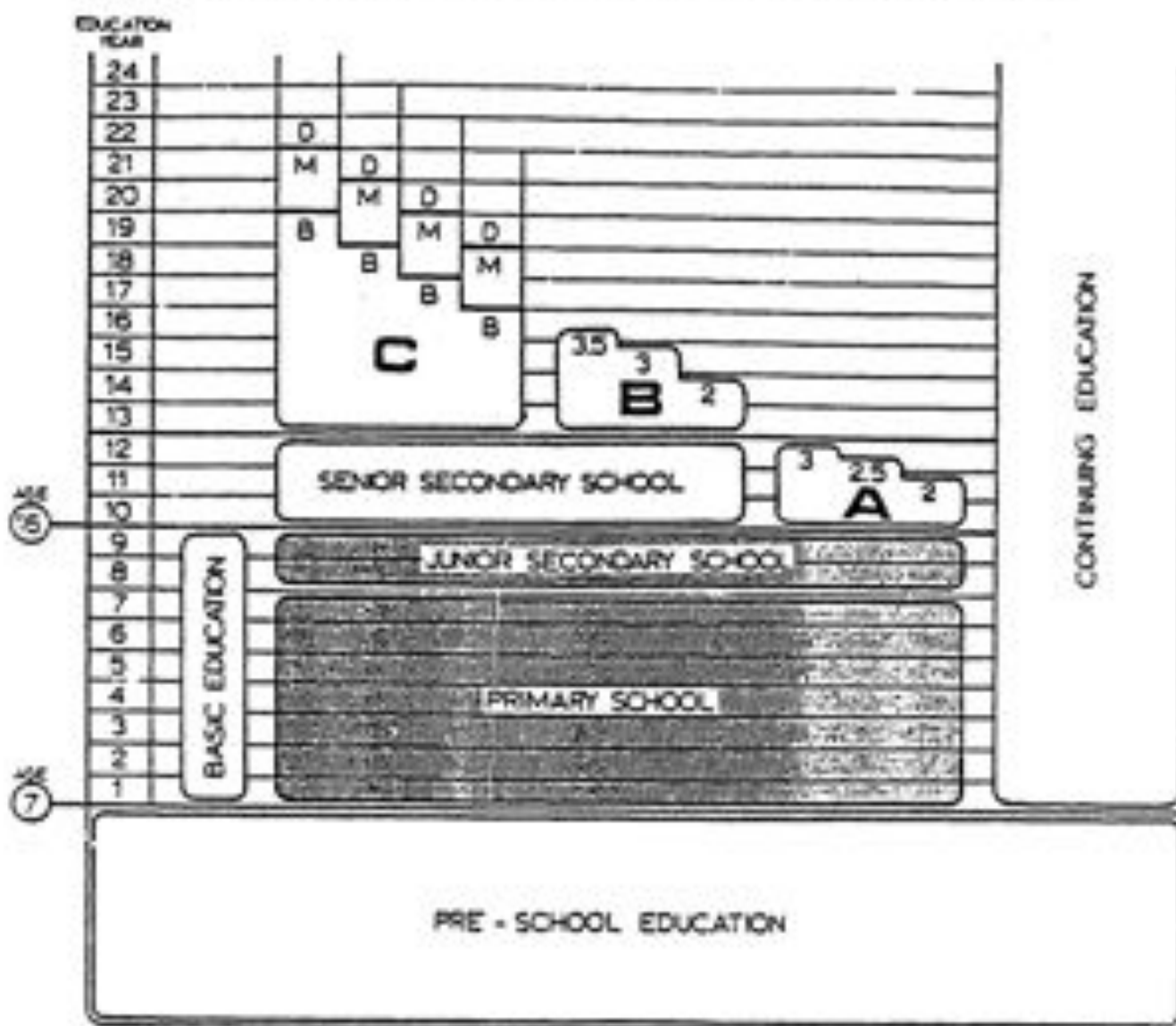
3.2 The Education System

Although the provision of nine grades of Basic Education is an important objective for education, the education system still has a primary - junior secondary - senior secondary structure, with public examinations at the end of each level determining access to the next level of education. The structure and organization of the educational system from independence to the present is shown in Figure One.

Primary Education

In the 1980s, significant progress has been made towards the achievement of universal primary education. In 1984, the participation rate for Grade 1 was 92 per cent and for the entire primary level 91 per cent (UNZA, 1986). The enrolments for Grade 1, Grade 5, and Grades 1-7 for 1983 and 1988 are shown in Table 2. Despite the high level of enrolment, there are some problems with the provision of sufficient places for all children in primary education. In 1984 there was a shortfall of 21,000 primary places, and in 1988 of 15,000 primary places (GRZ, 1989a). Likewise, the target of enabling every pupil who completed Grade 4 to enter Grade 5 and proceed to Grade 7 was not achieved.

Interim structure of education



NOTES

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

B Various programmes, e.g., Agriculture, Technology, Commerce, Nursing, etc., leading usually to a diploma.

C University degree:

D = Doctorate

M = Master

B = Bachelor: 4 years – Ordinary.

5 years – Engineering, Agriculture, etc.

6 years – Veterinary Science.

7 years – Medicine.

NB

In A and B there are also some courses which take less than 2 years.

From primary to senior secondary an education year represents a grade.

Figure 1. INTERIM STRUCTURE OF EDUCATION SYSTEM

A general problem is that of inadequate funding. It is estimated that the expenditure per student in 1975 was K2.19 per pupil per year at primary level, and in the period 1980-1983 it averaged only K1.79 per pupil per year. But there are also structural problems. Traditionally, the seven year primary course has been divided up into four years of Lower Primary and three years of Upper Primary. This has had the consequence of creating a bottleneck in the provision of primary education at Grade 5, as many rural schools provided only Lower Primary education. In 1988, the enrolment in Grade 5 was below target by 29,566. This bottleneck persisted because of the inability to provide additional classes at this level: 936 additional classes had been envisaged, but only 659 were provided.

As a consequence of the large-scale rural to urban migration since Independence, a further bottleneck has been created at primary level, i.e. access to Grade 1 in the urban areas. The three major urban centres of Zambia -- Lusaka, Kitwe and Ndola -- together account for about 25 per cent of the total population of the country. While the national participation rate in primary education is 92 per cent in Grade 1, it is only 78 per cent in these cities, and adequate facilities were available for only 45 per cent of the primary level age group. Only by overcrowding the classes and using double and triple sessions could 78 per cent of the eligible age group be provided with primary school places.

The progression rate from Grade 7 to Grade 8, i.e. from primary to secondary level, is very low: in 1983/4 it was just 23 per cent and enrolments have remained at around this level. Thus for nearly 80 per cent of the children, Grade 7 is the highest educational level which can be attained. This problem is particularly serious in view of the fact that virtually no formal employment prospects exist for people who have not completed secondary school. The only prospects therefore are self-employment, and the school leavers have not received the kind of education (i.e. in practical subjects) that might equip them for self-employment. Many school leavers at this level, especially in the cities, have resorted to street vending and other marginal activities as a means of economic survival.

Special Education

It is GRZ policy to integrate handicapped children into the education system. Eight special education units have been established in existing primary schools and there is a training college for special education in Lusaka, Lusaka College for Teachers of the Handicapped (LCTH). During the period under review, the enrolment of handicapped children increased as follows:

hearing impaired:	from 195 to 383 (primary)
	from 4 to 58 (secondary)
physically handicapped:	from 200 to 725
mentally handicapped:	from 105 to 542
blind:	to 330 (primary)
	to 220 (secondary)

(source: GR2 1989, FNDP).

The needs of handicapped pupils are becoming increasingly obvious with an enrolment ratio of over 90 per cent for primary education. It has been estimated by the World Health Organization that in a developing country up to 10 per cent of children are likely to be suffering from some form of handicap. These children are now increasingly likely to enrol for primary education at least in those areas without a Grade One bottleneck.

Secondary Education

The number of classes and enrolments in Government and in Aided secondary schools for the years 1983 and 1988 are shown in Table 3. The figures show that the planned targets for the FNDP were either achieved or exceeded. These achievements can be attributed to capital investment which was higher than that at other levels of education. During the period 1985-1988, six junior secondary schools were opened, providing thirty six additional Grade 8 classes. In addition, the number of self-help secondary schools increased from 24 in 1983 to 283 in 1988. Overall staffing levels at secondary school level are adequate at about 1.8 teachers per class (UNZA, 1986). Staff attrition would also appear not to be a problem as between 1979 and 1983 it declined from 12.8 to 2.1 per cent.

Secondary school teachers' subject areas and their levels of qualification are set out in Table 4. There appear to be three problem areas: the preponderance of non-graduate teachers; the heavy dependence on non-Zambian teachers especially in science and mathematics; and the inequitable distribution of teachers among disciplines, which is to the disadvantage of science and mathematics.

Although somewhat more endowed than primary level, the secondary level also suffers from under-funding. The 1975 expenditure per pupil was K9.86, and in 1983 it was K17.20 at current prices. This was just 25% of the minimum requirement as estimated by the Ministry.

Technical Education

The GR2 policy for technical education is to establish a Trades Training Institute in each of the Provincial Centres. This has been achieved with the exception of three: Mongu, Solwezi and Chipata where there are only a few staff houses.

Technicians and technologists have been trained at the Zambia Institute of Technology (ZIT), the Northern Technical College (NORTEC) and the Evelyn Hone College of Applied Arts and Commerce (EHCAAC). On the 1st January 1989, ZIT was incorporated in the newly-established Copperbelt University. It is intended that all programmes that were offered by ZIT will continue to be offered under the new organization. There are plans for some diploma courses to be up-graded to degree level.

Enrolments in technical education for the years 1984 to 1988 are shown in Table 5. The figures show a steady decline from 4,908 students in 1984 to 4,181 in 1988 in spite of the increasing demand for people with these skills and the apparently adequate infrastructure. The reasons for this decline are not clear. However, it could well be that staffing is the limiting factor. There is a paucity of suitably qualified teachers and during the period under review, an estimated 30 per cent of teaching posts in the specialized areas remained vacant. A further problem is funding. The high rate of inflation and generally poor state of the economy make it extremely difficult to obtain consumable materials. This adversely affects the teaching of technician, technologist and craft courses. A further problem with enrolments is the limited number of female students and their skewed distribution across subject areas. The proportion of women enrolled in technical and vocational colleges has increased from 13 per cent in 1975 to 23 per cent in 1980, but the overwhelming minority, 80 per cent, specialise in secretarial, office practice and home sciences, whilst the majority of men specialise in technical and engineering programmes (ZARD, 1985).

Another issue of major concern is the non-availability, locally, of high-level technical and technologist training of up to, for example, the U.K. Higher National Diploma level. It is, however, possible that the planned School of Technology at Copperbelt University will be able to offer this sort of training when it has become fully operational.

Teacher Training

The enrolment and output at Teacher Training Colleges for the years 1979 to 1988 is shown in Table 6. The total enrolment has been more or less constant at about 4,500 except in 1987 when it declined to 4,164. For the goal of universal primary education to be attained, Kelly et al estimate that an annual output of 2,200 will be required in 1987, rising to 4,200 in the year 2000 (UNZA, 1986). The intention has been to increase the enrolment at each college from an average of 300 to 500 and to establish a new primary teachers' college and a new science secondary teachers college. These objectives have not been achieved. One limiting factor for the increase in student numbers at existing colleges is the link between admission numbers and dormitory facilities: to increase student intake, more hostels will have to be built.

University Education

During the period under review, enrolments at university level have remained constant at about 4,500 students. In 1987, a decision was taken by the government to establish the "Ndola Campus" of the University of Zambia as a separate university, the Copperbelt University, to be located on the premises of the Zambia Institute of Technology, ZIT. The new university would, in addition to the two schools inherited from the Ndola Campus, have two additional schools: the School of Technology and the School of Forestry and Wood Science. ZIT was incorporated into the new university in January 1989 to form the nucleus of the School of Technology. It is intended to incorporate Mwekera Forestry College as the nucleus of the School of Forestry and Wood Science. Another important development which has taken place is the establishment of the School of Veterinary Medicine at the University of Zambia. The first batch of students graduated from the school in 1988.

While public expenditure by proportion is far higher per capita at university level than at any other level, this level of education still remains grossly under-resourced. Thus, supplies of textbooks, laboratory equipment and reagents are erratic. Subscriptions to journals and periodicals are many years in arrears and the research output is low. A serious consequence of under-funding is the inability of UNZA to attract and retain teaching and research staff. During the ten year period 1970-1979, forty-four Zambian staff left the university. From 1980 to 1987 the attrition was 142. Whereas in the earlier years local staff leaving the university invariably found jobs elsewhere in the country, growing numbers are now seeking jobs outside the country, especially in Botswana where the economy is booming.

Continuing Education

One of the marked features of educational reform in Zambia is the emphasis on the combination of education with productive activities. In recognition of this, the Adult Education Section of the then Ministry of General Education and Culture (now MGEYS) was reorganised and renamed the Department of Continuing Education. By 1985, the Department was enrolling 30,000 students for correspondence studies, 10,000 in supervised study groups, and more than 40,000 in full-time and part-time programmes organized in the schools for continuing education, in evening classes, and in prisons (GR2, 1989).

1.3 Female Participation in Education

Much of the beneficial effect of universal primary education may be lost unless it is spread to all of the eligible girls. The expected social outcomes, in terms of effects on fertility, nutrition and health, may not be achieved if a significant proportion of women and girls are not educated

(UNZA, 1986). It is therefore important to pay special attention to female participation in education, in particular at primary level.

Statistics indicate that there is almost equitable enrolment of boys and girls in Grade One. In January 1988, there were 113,510 boys enrolled, and 111,290 girls. However, the girls do not enter school in numbers commensurate with their share of the population. Those who do enter do not all remain in school as long as boys. This pattern is most pronounced in the rural areas where only two thirds of the girls who begin Grade 1 complete Grade 7. (UNZA, *ibid*). As the girls progress up the education ladder their numbers get reduced more than the boys. In 1984, the overall sex ratios (the numbers of boys for every 1,000 girls) at certain critical points in the education system were:

Grade 1	1,030
Grade 5	1,126
Grade 7	1,381
Grade 8	1,665
Grade 12	2,004
University	4,810

In Table 7, the enrolments are shown by sex for the critical grades for the cohort which started in 1974. There are three stages at which the female dropout rate is noticeably large. At the end of Grade 4, the higher dropout rate is linked to lack of schools and the distance to higher grade schools at which there are in any case no boarding facilities. The higher dropout rate at the end of Grade 7 is related to the general lack of secondary school places. For girls who do enrol for secondary education, the third major dropout occurs at the completion of secondary education when they fail to gain places in post-secondary institutions (UNZA, 1986; ZARD, 1985).

There have been several studies on why girls have high dropout rates from school. Reasons for dropout mentioned in the reports include domestic chores and withdrawal from school for marriage, both fairly common in rural areas. Pregnancy leads to expulsion from the school and it has been estimated that this is a reason for dropout of about 2 per cent of secondary school girls (Herlic, 1986). In lower income groups, the preference for financing boys' education is probably an important factor (ZARD, 1986). The participation of girls in formal education might be further jeopardized if current plans to introduce an examination fee of K50 per subject for Grade 7, 10, and 12 examinations are put into practice. Furthermore, the belief that girls perform less well than boys academically is still dominant in Zambian society, as is evidenced by the different criteria applied for the selection of boys and girls for secondary education, and the planning of secondary school places (more for boys) for the two sexes (Silanda, 1988).

The under-representation of females in education is a problem in teacher training. The total net enrolment for teacher training was 4,502 in January 1988. Of these, 44 per cent were female. In the same year, the Zambia Mathematics and Science Education project (ZAMSTEP) became operational. Of the 200 teachers undergoing the advanced teacher training provided by this project, just 20 are female. This is just one aspect of the imbalance between men and women students at post-secondary level. Only 1.2 per cent of the female population in the age group 19-25 years is enrolled in post-secondary education, as compared to 3.5 per cent of the men.

A final and much more positive note on female participation. It is indicated in a report on the multigrade schools pilot project that in the schools studied the enrolment rate for girls has risen from 37 per cent in 1980 (Grades 1 to 4), to 47 per cent in 1988 (Grades 1 to 7) (Lungwangwa, 1989). This might be because parents encourage their daughters to remain at school when all primary grades are available locally. This, however, is only conjecture as a more wide-ranging evaluation of multigrade schooling still remains to be undertaken.

A more detailed analysis of the gender issues in Zambian education can be found in the report prepared by Idesalm (SIDA, 1989), in preparation for this evaluation.

1.4 The Impact of the Economic Crisis on Education in the 1980s

The constraints on the development of education in the 1980s are largely financial and are rooted in the general economic crisis. The education system is planned for universal basic education with continued restricted access to secondary and tertiary levels. The financial resources, and consequently also human resources, for full-scale plan implementation are lacking. However, as noted by an evaluation team in 1987 (Johnston et al) there are also inefficiencies in the use of available resources.

In 1983 a SIDA consultant team (Fägerlind and Valdelin) prepared a report on Swedish support to education in Zambia. This review was carried out when the economic situation of Zambia had already been deteriorating for a number of years. The consultants analysed data on the costs and financing of education, described the objectives for development within the education sector contained in national plans and projections, and assessed the prospects for attaining these objectives. The conclusion drawn from the analysis was that it would be difficult for the Zambian government to attain its objectives for education in the 1980s due to the economic constraints. On its own, the expansion of basic education as envisaged in the Education Reform of 1977 would require an average addition of 100 to 120 per cent of the normal education budget of the 1970s. Just normal expansion due to population growth would

increase education budgets to 150 per cent of the 1970s budgets. Therefore, given the continuing severity of economic constraints, it was unlikely that 100 per cent of eligible pupils could be enrolled in Grade One in the 1980s.

These fears about the ability of the government to finance further educational expansion turned out to be well founded. In 1986, while education continued to receive the largest proportion of the government's recurrent expenditure in real terms, the allocations to this sector have declined. As a proportion of GDP, total expenditure on education fell from 4.7 per cent in 1975 to 3.3 per cent in 1986 (Table 8). Within the overall declining allocations to education, allocations to teaching materials experienced an even sharper decline to the extent that they are now totally non-existent (Table 9). This must be viewed against enrolments that increased by over 50 per cent in the same period. The consequences include large and overcrowded classrooms, double and even triple sessions, poorly furnished classrooms, non-availability of teaching materials and low staff morale.

In 1987, another SIDA consultancy team (Johnston, Karlsson, Kaluba, & Nystrom) found the major effect of the economic crisis on education to be a drastic reduction in budgetary allocation to education. The state was paying for teachers' salaries and nothing more. Teachers had experienced a big fall in the real value of their salaries. School supplies, including furniture and books, were being imported or at least financed by donors. However, by community support and access widening measures, a high net enrolment in primary schools had been maintained. Total enrolments which stood at 681,912 in 1975 had risen to 1.365 million in 1986. The number of pupils per class and per teacher have been maintained or even improved. Some serious problems, however, remained unresolved. Access to Grade One in the urban areas and Grade Five in the rural areas remain as major bottlenecks in the system. The evaluation team found that the Zambian government had adopted two strategies to overcome problems of education provision in conditions of economic crisis:

- the transfer of costs to users or parents, and
- increased cost efficiency.

These two strategies are still being pursued. Parents must now provide school requisites e.g. textbooks, exercise books, pencils etc, and from 1985 pay a K100 termly fee for each child attending boarding school. It should be noted that even this modest contribution drew violent protests, not from affected students and their parents but from university students. There is a fee for all non-Zambians attending Zambian schools. Parents must also pay for the building and maintenance of any new school buildings. The government policy is to encourage communities in such activities by providing the teachers required and paying their salaries. Table 10 shows the scale of parental contributions at

Government and aided primary and secondary schools in 1985. To these amounts must be added any other amounts that Parent Teacher Associations (PTAs) may levy from time to time.

Further cost transfer measures were being planned in 1987, including: a general education levy to be handled by district councils; a recommendation to expand existing PTAs into production cooperatives; and incentive grants for the establishment of private institutions at many levels. Cost efficiency measures include recommended new regulations to eliminate wastage in the employment and distribution of teachers, including introduction of a minimum teaching load. However, it is noted by Johnston et al that the efficiency problems which seriously affect the production and distribution of educational materials do not seem to attract government attention.

Despite the constraints on educational development, it was found by Johnston et al that there was still considerable under-utilization of resources in the education system, particularly regarding primary school teaching staff and the production and distribution of educational materials and school furniture. These structural problems hinder the main donor in the primary school sector, SIDA, from giving effective support so that recently around half of its annually available support remains unutilized (see Table 11). The team did not see how this situation could be changed in the near future.

More recently, the GRZ has turned its attention to the financing of higher education (MGEYS/MHET, 1989). The government has hitherto provided free tuition at this level and has also provided an allowance to cover the costs of meals, accommodation, stationery, transport, books and equipment for university students, and full board for students in all other tertiary institutions. This system is to be radically altered. In a major policy statement in April 1989, the Minister of Higher Education announced new measures for the financing of higher education:

- subsidies to the education of non-resident non-Zambians would cease and this category of students would pay the full cost of their tuition;
- the education of Zambians and residents would continue to be subsidised. However, fees reflecting the running costs, excluding staff emoluments, would be charged and this category of students would be expected to pay 25 per cent of such fees if sponsored by government, and 50 per cent if self- or family-sponsored. At university level the amounts to be paid would range from K2,000 to K6,000 while at other institutions these would range from K325 to K1,050 per annum;
- students at teacher training colleges and technical institutions would pay 50 per cent of boarding and lodging costs (K300 per term) while those at university would pay for

their accommodation and board;

- educational costs of students on paid study leave would be borne by their employers; and

- part-time and correspondence students would no longer be eligible for a government bursary. (GR2, 1989c)

The intention of these reforms is not to reduce the government budget for higher education but to increase the resources. In recognition of the hardship that will be caused for some students, it is also intended that a loan scheme be introduced.

When this latest package of financial reforms for education is put into effect, then a transfer of costs from the State to consumers will have been made at all levels of the system. As far as primary schooling is concerned, the transfer of costs means that not only are parents responsible for providing their children with individual requisites for learning, but are also as a community responsible for maintaining, repairing and expanding the physical infrastructure for education. This comes at a time when absolute poverty is effecting ever-increasing numbers of families, and when the chances of primary school graduates gaining wage employment are minimal. At the same time, the primary school curriculum remains oriented towards progression to secondary education and not to the productive skills needed for informal sector employment.

Although participation in primary education in Zambia has been remarkably resilient in the face of economic decline, the limits to that resilience may now have been reached. If so, there is a real danger that groups already marginalised by economic decline -- the urban and rural poor -- will find education a luxury beyond their reach and an irrelevance for the fulfillment of immediate needs. If school enrolments do begin to decline, it is likely that especially girls will be adversely affected when parents make choices as to which children they can afford to send to school. Children with special education needs are also likely to be adversely affected. Secondary and higher education are already highly selective. As economic crisis for individual families becomes more widespread, then there is a danger that access will become increasingly dependent on families' economic resources rather than on students' academic merits.

In this situation, donor aid is going to remain an essential component of education finance. For donors such as SIDA which concentrate on the qualitative improvement of primary education, there may need to be a shift in resources from central to district and local levels corresponding to the new distribution of responsibilities for primary education. More attention may also need to be paid to quantitative aspects of educational provision if enrolments start to decline. The major developments for education as outlined in the Fourth National Development Plan (see Section 3.5) appear to be

optimistic in the face of the economic crisis, and the extent to which they can be realised may become closely tied to the availability of donor funding for education.

1.5 Planned Major Developments

The objectives of the Fourth National Development Plan (GNP, 1989) are to continue the efforts to implement the Educational Reform and to "foster judicious expansions and to enhance quality of education". There are three major strategies: qualitative, quantitative, and cost-effective.

The quality improving strategy includes the following components:

- increasing instructional materials,
- facilitating curriculum development and training so that both boys and girls have equal access to subjects at post primary levels,
- up-grading teaching staff,
- improving the system of public examinations to make them a more effective tool in educational development,
- improving educational management, administration and supervision,
- improving education broadcasting services, cultural education in educational institutions, rehabilitating physical facilities, furniture and equipment in all educational institutions including educational supporting service units.

The quantitative strategy includes expansion for all levels of the system:

Primary Education - It is planned to provide an additional 1,194 Grade One classes and 4,047 Grade Five classes. In areas of sparse population this will be by means of multigrade teaching and biennial intakes. For other areas, it is not stated how this will be achieved i.e. whether or not new schools or classrooms will be built or whether there will be greater use of double and triple sessions.

Secondary Education - It is planned to provide 250 Grade 8 classes, including 40 from the TNDP. Of these, 210 will be at existing secondary schools. Ten new junior secondary schools will be provided to cater for the other 40 Grade 8 classes. Emphasis will be placed on science and mathematics teaching. This will involve investment in changing some classrooms into laboratories and the supply of equipment, consumables, and textbooks.

Teacher Education - Each teacher training college will increase its enrolment to 500 students and a new Primary Teachers College with a capacity of 500 will be opened in Lusaka.

Technical Education and Vocational Training - The three Trades Training Institutes planned for Mongu, Chipata, and Solwezi will be completed and the imbalance in the provision of teaching and hostel facilities will be redressed. Special education programmes for the handicapped will be integrated in the Department's institutions.

University Education - During the period of the Fourth Plan, the major part of development funds will be targeted at the Copperbelt University to establish the new schools: School of Technology and School of Forestry and Wood Science. Consequently, no major new programmes are envisaged at UNZA but existing programmes will be consolidated.

The cost-effective strategy is to institute cost-saving measures and introduce cost-sharing schemes:

- improving the distribution and utilisation of teaching staff in order to reduce under-employment,
- rationalising the employment and utilisation of non-teaching staff,
- introducing cost-sharing between Government and users,
- rationalising courses and enrolments in relation to manpower requirements.

As noted in Section 3.4, achievement of these objectives is, given the continuing economic crisis, going to be in part dependent on donor financing. It will also be dependent on the ability of parents and communities to share the costs of their children's education.

3.6 Donor Assistance to Education in Zambia

Aid flows into Zambia through a variety of routes: NCDP, the Ministry of Finance, the Ministry of Foreign Affairs and other channels. This weakens aid coordination. UNDP produces an annual report on development cooperation in Zambia. This attempts to give a comprehensive picture of the aid situation but it can only be as reliable as the information supplied by the donor community.

In 1983, Fägerlind and Valdelin found that education received 16.3 per cent of the total donor assistance to Zambia in the period 1980-1982. The major donors of technical assistance to education were the UK, Japan, Denmark, and Sweden, Sweden being the second largest donor country. This type of

assistance was completely dominated by the supply of teachers and other personnel. Capital assistance to education in 1980, in the form of IBRD loans, amounted to disbursements of US\$4.2M in 1980, with future capital assistance agreed for US\$25M. In 1982, contributions to capital expenditure in the form of grants were made by Canada, Sweden and the Netherlands, the major part of such funds coming from Sweden.

The last year for which details of disbursements for technical cooperation projects and activities in the education sector are available is 1987. They are summarized in Table 19. The major donors continue to be those listed above, but also important are Finland, Ireland, Netherlands, and Norway. A number of multilateral agencies are also supporting education in Zambia, but to a much lesser extent than the major bilateral donors. The multilateral agencies include FAO, UNESCO, UNFPA, UNFSSD, and EEC. The total disbursements in 1987 amounted to US\$ 11,876,000, of which US\$ 1,636,000 disbursed by SIDA (UNDP Report for 1987).

According to the 1987 Report, the education sector has continued to receive a major and increasing proportion of technical assistance, 25 per cent in 1984 and 26.7 per cent in 1987. It is second only to agriculture which received 33 per cent and 33.8 per cent for 1984 and 1987 respectively. Despite the continued importance of technical assistance to education, one consequence of economic deterioration is that Zambian counterpart funding of education projects and programmes is becoming increasingly difficult.

A descriptive summary of the main technical assistance programmes in the education sector is given below by level of education.

Primary Level

At this level, donor-supported programmes focus on the training of teachers and the provision of teaching materials including textbooks. SIDA and FINNIDA support the Zambian Education Materials Project (ZEMP). FINNIDA also supports the Practical Subjects Project (PSP) which is concerned with the supply of tools for practical subjects and the establishment of workshops in primary schools and primary teacher training colleges. SIDA and NORAD support the Self-Help Action Plan for Education (SHAPE) with some support also from FINNIDA and British Council.

The Australian Development Agency Bureau (ADAB) supports the Education Programme for Southern Africa (EPSA) which aims at improving the quality of education at the basic level. This is done through the provision of teaching aids and equipment and the holding of training courses and workshops.

During the course of 1989, Canadian International Development Agency (CIDA) will launch a new programme aimed at

strengthening the teaching of primary science and mathematics, through teacher up-grading.

Special Education

The only donor involved in special education is SIDA.

Secondary Level

The single largest programme of donor assistance at this level is the provision of teachers, especially for mathematics and science. The British government supported 103 teachers in 1985. Other projects include ZAMSTEP, the Zambian Mathematics and Science Teacher Education Project, funded by EEC and implemented by British Council. There is also a UNESCO project for low cost equipment.

Technical Education and Vocational Training

Canada played a major role in the development of technical education in the years soon after independence: the Zambia Institute of Technology (ZIT) was built with Canadian assistance. More recently, Canada has granted K17 million for the rehabilitation of ZIT. Under the General Human Resources Development Programme commencing in 1989, Canada will provide in-service training for teachers at DTEVT institutions and some pre-service training to reduce the present heavy reliance on expatriate teaching personnel. The British government provided 14 posts in this field in 1985, and the Irish government also supports a number of posts, especially in Business Studies.

Scholarships for overseas training constitute a major component of assistance to technical education. The major donors are SIDA and British Government. The German Democratic Republic has provided large numbers of scholarships for study in the GDR at craft level but this programme is being reviewed due to Zambian concern over the quality of the training.

During the years 1987-1990, Japan will spend K40 million on providing technical assistance (personnel, equipment and training fellowships) to DTEVT.

The USSR has promised to complete the construction of the Trades Training Institute at Chipata, Eastern Province.

University Level

The university system continues to be a major beneficiary of foreign aid, the largest component of which is personnel. In 1988 there were an estimated 100 staff on various aid programmes. The largest single group was British-supported

(25). The Netherlands and Japan came next with 18 and 17 respectively.

The main projects are veterinary education (Japan, UK, Ireland), agricultural sciences (Canada, Belgium, Federal Republic of Germany) and Engineering (Netherlands, Sweden). Scholarships for overseas study are another major component of foreign aid. The number of foreign scholarship holders in 1988 was about 100, the largest numbers being in UK (25) and Canada (16).

Substantial quantities of equipment and books are received through the various projects. In addition there are some donations not directly connected to projects. Japan has made substantial donations of this type. SIDA also provides some general support to UNZA.

Support for capital development is less common. Sweden financed the construction and equipping of the School of Mines in the 1970s. Since then only two donors have been involved in capital development: Canada and Japan. Japan has built and equipped the School of Veterinary Medicine. Canada has partially financed the first phase of the School of Agriculture and is constructing 30 staff housing units.

4 SWEDISH SECTOR SUPPORT TO EDUCATION IN ZAMBIA, 1984 - 1989

4.1 SIDA Guidelines for Support to Education

SIDA guidelines for education assistance have been developed on the basis of the guiding principles for Swedish aid to developing countries, on the basis of past experience with education assistance, and with reference to the overall context of development assistance implementation. Regarding the latter, it is stated in the Education Division's 1986 guidelines that:

There is no indication that any dramatic changes will take place in the environment of educational assistance within the foreseeable future. Population growth, especially in the younger age brackets, will remain on a high level. No radical improvement in economies can be expected, particularly in the poorest of the recipient countries. The burden of debt of African countries, combined with a lack of foreign currency, will continue. The modern urban culture with its emphasis on consumption has come to stay. At the same time there will be strong elements of the more traditional forms of life, self-subsistence based on the extended family with religion as an important uniting link. In the field of education there is a need to create awareness and understanding of these social tensions and changes.

In comparison with the 1960s and the 1970s, the new feature is scarcity of resources, including the lack of foreign currency. Youth unemployment will increase. In a stagnating or possibly contracting modern sector, there is no possibility of providing employment for the growing numbers of young people.

The principal point of departure for the education assistance is that the unique economic, social and cultural situations of each country should be given great consideration. Therefore, demands on the analysis and needs of external conditions (the education environment) should be intensified.

Very briefly, the guidelines are as follows:

- every education project should be regarded as an investment which gives a yield in economic, social and cultural terms for both the individual and society,
- the relevance of the content of education programmes should always be considered,
- educational projects should be long-term and in the case of the poorest countries SIDA must expect to contribute basic necessities (pens, books, equipment) for the foreseeable future,
- the need to meet running costs is becoming greater, especially in the poorest countries, and therefore there is little point in drawing a distinct line between capital costs and running costs. However, it should be ensured that dependence on assistance does not become too great, and teachers salaries should not be financed,
- as all needs cannot be satisfied a selection must be made based on the goals for Swedish development assistance, and SIDA's experience and knowledge,
- the main emphasis should be on basic education,
- for those projects in which new methods are a prominent feature and in which foreign personnel participate, SIDA should offer a more distinct profile than hitherto when offering support,
- SIDA should act to improve the internal effectiveness within the projects and programmes,
 - support to educational research should be expanded,
- within the sector programmes space should be made available if possible for a limited amount of institutional cooperation within higher education and research,
- project based education and training, i.e. education and training within other sector programmes, should be consolidated.

It can be seen in the following description of Swedish support to education in Zambia that these guidelines are followed. The main emphasis is on support to basic education including long term support to the provision of educational materials and equipment. Support to basic education is also the underlying objective in support to teacher education. Swedish expertise in the fields of special education and technical and vocational education is apparent in the sector support programme. Limited support is given to higher education including institutional cooperation between UNZA and the Royal Institute of Technology (KTH) in Stockholm. The support to the Planning Unit of the Ministry of Education is important for the improvement of the internal effectiveness of projects and programmes.

As this report is also concerned with the gender aspects of the ESSP it is of interest to look at the SIDA plan of action for Women in Development, WID, (SIDA, 1985). According to the WID plan of action, the objectives of SIDA's development cooperation activities are:

- that assistance as a whole become more women-oriented,
- that special women's projects be initiated when circumstances warrant them,
- that women's productive work and responsibility for reproduction be facilitated so that women can support themselves, attain economic independence and, in the long run, be accorded equality with men in social, economic, political, religious and cultural aspects,
- that assistance in all areas be designed in accordance with the special needs of both men and women, and
- that women on both the donor and the receiver side be given the opportunity to actively participate in and contribute to shaping the broad outlines of aid policy as well as the planning, implementation and evaluation of individual assistance inputs.

The extent to which the ESSP takes into account these objectives is considered in the section on findings and recommendations.

4.2 The Education Sector Support Programme in Zambia. 1980-1983

On the 25th June, 1980, a specific agreement on Education Sector Support was drawn up by the Government of the Republic of Zambia (GRZ) and the Government of Sweden. Up till 1980, all Swedish support had been earmarked for secondary or higher education, specifically TVTC in Luanshya and the Schools of Engineering and Mines at the University of Zambia (UNZA). In 1979, a SIDA Mission preparing for the sector agreement

prepared a report "outlining the main thrust of the Swedish support to the education sector for the period 1980- 1982", giving special attention to: teacher training; special education; improvement of science skills generally and particularly agriculturally oriented skills; vocational training needs and technical skills requirement of the rural population.

The mission reviewed the situation of Zambian education, with an emphasis on the above-mentioned sub-sectors, outlined the problems to be tackled in the education system, and made recommendations for the future cooperation between Sweden and Zambia in the field of education in the light of the Zambian Third National Development Plan (SIDA, 1979).

The proposed breakdown of sector support from SIDA for the period 1980-82 followed the recommendations of the 1979 review, being: special education; primary education; primary teacher training - resources centres and production units; and technical and vocational education. Funds were allocated separately for TVTC, Luanshya; the School of Engineering, UNZA; and to the School of Mines, UNZA. At the First Annual Consultations on the Education Sector Support Programme it was agreed that "the Swedish contribution within ESSP should continue to be used for improving educational standards, particularly as regards basic education and the educational needs of the rural population." (Agreed Minutes 1980:1).

In 1983, the SIDA consultancy team Fägerlind and Valdelin recommended that in the light of the wide financial gap between Zambian education objectives and the actual situation, Swedish support be concentrated on basic education, Grades One to Seven, but not for the time-being on the extension of basic education from Grade Seven to Grade Nine. Their main recommendations were as follows:

- Support to basic education in urban areas should be concentrated to Grade One classroom additions in order to eliminate the Grade One bottleneck in the provision of basic education. Such support was recommended to be integrated with self-help schemes, low cost buildings and maintenance schemes based on local materials and skills. The programme should include the rehabilitation and maintenance of existing classrooms. A second major bottleneck in the basic education system, entry into Grade Five, was found to be predominantly or totally a rural situation caused by low utilization of classrooms and therefore amenable to planning and administration solutions. It was therefore recommended that further studies should be made to find alternative solutions to this problem, for example, multigrade classrooms.

- Support to increase the internal efficiency of the system was recommended to be concentrated on the supply of teachers' handbooks and secondly, the supply of exercise books, particularly in rural areas. Limited support was also recommended for textbook production. The emphasis already

placed on support to science education was recommended to be continued but, as far as Swedish assistance is concerned, concentrated on primary education. Support to practical subjects should be considered, beginning with discussions with FINNIDA on possible cooperation in this field. Support to the planning and administration of education was also recommended.

Although the team did not make an in-depth study into on-going programmes with Swedish support outside basic education, a few recommendations were made for these other areas of support:

- that support to Special Education be continued,
- that support to the Curriculum Development Centre should in future be concentrated to teachers' handbooks, science subjects, and practical subjects
- that support should not be given to teacher training except for certain subjects such as practical subjects, primary school science, and production units.

In 1987, Zambian education was again reviewed by a SIDA consultant team (Johnston, Kaluba, Karlsson, Nystrom). In review of education in a situation of economic crisis, the main options for further Swedish assistance to Zambia were found to be the following:

- Educational materials and school furniture programmes. Expanded assistance in these two areas was considered to be highly motivated, certain to be additional to Zambian efforts, but requiring for effectiveness and efficiency structural reforms on the Zambian side which are difficult to achieve.
- Teacher training/resource centre programme (now "SHAPE") was also considered highly relevant and suitable for donor financing. Expansion of this programme could, however, only come with time as the programme progresses.
- Special education was not considered in the report but was recommended for further donor support on its own grounds.
- Support to planning, monitoring and coordinating at different levels of the system (ministerial, regional, district, and individual school levels) was also considered an important area for Swedish support.
- Support to In-service training for administrators, inspectors and headmasters.
- Quality, inservice training of teachers, rather than educating more teachers, was considered to be a further, additional potential area of support for Swedish aid.
- Support to self-help initiatives for the construction of classrooms was also suggested for support, with the suggestion that careful consideration should be given to how foreign

inputs can facilitate rather than replace local initiatives.

It was neither requested by GRZ nor recommended by the team that support be given to teachers' salaries.

In the following section of this report, the actual support to these sub-sectors over the period 1984-1989 is outlined. The allocations and disbursements are summarized in Tables 11 and 12.

4.1 The Education Sector Support Programme, by Sub-Sector, 1984-1989

4.1.1 Development Planning and Research Unit of the Ministry of General Education, Youth and Sport (The Planning Unit)

In Zambia, the planning of basic and secondary education is the responsibility of the Development Planning and Research Unit of the Ministry of General Education, Youth and Sport (MGEYS). In September 1983, the Joint Annual Review team summarized the objectives of Swedish support to the Planning Unit as being:

- i. to improve the quality of staff thereby strengthening the capacity of the unit,
- ii. to upgrade the planning officers at provincial and district level, and
- iii. to improve the quality of material produced by the office with special emphasis on educational statistics.

The allocations and disbursements to the Planning Unit are shown in Table 13.

The Central Unit

At central level, the Unit comprises planning, statistics and buildings divisions. There are local units at provincial and district levels. The central level unit is charged with a number of functions including: the compilation and dissemination of educational statistics; in-service training for educational administrators and planners; and the development of innovative approaches to meeting the quantitative and qualitative goals for educational development in Zambia. The Unit is furthermore responsible for coordinating the Education Sector Support Programme.

A major problem in providing support to the Planning Unit throughout the period under review has been the staffing levels of the unit. This problem has been tackled by means of technical assistance and training programmes. In 1983, the central unit was strengthened by the appointment of two

Swedish senior planning officers. Staff training activities supported by SIDA have included the training of a planning officer at the International Institute for Educational Planning in Paris, and a planning officer on a M.A. (Education) course in Sweden. Other members of the Unit have been financed for study visits to neighbouring countries.

There have been two Swedish Senior Planning Officers at the Planning Unit up till the present, and they were joined by an additional officer in 1986-87 who was recruited to assist in planning the integration of special education with general education. A consultant was engaged in 1987 for a feasibility study on data processes. Consultants were also engaged for an analysis of the financial and management aspects of "self-help schemes" for primary schools.

In 1986, it was noted that there had been some delays in the execution of the programme of support to the planning unit, partly due to shortage of manpower at the Unit, and partly due to difficulties in finding suitable candidates for different studies. This was a matter of concern, given that the existing posts in the Unit, considered barely sufficient for the work, had not all been filled. However, progress was being made in some of the sub-projects. Up-grading courses for planners and statisticians had been carried out according to plan, but the mobile training programme had been delayed due to the Unit's heavy work-load. The backlog in educational statistics was being dealt with but consultancies proposed the previous year had not been carried out. The Review team concluded that the concentration on within-country staff development should continue and that the staffing situation at the Unit should be given particular attention.

The staffing situation in the central planning unit remained critical in 1987 due to lack of Zambian staff. In October of that year less than half the designated positions of the Unit were filled. This situation led to a lack of up-to-date statistical reports, a poorly-defined division of labour in the Unit, and an over-reliance on expatriate staff. At the 1987 Review it was therefore agreed that allocations for scholarships abroad and additional expatriate personnel for the Unit could not be considered until the Unit was adequately manned. Swedish support would be concentrated on national training activities within ongoing programmes. When the 1988 Joint Annual Review was carried out, the staffing situation had not improved, only one third of the designated positions being filled.

Regional and District Level Training

Regional and district level training in educational planning has been supported by a series of short training programmes. An important component of this support is given to a mobile training programme designed to reach District Education

Officers and other education officers. The short courses cover topics such as school-mapping, collection and dissemination of statistics, school buildings maintenance, and survey techniques. This programme was launched by the MGEYS in 1984 with a training seminar held at central level. A team of six senior education planners then toured the provinces conducting seminars at which altogether 300 planners participated. It was reported to the 1984 Review team that at these seminars, ways and means of creating more school places were discussed, for example by "tight- timetabling" so that classrooms could be fully utilized and thereby more children enrolled (MGEYS, 1984).

In 1985, work continued on the mobile training programme. Although there were some problems with this in 1986 due to the staff shortages at central level, the mobile training programme was functioning well in 1987. In addition to the usual activities, the first large-scale attempt to document the numbers and types of handicapped children in primary schools was carried out, in order to provide input for the future planning of special education in Zambia. At the 1988 Joint Annual Review, the Ministry gave priority to the training programme and planned to continue it for at least another year.

In 1985, the first of the series of annual two-week university level courses for regional and district level planners was carried out with lecturers from the University of Zambia, University of Stockholm, and the Planning Unit of the Ministry. These courses have been run on a yearly basis up to April 1989 when the last seminar in the series was given and an evaluation exercise carried out. The courses have had both theoretical and practical components. The practical component has included: the relationship between planning and implementation; education management issues; equality of educational opportunity; the analysis of the relationship between different phases of planning; internal efficiency issues; cost-effective strategies - multigrade schools and self-help schools (Chinapah, 1987).

In 1987/88, three regional offices attended a six-months course in elementary statistics at the Central Statistical Office in Lusaka.

In 1988, a course for district staff was being organized in cooperation with Unesco.

Multigrade Classrooms

Decisions taken during the 1984 Joint Annual Review included the setting up of a pilot scheme for multigrade classrooms in five schools in each province. The aim of the scheme was to increase the possibilities for every child entering Grade One in sparsely populated rural areas to be able to continue to Grade Seven. The pilot scheme began with orientation courses

for the teachers and the provision, with Swedish funding, of textbooks, exercise books, self-instructional materials and modified teachers' handbooks. In 1985, the pilot multigrade programme began in four schools which were equipped with desks, textbooks, exercise books and other school materials. By Autumn 1986 the multigrade programme had expanded into 47 schools and responsibility for the programme transferred to the inspectorate for follow-up and monitoring. By October 1988, 165 schools were being upgraded under the multigrade programme. However, the supervision and monitoring had not been carried out according to plan due to lack of transport at the Inspectorate. The setting up of a special multigrade classroom at Malcolm Moffat Teacher Training College was started during 1988.

The multigrade programme in Mkushi District has been evaluated by the School of Education, UNZA (Lungwangwa, 1988). The findings include:

- the designated college for multigrade teaching (Malcolm Moffat) had not integrated this mode of teaching into the regular teacher training programme,
- District Education Officers support the multigrade programme as a means of upgrading schools,
- education materials, mainly donated by SIDA, are satisfactory but transport to the schools from the District Offices is a problem. All but one of the four pilot schools visited lacked educational materials, and the desks supplied by SIDA were already worn out due to poor materials,
- the multigrade system is successful. The progression rate of children from Grade Four to Grade Five has improved and attrition rates decreased,
- there were good school-community relations in all the schools, and the multigrade system has helped to maintain stability in the community,
- the teachers were extremely committed to multigrade teaching but were overworked and complained of not getting special allowances.

The evaluators were unable to consider the question of unit costs because of the unresolved problems of accounting and distribution of resources intended for multigrade schools.

Self-Help Activities

In 1987 a "pre-feasibility" study was made on community self-help in the construction and maintenance of primary schools (Wimblad and Waern, 1987). It was found that although the GRZ is formally responsible for primary school construction and maintenance, in reality the major part of primary school

construction has been financed and implemented by the local communities. In the two districts, Katete and Petsuke, studied by the consultants, the volume of self-help construction was found to be "considerable" and perhaps equivalent to half of that required to reach universal primary education by the year 2000. The quality of the self-help schools visited was satisfactory. It was recommended that:

- local communities in rural areas through their respective PTAs be given total responsibility for the planning, construction and maintenance of all primary school buildings, desks, staff houses,

- there must be no mandatory type designs or specifications,
- MGEYS should with SIDA-assistance produce and distribute a self-instructional manual for PTA members on how to plan, finance, build and maintain rural primary schools,
- MGEC should with Swedish funding carry out a pilot project based on the community-oriented aided self-help approach.

In July 1988, a plan of operation was drawn up for a pilot project concerning primary school construction through community-oriented, aided self-help. The pilot project has been initiated in 1989 and will be evaluated after two years.

4.3.2 Educational Materials and Equipment

This sub-sector has two main components: instructional materials and school furniture. The rationale and objectives for this support were summarized in the report of the 1984 Joint Annual Review:

With declining public allocations for education, combined with one of the fastest growing school age populations in the world and an enrolment rate of 82-85 per cent of the 7-14 year-olds, the Zambian schools are short of all sorts of educational materials and equipment. During the first and second agreements support has been given to the production and supply of primary school desks, pupils' exercise books, and teachers' handbooks. SIDA funds have also been set aside for the production and distribution of text books for primary schools. The objective of this support is that all pupils in the Zambian primary schools should be provided with school desks and some basic materials. The goal is also that every teacher should have access to the handbooks developed by the Curriculum Development Centre.

The allocations and disbursements to this sub-sector for the period 1984-1989 are summarised in Table Fourteen.

School Desks

From 1981 to 1984, approximately 75,000 school desks were produced and delivered to primary schools in all nine provinces, with priority given to the schools most in need. In 1984, only a very rough approximation of the number of desks still needed was available. The figure was 70,000. It was agreed at the 1984 Joint Annual Review that steps should be taken to improve maintenance, calculate the long-term needs, and to make provision for financing the replacement and maintenance of desks from other sources. Money was set aside to support an experimental local production.

By 1985, SIDA had financed the construction and delivery of approximately 100,000 two-seater desks, this representing the major portion of school desks produced in the country. Production had been carried out on a tender basis by three firms in Lusaka, and transport by local haulage firms, first by a private firm and then by a parastatal company. From the District Education Offices, transport to the schools was by local vehicles. Various problems were encountered in the implementation of this programme: coverage, transport, quality and quality control, design and maintenance. An experiment was being carried out, in Kasama and Chipata in the northern regions of the country, with local production of school desks. The Review team found that the quality of the desks was poor and that large numbers were rendered unusable shortly after delivery to the schools. Furthermore, transport costs had become unacceptably high.

In 1986 the school desk programme was evaluated (Winblad, 1986). The evaluation was intended to result in recommendations on new production of desks, appropriate design and maintenance. It was found by the consultants that a great number of recently delivered desks were in need of repair and that some were even beyond repair. The number of desks estimated to be likely in need of repair was over 20,000. The consultant recommended that:

- no more SIDA funds should be allocated to central production of schools desks,
- the local communities should be made responsible for the production of desks,
- schools should be responsible for the repair of desks,
- SIDA should assist the Ministry with the publishing of a self-instructional manual on the building and repair of desks,
- the manual should be distributed and seminars arranged to spread the idea of the self-repair of desks.

This manual was produced by SIDA/MGEC and made available in Zambia together with twenty tool kits. The Ministry decided to stop further central production for the time being and,

after studying the evaluation report and repair manual, submit a plan for the implementation of a repair and maintenance programme.

In October 1987, it was reported that the local production of school desks was proceeding in all nine provinces, that the quality of the desks was superior to that of the centrally produced desks, and that local production had reduced distribution costs. However, several major problems were still facing the programme: shortage of raw materials in some areas, lack of transportation facilities, and insufficient resources for supervision and monitoring.

Regarding the maintenance and repair project, it was reported that the experiences from a second workshop held in August 1987 had not been conclusive and therefore the project should be implemented only gradually. It was therefore decided that for the school desk programme as a whole, disbursements should be limited while awaiting the results of an evaluation planned to be carried out the following year. It was also decided that the repair manual and kits needed to be revised and then gradually distributed.

Since 1988 a local consultant has been employed by MGEYS to monitor the school desk production programme.

Instructional Materials

There are three major components to this sub-sector: primary school textbooks, teachers' handbooks, and pupils exercise books. A more limited support has been given to the purchase of maps and atlases.

Swedish support to this sub-sector since 1984 needs to be understood within the framework of the complex arrangements for the production of educational materials in Zambia and in the light of other donor country activities in this area, especially Finland's. At the same time that Swedish support to educational materials in Zambia started, FINNIDA, the Finnish International Development Agency, began to implement a programme of textbook development and rehabilitation in Zambia. The Finnish project, ZEMP, seeks to develop the textbook production potential of Zambia by providing materials and technical assistance on three fronts:

- to CDC for the development of new texts for Grades Eight and Nine of the school system,
- by development of the textbook publishing and production facilities at NECIAM, the National Education Company of Zambia,
- by providing additional transport facilities to NEDCOZ, the National Education Distribution Company of Zambia, to facilitate the distribution of texts to schools.

From an early stage, it was recognized by FINNIDA that if the project was to succeed, then improvements to the availability of learning materials at primary level would also have to be made. Provision was therefore made in the project agreement for the reprinting of some 2 million existing primary texts for distribution to schools. 1.27 texts had been printed in Finland and delivered to Zambia by September 1985.

In 1987, the FINNIDA project was evaluated (FINNIDA, 1987a). The FINNIDA evaluation mission found that two of the three objectives of ZEMP had been largely met i.e. developing the capacity of CDC to produce indigenous learning materials for the secondary schools, and improving the capacity of KKF to develop and process educational materials for primary and secondary level, in close cooperation with CDC. The third objective, to increase the supply of educational materials to the primary schools through an emergency (Rehabilitation) programme, had only been partially successful. There had been a low utilization of funding (roughly half the allocation of FIM 15 million) because less than half the textbooks originally included in the emergency programme had actually been printed and distributed. This was mainly because of limited production and distribution capacity in Zambia, and particularly within KKF. New equipment being delivered to KKF. The Finnish support to ZEMP entered a second phase in 1988 which is planned to be completed in 1991 (FINNIDA, 1987b).

In view of the central importance and complex organization of this component of the ESSP, a further sub-division of Swedish support to educational materials is made: primary school textbooks; exercise books for primary schools; and teachers' handbooks for primary schools; maps and atlases.

Primary School Textbooks

In the 1985 Joint Annual Review report, a brief description is given of the organizational framework for the development, production, and distribution of primary school textbooks in Zambia:

The Curriculum Development Centre (CDC) is responsible for the development of syllabuses and manuscripts for textbook and teacher guides. ... CDC delivers completed manuscripts to National Education Company of Zambia (NECZAM), which acts as the publisher. Since NECZAM has only limited printed capacity of its own, it usually contracts book production out to commercial printing firms on a tender basis. Sometimes it utilizes the facilities of Educational Printing Services, under the Dept. of Technical Education and Vocational Training (DTEVT). Responsibility for distributing NECZAM's publications lies with its sister company, the National Education Distribution Company of Zambia (NEDCOZ), which receives orders from the Ministry of Education or

provincial authorities, and orders the books from NECZAM. NEDCOZ has provincial depots through which textbooks are distributed to the various districts. The depots also function as retail outlets and enable NEDCOZ to market NECZAM products to bookshops and the general public.

In January 1986, NECZAM and NEDCOZ were integrated into the Kenneth Kaunda Foundation (KKF) as the manufacturing division and marketing divisions respectively. One advantage of this organizational change has been to make the increased printing capacity at the KKF press available to NECZAM. However, at the same time that this move was made, NECZAM's production had declined sharply because of the government's inability to pay for textbooks and readers for primary school.

The 1985 Review team estimated that some 3.5 million books would have to be produced to meet the demands for textbooks and workbooks in the curriculum's core subjects. On top of this, provision would have to be made for replacement of old books every five years and for enrolment increases. In the same year, a SIDA consultant reviewed the financial inputs, training component, technical assistance and paper and materials situation. The consultant concluded that:

If the existing requirements for primary school books are to be met over the coming five year period, additional inputs for each of these categories will be required. Given the fact that personnel and infrastructure for Finnish and Swedish support to learning materials provision already exists in the country, the main feature of such support would be a coordination of inputs. (Gorham, 1985).

On the basis of this report, the 1985 Joint Annual Review recommended that:

- discussions be held with FINNIDA to investigate possibilities for cooperation and the possibility to jointly support the project in the future, and that a project document be worked out and approved by all concerned parties before further disbursements be made additional to the 500,000 K mentioned below,
- that, as an exception, SIDA would meet the local cost contribution to print the primary school books made on the paper supplied by SIDA in 1985 and 1986, a total value of 500,000 K.
- that for a future project MGEC must make an effort to meet local costs for printing of textbooks.

In 1986, the production of books had run into a number of problems, stemming mainly from the lack of a coordinated organizational framework for production and distribution. The result of the problems was that in September 1986, only 146,000 of the books had been completed and were in Lusaka

ready for distribution. A further 195,000 were printed but not bound, 89,000 partially printed, 30,000 printed but not yet delivered to Lusaka. The balance of 170,000 remained to be printed. The 1986 Joint Annual Review team recommended that as great efforts had been made by Zambian Authorities, SIDA, and FINNIDA, to supply primary school texts, that coordination of these efforts be maintained in the future with the Zambian Educational Materials Coordinating Committee playing a key role.

By June 1987, all but 40,000 of the Swedish-supported textbooks had been printed and distribution had begun. A project plan had been developed for the joint SIDA-FINNIDA-GRZ programme covering all aspects of textbook production and distribution. An agreement had been reached between the ZEMP Coordinating Committee and the Kenneth Kaunda Foundation regarding unit costs, production schedules and payment for work on the first 17 titles to be produced. However, the whole programme had been delayed 3-4 months and it was expected that a proportion of the 4 M SEK allocated for textbooks for 1987 would remain unutilized by the end of the year.

The Project Plan was discussed at the 1987 Joint Annual Review and it was approved with some slight alterations regarding technical assistance. Responsibility for deliveries was only to be down to district level and SIDA was concerned about the arrangements for deliveries to the schools. The Ministry undertook to investigate the problem. Another potential problem discussed at the meeting was that of textbook sales. The Swedish contribution was intended to allow the provision of books to schools where they would be used free of charge. If, as is possible, the GRZ should decide to change its policy of free provision of books, then SIDA would have to review the conditions for support to the textbook project. Other decisions made at the Review were a revision of costing procedures, and an evaluation of the quantitative and qualitative aspects of the textbook programme.

At the 1988 Joint Annual Review, it was noted that despite late installation of machines at KKF and late delivery of spare parts, some 70 per cent of the planned production goal would be reached during 1988. The first 6 titles (600,000 copies) were produced and distributed. However, a problem had arisen because KKF had printed and sold textbooks on the commercial market before printing the free textbooks. The SIDA delegation objected to this practice, preferring priority to be given to the distribution of the free copies. It was agreed that some of the textbooks would be printed in Finland as a stopgap measure in order to speed up production. The problem of distribution from District Offices to the schools remained unresolved. The other major unresolved problem for the educational materials project is the printing of the backlog of textbooks.

Exercise Books for Primary School

Exercise books are relatively inexpensive items and it was proposed in the document of the 1977 Education Reform that this cost could be absorbed by parents. The need for exercise books is very great, given that there is a dearth of textbooks and therefore pupils must copy down the texts from the blackboard. However, in some parts of Zambia, exercise books are not available or not affordable. The supply of exercise books has been supported by SIDA since 1980 and there are few problems with the programme apart from paper availability. It was recommended in 1985 that SIDA should continue to support the provision of exercise books by meeting the full cost of some 1.5 million books yearly during 1986-89. It was further agreed that the exercise books, which will be distributed free of charge, be directed to areas outside the line of rail.

The 1984 Review team estimated the annual need to be between 15 and 20 million books per year. The money allocated to the sub-project is used by the Ministry to pay the Kenneth Kaunda Foundation which provides the books and transportation to district level. It was found that the plan to distribute books to the more remote parts of the country i.e. those off the line-of-rail, had not been implemented. This was retained as a priority but it was also noted that this should not exclude the provision of exercise books to disadvantaged schools in the urban areas.

The exercise book production programme faced considerable difficulties in 1987. By 1st July that year, only 150,000 had been delivered out of an MGEYS order of two million exercise books. The problem was caused by lack of suitable paper. By September 1988, the situation was considerably improved. Nearly five million exercise books had been printed and distributed to the districts.

Teachers' Handbooks

At the 1984 Joint Annual Review, there was a lengthy discussion of the production of teachers' handbooks. The Curriculum Development Centre is responsible for developing new teachers' handbooks in connection with the development of new syllabuses. This process generates a need for printing trial editions. It was agreed that as soon as paper, ink etc could be supplied the handbooks could be printed in the numbers required and the Ministry (MGEYS) would distribute them to the schools. In 1985, eight trial editions of teachers' handbooks were ready to be printed and distributed to the schools. The CDC's Printing Services Unit (PSU) is responsible for printing the handbooks and also statistical reports, syllabuses, examinations etc. At the 1987 Joint Annual Review, the operations of the PSU were discussed. SIDA had already provided the PSU with the raw materials and paper for the printing of 266,000 teachers' handbooks. The PSU, however, was suffering from chronic shortage of spare parts

and inability to repair equipment. Furthermore, lack of printing materials had a deleterious effect on other SIDA-supported programmes. It was therefore decided that in 1988 additional funds for the purchase of printing materials and spare parts should be provided and that some additional equipment should be purchased e.g. wordprocessor and automatic film processor. It was also envisaged that as some of the printing equipment at PSU was outmoded and obsolete, two off-set machines with greater capacity should be purchased. It was agreed that PSU investigate the purchase of two reconditioned machines.

In 1985, the surplus printing capacity of DTEVT's Educational Printing Services (EPS) began to be utilized for producing reprints of some 70 teachers' handbooks with paper and materials supplied by SIDA. By September 1986, some 58,000 handbooks had been printed at EPS but there had been a breakdown of the binder and some mechanical problems with the printing press. It was decided that funds be allocated for spare parts and that there should be an effort to coordinate distribution with that of textbooks. By June 1988, the number of handbooks printed had reached 140,000 out of a planned 266,000, that being 36 out of a total of 70 titles. Production problems are still not resolved.

School Maps and Atlases

It was decided in 1986 that there should be SIDA support to the provision of a set of wall maps for primary schools. The four maps envisaged were: Zambia, SADC Countries, Africa, the World. The first three of these are being prepared by the Survey Department of the Zambian Ministry of Lands and Survey, and the World Map has been procured by international tender from Esselte Maps of Sweden. The World Maps were delivered to Zambia in 1987 and delivery of the other maps was scheduled for early 1988.

It was reported in 1987 that KKF had in stock 95,000 resource atlases which had been produced overseas for Zambia but had remained unsold. They are of high quality, suitable for pupils in upper primary schools, and at K26.95 per book a considerable bargain compared to prices for similar materials in commercial book stores. It was therefore decided that SIDA make available 2.6 M SEK to the Ministry for purchase and distribution of 95,000 resource atlases, provided that the atlases be clearly marked "not for sale". By October 1987, 67,370 copies of the resource maps and 4,000 copies of the World Map had also been distributed. No funds were requested for this part of the programme for 1989.

4.2.2 Teacher Training

Swedish support to teacher training in Zambia has been concentrated on the in-service training of primary school teachers. This support was first given to Resource Centres and Production Units but from 1986 the support has been given to a comprehensive teacher support programme, the Self Help Action Plan for Education (SHAPE). The allocations and disbursements for this subsector are summarized in Table Fifteen.

Resource Centres

The objective of the Resource Centre Programme was:

to improve the quality of primary school teachers, by improving the quality of the in-service training at the primary teachers' colleges. These centres are supposed to be living centres for the interaction between the classroom situation and teacher training. They should be centres for support and stimulation to the primary school teachers. Primarily they should develop techniques and methods directly relevant to the most prevailing situation in the primary schools. (1981 Joint Annual Review Report).

This project began to be implemented in 1984 but in the early stages of project development there were some unresolved issues of project direction. These included:

- definition of the target groups,
- content of the training,
- who should participate - inspectors? primary school teachers? both?,
- the need for an in-built evaluation process,
- development of an overall frame of reference regarding resource centres,
- definition of the standard of equipment and materials at the centres.

At the 1985 Joint Annual Review, it was reported that most of the issues listed above had been attended to but it was found that the requirements for the programme had been set at a "too sophisticated and comprehensive" level. It was agreed that a project document should be worked out before the next Agreement Period (1986-89) came into force and that SIDA should provide a consultant to help with the project document preparation. It was also agreed that consideration be given to the inclusion in the project of the National In-Service Training College (NISTCOL) at Chalimbana.

Production Units

Implementation of the support to the development of production units was seriously delayed at the beginning of the ESSP. This was in part due to the lack of concrete programme objectives and consequently "vague" planning. In early 1982 a project committee was established but due to lack of coordination and communication, and heavy workload, the work of the Committee was not very successful. This slow start did not lead to the project being abandoned, as the idea of production units in schools and colleges was firmly anchored in the 1977 Education Reform, and strongly supported by SIDA. In 1985, a consultant was appointed to contribute to project development.

The Self Help Action Plan for Education (SHAPE)

In 1985, two experts were recruited by SIDA to assist a Zambian team in working out project documents for the two parts of the SIDA-supported in-service training of teachers i.e. resource centres and production units. In their report, the team recommended that:

Resource centres, production units and practical subjects in the future should be regarded as one programme.

The team summarized three aims for SHAPE:

1. To enable teachers to exercise individual and collective responsibility for their professional development.
2. To enable teachers to develop a variety of productive activities in the schools, in order to broaden the educational experience of the students and bring benefits to the schools through self-reliant efforts.
3. To enable schools to become better able to serve the development needs of their communities and the nation. (MGEC/MHE, 1985).

Both SIDA and NORAD expressed interest in supporting such a programme, providing that some structural and administrative matters could be resolved. A Coordinating Committee for SHAPE was established with members from both Education Ministries, and a formal decision was taken by SIDA to support the programme. SIDA undertook to recruit an executive secretary to the Coordinating Committee. SIDA received a request for support from 1987 for training activities, equipment, and funds for the secretary and the secretariat. The practical subjects are supported under a separate agreement between Zambia and Finland.

The 1986 Review team suggested that 1M SEK be allocated for SHAPE training activities, the funds to be released when the Coordinating Committee and Secretariat had developed a work

plan. 420 000 SEK were set aside for the costs of the Secretary. A further 1M SEK was allocated for the establishment of the Secretariat, other equipment and vehicles. NORAD also decided to donate 1M Norwegian Crowns, for the same purposes. It was agreed that a bilateral associate expert should be recruited to assist the Ministries on the financial aspects of the programme.

The SHAPE programme commenced in January 1987. At the beginning of programme implementation, the emphasis was put on:

- the establishment of committees at all levels to initiate, coordinate and monitor in-service training (Inset) activities and production work and also on restating the purpose and principles of SHAPE and jointly exploring the potential for improvement of on-going activities or initiation of new ones.

The National Secretariat, the Executive Secretary of which had taken up duties in January 1987, held planning meetings with all regional and college committees, and started to subsidize resource work around the country. 100 participants attended an Inset work-shop for teachers and other education personnel. A 10-man team of inspectors from both Ministries started working with the SHAPE project, each responsible for supervising a specific area of school/college production as well as Inset activities.

Throughout 1987-1988, the focus of the programme was on:

- resource work in regions, districts, and colleges,
- leadership training programme at regional and national levels,
- monitoring of on-going resource and productive work,
- national information meetings,
- purchase and distribution of basic materials, equipment and transport.

In 1988, all regions, districts and colleges were receiving financial support for their Inset programmes. Many colleges were implementing their programmes. Some national meetings were held, including: a review seminar with all regional coordinators; a seminar on education with production; a seminar for college lecturers on research; and a seminar for all Chief Education Officers. A series of regional seminars were given to give basic orientation and training to SHAPE personnel in resource work, production, and financial administration. Other work in 1988 included the purchase and distribution of vehicles, motorcycles and cycles, office equipment and stationery for resource work. A start was also made with selective support to production projects in schools and colleges. The activities proposed for 1989, the final year of the first phase of SHAPE, were:

- a staff development programme for senior SHAPE staff,
- initiation and development of viable production projects in schools and colleges,
- material support to District Resource Centres,
- development of colleges as Regional Resource Centres and the effective functioning of their resource rooms,
- concluding of all activities planned for the first phase of the SHAPE programme.

The first phase of the SHAPE programme was evaluated by a Zambian - Swedish team in January 1989. The SHAPE programme was studied in 4 provinces, 12 districts, 29 primary schools and one secondary school. The findings are placed into the context of the education situation in Zambia, as are theoretical discussions of: the role of knowledge and education in an economic model of development, the school as an organization, the teaching code, and the professional development of teachers. The main findings are that:

- the SHAPE professional organizational structure is now implemented at all levels,
- communication between levels has been facilitated and mobility has been strengthened,
- training of leadership at national and regional levels has created awareness and raised the capacity at these levels,
- enthusiasm and positive changes in attitudes can be observed at lower levels of the school system.
(Lubasis, Mudenda and Odin, 1989).

The goals of the first phase of the project can thus be considered to have been attained. However, the evaluation team also found that there are constraints on project development, these being connected to the limited professionalism of teaching in Zambia. They note that:

- the school as an organization is not very strong in Zambia,
- the professional development of teachers has started but there is a large potential for further development,
- the teaching code makes it difficult to work holistically, interactively and to combine theory with practice and production.

The evaluation team's recommendations center around the idea that there is a need for the programme to concentrate its energy and allocate its resources to schools and zones as much as possible. There should be a corresponding decentralization of funds and of Inset activities. The team also recommended that the SHAPE secretariat be Zambianized in the second phase of the project, and that methodological development and small scale research should be carried out integrated or in close relation to other SHAPE activities.

4.3.4 Special Education

The support to special education is grounded in both the objectives for Zambian education and in Swedish objectives for assistance to education programmes. In the 1985 Joint Annual Review report, the 1978 Education Reform document is cited:

All handicapped children, like any other children, are entitled to education. They should receive basic and further education by full-time or part-time study as any other children. Further, since the handicapped children are a special case, there should even be positive discrimination in their favour in the provision of facilities and amenities for educational purposes.

A range of items for support to special education were suggested by the SIDA Mission which in 1979 prepared proposals for the ESSP in Zambia.

In 1982 a contribution to fuel costs and allowances was made to a national campaign to reach disabled children. This campaign revealed a great need for extended programmes in special education. By 1984, this subsector of education support was well established. The programme proposals had begun to be implemented in the fields of: special teacher training; curriculum development and development of teaching aids; pre-vocational and vocational training; basic special equipment and staff development. Money had also been allocated for transport of handicapped children to and from school. The main items which have been included in the Swedish support for the the period 1984-1989 are summarized in Table Sixteen.

At the 1984 Joint Annual Review it was noted that the programme was serving the needs of 2,100 pupils mainly in special schools. A need for further planning and coordination of the different programme activities was stressed: a Special Education Coordinating Committee (SECC) had been established for that purpose in 1983, run jointly by the two ministries of education. It was agreed that a major concern in the future should be to extend supporting services for handicapped children into ordinary schools. It was also agreed that a Swedish consultant should be appointed to assist in working out a planning document as a basis for discussions about further Swedish support in this field. The following year, 1985, it was noted that the number of handicapped children enrolled in primary schools had increased "considerably" compared to the previous year.

In 1986, a project document for "Education for Handicapped Children in Zambia" was drawn up. However, at the 1987 Joint Annual Review it was found that several of the agreed project activities had not been carried out. It was agreed that efforts should be increased to implement the activities. It was also agreed that in addition to the usual programme activities, evaluations should be carried out of (i) aids for

the blind, walking aids, and transport and materials for handicapped children, and (ii) the use of group amplifiers and sound absorbants. There should also be a tracer study of teachers from LCTH, and an estimation made of additional requirements for new teachers. The review team also decided that LCTH should be partly supported under the SHAPE programme in 1988.

The need for an evaluation of the special education programme was given further attention in 1988. It was agreed that a joint evaluation of the SIDA-funded part of the programme should be carried out and recommendations made for future support. The evaluation team found that the SECC had undertaken many activities to achieve its dual objectives of coordination of all special education programmes and of planning, monitoring, advising and disseminating information on special education projects. Regarding the whole special education programme, the team found that Swedish funds have helped Zambia take the first steps to meet the needs of the handicapped in the education system. They recommended that SIDA continue to support special education in Zambia but concentrate on:

- establishment of a professional infrastructure with planned interrelation and coordination of special education programmes and activities,
- special education teacher training in all colleges and institutes,
- manpower training inside the professional education system and information to the wider society,
- practical research in close relation to manpower and teacher training.

(Bäckman & Odén, 1989).

4.3.5 The Department of Technical Education and Vocational Training (DTEVT) - Staff Development Programme

The objectives of the support to the Department of Technical Education and Vocational Training (DTEVT) of the Ministry of Higher Education, as agreed upon as a sub-sector of the ESSP, are:

- to increase the quality of staff and thereby of the training in trade schools falling under the supervision of DTEVT, and
- to increase the number of Zambians capable of administering and teaching within the programme, leading to increased Zambianization.

With this latter objective in mind, it was the intention on the part of SIDA that staff development should preferably take place in Zambia, using existing institutions, and if necessary bringing foreign lecturers to Zambia. There has, however, been a large component of training abroad. The allocations and disbursements to DTEVT staff development since 1984 are summarised in Table Seventeen.

An evaluation of the SIDA-funded component of the programme was carried out in August-September 1984. This showed that 26 people had been sponsored for overseas training, and some 200 had participated in local programmes, mainly curriculum development workshops and these had resulted in more than 50 syllabi. It was also found that there was steady progress towards Zambianization i.e from 35 per cent Zambian staff in higher colleges in 1979 to 60 per cent in 1983, and from 54 per cent overall in the DTEVT in 1979, to 72 per cent in 1983. However, due to lack of data, this could not be shown to be directly connected to the overseas training.

It was suggested in the evaluation report that the training programme could be made more cost-effective by such measures as:

- reducing the need for training abroad by entering into discussions with UNZA on recognition of DTEVT Diploma Courses,
- improvement of methods for assessment of training needs and of work performance after training,
- improved information regarding the relevance of overseas courses,
- support to curriculum development (workshops) and overall planning (staff development) to continue,
- priority for overseas training to be given to a few longer technical diploma and degree courses, with preference given to departments with a low proportion of Zambians. (Gorham, 1985).

The importance of establishing training facilities within Zambia continued to be stressed by SIDA in the following years' sector reviews. In 1985, the problems caused by lack of linkages between different levels of the technical training system were considered. It was decided that as a condition of support for staff development after 1986, SIDA would require a follow-up study of the 1984 evaluation and that in the interim not more than twenty students at any one time would be supported for overseas training.

The follow-up evaluation was carried out. It was found that the organization of the staff development programme had been improved and an up-to-date data-base established which provides information on staff development requirements in all DTEVT institutions. The range of activities under the local

component had increased: DTEVT had embarked on in-country training to up-grade TTI technical teachers with craft certificates to technician level. At the 1986 Joint Annual Review it was therefore agreed that support to this sub-sector should continue. The limit of support to 20 fellowships abroad at any one time was retained. It was agreed that further efforts should be made to utilize UNZA to up-grade diploma holders to degree level. As the main stumbling block appeared to be the mathematics and physics qualifications of the candidates, it was agreed with UNZA that a group of diploma-holders would be registered as part-time students by special arrangement, to receive assistance in mathematics and science.

More detailed attention than usual was paid to the DTEVT support at the 1987 Joint Annual Review. It was found that:

SIDA support together with that of other donor agencies had greatly strengthened and improved DTEVT's training capacity in its national role of producing middle level technical and manpower management personnel. In the five years in which SIDA has been supporting the Department's staff development programme, the level of Zambianization of lecturing staff in the Department had increased from 65 per cent in 1982 to 80 per cent in 1986.

However, it was also found that:

Since February 1985 ... there has been a marked increase in the number of instructional staff who resigned from the service in search of greener pastures elsewhere. Between February 1985 and June 1987 a total of thirty seven lecturers resigned, and approximately 40 percent and 30 percent of these resignations were of lecturers in Engineering and Business Studies respectively. Between them, Northern Technical College, Zambia Air Services Training Institute, Evelyn Hone College and the ZIT accounted for approximately 80 percent of the resignations. If this high turnover of staff persists it is likely to undermine the efforts of the Government to make the country self-sufficient in the supply of teaching staff in the sub-sector.

The main change to programme implementation agreed upon at the 1987 review was that from 1988 onwards the administration of the foreign component of the programme would be sub-contracted by SIDA to the British Council. In addition to the usual items, it was agreed that a sum of money be allocated for the purchase of books, for borrowing by students, for the DTEVT institutions. It was also agreed that a detailed proposal for new library facilities at Luanshya TVTC be prepared for SIDA's consideration.

At the 1988 Joint Annual Review, it was reported that construction of the library at TVTC Luanshya was underway. This and the usual items of support were agreed upon for

further support. It was also agreed that there should be support to the water supply project at TVTC Luanshya. It was noted that DTEVT would evaluate the British Council's administration of the overseas students.

4.3.6 University of Zambia (UNZA): School of Engineering

During the period under review, Swedish funds have been used to support two programmes at the University of Zambia: the electronics and telecommunications programme, and land surveying. The objective of the support to the electronics and telecommunications programme is to improve the quality of teaching at the department through staff development and procurement of new equipment. There is institutional cooperation with the Royal Institute of Technology (KTH) in Stockholm. The objective of the support to the Land Surveying Department is to assist the building up of a qualitatively satisfactory training in land surveying. The support is concentrated on equipment, staff reinforcement and staff development. There has been institutional cooperation with the National Land Survey (NLS) of Sweden and more recently with KTH.

The allocations and disbursements to this sub-sector are shown in Table Eighteen.

The agreement for this sub-sector was entered into in 1979 for electronics and telecommunications, and 1982 for land survey. Both agreements were extended until December 1988. In 1987, the institutional cooperation was evaluated by a SIDA consultant (von Bahr, 1987). He found that the institutional cooperation between KTH and UNZA was working well and recommended that it should be extended. Regarding land survey, he found that although the programme was well staffed, and equipment modern and comprehensive, the training programme had not reached all of its objectives. The consultant recommended that when the current agreement with NLS came to an end it should be replaced with an institutional cooperation with a suitable section or department of the School of Land Surveying at KTH. At the 1988 Joint Annual Review it was agreed that both programmes continue to be supported. Linkages with KTH were extended to include the land survey programme which had been evaluated again that year (Larsson, 1988).

5 FINDINGS AND RECOMMENDATIONS

5.1 General Observations

Before giving the findings and specific recommendations for the various sub-sectors, some general observations are made which are considered to be of relevance for the ESSP as a whole.

Observation One - Evaluations of Swedish support to education in Zambia have, on the whole, been positive towards the programme. The overall profile of the programme is therefore retained in the following recommendations. This limits the room for manoeuvre for recommendations concerning new sub-programmes. However, two complementary areas of support are considered to be of such vital importance for education and development that they are included in the recommendations. These areas are Women in Development and Literacy. Recommendations are also made concerning Distance Education which is seen as being a potentially valuable component of the ESSP.

Observation Two - The education sector has received a substantial proportion of donor assistance to Zambia. The Nordic countries are particularly important for primary level education and Sweden is the only country supporting special education. Secondary, technical and vocational, and university levels receive substantial support from other donor countries. It is therefore considered to be important that the focus of Swedish aid should continue to be primary education including special education.

Observation Three - Within the priority area of basic education, the MGEYS gives priority to providing access for all children to the first seven grades. Given the extent of needs in primary education, participation in which is essential for attainment and retention of basic literacy and numeracy skills, the team is of the opinion that support should continue to be confined to Primary Grades One to Seven and not be extended to Grades Eight and Nine in the coming agreement period. Within primary education and related teacher training programmes, support should continue to be given to those sub-programmes which improve the quality of education.

Observation Four - Support to education in Zambia will for some time to come be dependent on donor-agency inputs for both qualitative and quantitative improvements. This support means that inevitably substantial local costs will be incurred, for example for the school desk programme, teacher training and other forms of human resource development. Without local cost inputs including transport costs, SIDA-supported programmes, especially those in the priority area of primary education, may not be able to function effectively. Therefore local cost components of programmes should continue to receive support from SIDA. It is noted, however, that there appears to be some

confusion as to what constitutes local costs. For example, all costs for textbook production in 1989 are listed as being local, whereas the paper etc for this project is imported (see Table 12). It is suggested that this matter of which items are paid for in local currency and which in foreign exchange be clarified.

Observation Five - One of the long-term objectives of development aid is to increase self-reliance. The ESSP contains sub-programmes for staff training, both in-country and abroad. The natural outcome of this support should be to decrease reliance on externally recruited experts. It is therefore considered by the team that in the coming sector agreement there needs to be a focus on the Zambianization of SIDA-supported programmes, with the aim of increasing self-reliance in the education sector. This means that staff training and up-grading will continue to be vital components in all sub-sectors. It is noted that the attrition of qualified staff from the education service is a hindrance to the development of self reliance. Attrition especially affects staff with readily marketable skills in fields such as technology, vocational training, computer science etc. This problem affects not only the teaching profession but also educational administration. The problem is related to the uncompetitive salaries in the public sector. This problem will need to be addressed by the GRZ and the education ministries if Swedish support to educational development is to have a long-term impact. It has consistently been stated that aid agencies should not "top-up" the salaries of state employees. However, it is suggested that ways and means for providing incentives for education staff should be found, for example, adequate housing for teachers in rural areas and responsibility allowances in connection with work on aid-supported programmes.

Observation Six - Expertise in specific fields of education can often be found concentrated in institutions in both industrial and developing countries. Long-term support to education development is considered by the team to be potentially most effective in the framework of institutional cooperation. This is already functioning well between the University of Zambia and the Royal Institute of Technology in Stockholm. It will therefore be recommended, in the following sub-sector proposals, that such cooperation should be developed in other areas. This is important given that SIDA is planning to reduce the level of staff for sector support.

Observation Seven - The team has given special consideration to the question of gender issues in Zambian education. It has been found that although girls enter school in only slightly lower numbers than boys, they suffer from increasingly large attrition rates as they move up the system. Job-related training also favours males over females. SIDA-supported programmes are aimed equally at both boys and girls, men and women. However, as participation is lower for girls and women

it is suggested below that SIDA should become involved in activities which positively discriminate in favour of females.

5.2 Findings and Recommendations by ESSP Sub-Sector

5.2.1 Development Planning and Research Unit

There is a complex programme of support to the Development Planning and Research Unit of the Ministry of General Education and Culture. Allocation to this sub-sector has steadily risen during the period under review, from 5.8 per cent in 1984 to 12 per cent in 1989. The support is vital given the key role that the Unit plays in educational planning and management, in the processing of education statistics, and also in the management of donor agency inputs. Staff training at all levels -- central, regional, and district -- has been an essential support of the sub-sector support. A very successful sub-programme has been the introduction of multigrade classrooms as a means of improving access to education from Grades One to Seven in rural areas.

The undoubted successes in supplying a variety of training programmes in Zambia and training abroad for some Planning Unit staff, have been partly undermined by the serious understaffing of the Unit.

- Support to the Planning Unit of the Ministry of General Education, Youth and Sport is recommended to be continued given the Unit's central importance to the running of the education system and for the coordination of Swedish-supported programmes and projects. This support should, however, be used for the planning and administration of those aspects of the system which receive Swedish support, in particular primary education.

- The Planning Unit of the MGEYS should be completely Zambianized as soon as possible in the coming agreement period. Vacant posts in the unit are now being filled and therefore it is not considered justified to continue financing Swedish educational planners beyond the expiry date of present contracts.

- It is recommended that support continue to be given to the Mobile Training Programme and that this support should include both training materials and vehicles.

- It is recommended that training abroad at Masters and diploma level should be phased out in the coming agreement period and be replaced by local training (see Section 5.2.7 UNZA).

- In the current agreement period, computers and related equipment have been purchased for the Planning Unit. It is recommended that the support to computerization should be limited to initial help with installation and short term

training courses. In the first instance, expert help for installation and training should be sought in Zambia.

- Support should continue to be given to the experimental community self help school building pilot project. If the evaluation of this project in two years time is positive, then the project should be expanded, with Swedish-support, into a national programme. Although SIDA is committed to supporting education in rural areas, it is recommended that up to 10 per cent of this programme could be implemented in urban areas in recognition of the needs of the urban poor.

- Whilst provision of new buildings and school furniture are essential, they will not make an impact on educational provision if existing facilities are allowed to deteriorate. Maintenance and repair is already a serious problem. It is therefore recommended that a feasibility study should be carried out into possible strategies for Swedish-support to the communities and PTAs which are responsible for such activities.

- It is recommended that a nationwide evaluation be made of the multigrade schools.

5.2.2 Educational Materials and Equipment

The support to education materials is a vital contribution to primary education in a situation of national economic crisis and structural readjustment. With the national government unable to contribute more than the salaries of teachers to the running costs of the schools, the quality of education has become very dependent on donor agency inputs. During the period 1984 to 1989 support to educational materials and equipment has been the dominant sub-sector in terms of financial allocations by Sweden. Sweden, together with Finland, is playing a central role in this area in Zambia. The percentage of the ESSP allocated to this sub-sector has usually been over 50 per cent, reached a high of 67 per cent in 1985, but had declined to 38 per cent in 1989. This decline is connected to low utilization of funds: there are still weak links in the chain of actions necessary to produce educational materials and school furniture and distribute them to the schools.

- It is recommended that the educational materials programme continue to be a major item in the education sector support programme.

- Furthermore, it is recommended that the priority objective of the programme should for the time being be the provision of schoolbooks so that every primary school pupil receives free of charge a basic package of learning materials necessary for their education. This means that in-country capacity building takes second place in the immediate future.

- Consequently, in order to clear the immense backlog in the production of primary school textbooks, it is recommended that consideration be given to printing the backlog elsewhere in the PTA/SADCC region. This is to be a stop-gap measure only.
- The printing and distribution of exercise books should continue to be a priority item.
- Attention should also be paid to the provision of equipment to KKF, in order to ensure an even flow of production from printing to binding and trimming.
- Consideration should be given to the reorganization of the distribution of school books from KKF to the districts and schools.
- School furniture production at district level should continue to be supported but in addition to being monitored by a local consultant, it should be evaluated before the end of the next agreement period. The consultant(s) should make recommendations for improvements to all aspects of this programme.

5.2.3 The Self-Help Action Plan for Education - SHAPE

Primary school education is reliant upon trained and motivated teachers. The attempts to support teacher training establishments and teachers in rural schools through support to resource centres and production units up to 1986 were not successful. This sub-sector has been galvanized into action by a radical departure in the provision of support to serving teachers. The Self Help Action Plan for Education (SHAPE) takes a comprehensive approach to helping teachers and the school communities to help themselves. In 1986, SHAPE was allocated 9.4 per cent of the Swedish funds. By 1989 this had risen to 11.7 per cent. Activities have been carried out at central, district, zone and school levels, aimed at encouraging production projects in the schools. Tools and vehicles have been provided, and in the second phase of the project there is to be an emphasis on school and zone level activities. SHAPE has the potential to reach out to teachers in isolated schools and give them the support they need to participate in school and community development projects and provide their pupils with an education relevant to local conditions. Given the responsibility laid on the community for school buildings and maintenance and the funding of these activities, SHAPE could become a key component in the strategy for maintaining, and perhaps even improving, educational standards in rural schools.

SHAPE will be entering its second phase at the beginning of the next agreement period. The first phase of the programme has been positively evaluated.

- It is recommended that Sweden also support the second phase of this project.

- As part of the process of project consolidation it is recommended that the SHAPE secretariat be Zambianized at the beginning of the second phase of the project. A counterpart should be identified as soon as possible for the SHAPE executive secretary.

- In order to facilitate the continued development of the project, the project should be sited as soon as possible within one ministry whilst continuing to liaise and cooperate with the other ministry. This suggestion is made so that SHAPE may have a firm institutional base and SHAPE activities be included in the regular work of administrators, inspectors, teachers etc involved in the project. This will be beneficial for the long term development of SHAPE activities. New organizational arrangements will require very careful consideration before being implemented.

- In the first phase of the project attention has been paid to the development of the SHAPE organization and there has been some concentration on the central level. It is therefore recommended that in the second phase there should be a concentration on school and zone level activities. In particular, support should be given to the provision of materials and equipment for school and zone resource centres and school activities related to education with production, and inservice training for teachers involved in SHAPE activities. This support should be focused on primary level education.

- At regional and district levels, the priority for support is recommended to be the development of resource centres at the Teacher Training Colleges which should be the focal point of in-service training activities for SHAPE, and at district education offices.

- It is further recommended that support should be given to SHAPE in-service training at Chalimbana National In-Service Training College. This training should be directed towards head teachers, inspectors, district and regional education offices etc.

- Given that it is recommended that SHAPE activities be concentrated at zone and school levels, it is also recommended that consideration should be given to the continued support for the purchase of project vehicles, motorcycles and cycles, with the provision that adequate arrangements can be made for their maintenance and repair. The co-financing of transport with local communities is recommended to be continued.

5.2.4 Special Education

The GRZ policy of providing basic education to all children is extended to handicapped children. Sweden has supported special education in Zambia since the beginning of the ESSP in 1980. The allocation to special education has varied from between about 8 to 13 per cent of the Swedish support over the period 1984-1989. There have been attempts to extend the programme from special schools to handicapped children attending regular schools. For this to be successful there will need to be a solid core of teachers and teacher trainers with knowledge of special education. This gives a central role to the Lusaka College for Teachers of the Handicapped (LCTH). However, it was found by the team that activities of the college are seriously threatened by staff shortages. It is therefore recommended that:

- As a condition for further support to special education in Zambia, GRZ should make a commitment to maintaining adequate staffing levels at LCTH.

When this condition has been fulfilled, then the following recommendations should be acted upon:

- The Special Education Coordinating Committee should continue to be the focal point for the organization of special education.

- Support should be given to LCTH. Even when the emphasis in special education is placed on integration of the handicapped into the school system, there continues to be a need for trained specialist staff in the field of special education. This support should include, as a matter of urgency, support to the acquisition of books for the library and materials for a resource centre for LCTH students. These resources should be available to teachers working in special education as well as to LCTH staff and students.

- Support should be given to the costs of in-service training courses in special education at LCTH and also to seminars arranged for college principals and those teachers with responsibility for special education.

- Support should be given to the costs incurred in curriculum development for special education as a component of regular pre-service and in-service teacher training at the teacher training colleges. In addition, support should be given to developing the libraries and resource centres of these colleges regarding special education.

- Special Education is an established subject area within the School of Education at UNZA. It is suggested that LCTH seek ways to cooperate with the relevant staff in the School of Education in the design of applied research and evaluation projects in special education. It is recommended that SIDA support minor research projects in this field.

- It is recommended that the possibilities for institutional support in the field of special education be considered, both within the region and further afield.
- It is recommended that study tours in the region, for example to Botswana and Zimbabwe, should be supported in order to strengthen regional cooperation in the field of special education.
- Regarding the Braille Press, it is recommended that regularization of the staffing situation be treated as a matter of urgency. Also, training should be funded of the technician responsible for the service and maintenance of the Braille Press and Perkins Braille. Such training is available in the region.
- See also below for recommendations on TEVT Special Education.

5.2.5 Department of Technical Education And Vocational Training - DTEVT

The DTEVT staff training support is a means of improving the quality of education in a subject area which is sensitive to the conditions of economic decline, structural change and formal sector employment problems. Vocational and technical education can be considered to be an area in which Sweden has considerable expertise. The main weakness in this sub-sector appears to be the building up of in-country training competence. However, since 1986 the range of activities under the local training component are reported to have increased. Ways and means of strengthening the local activities should be considered. Support to this sub-sector has been rapidly increasing, from 2.7 per cent of the allocation in 1986 to 14 per cent in 1989.

Assistance to the DTEVT has been heavily weighted towards scholarships for training abroad, with up to twenty staff members being supported each year. This has had limited returns for the development of TEVT as 50 per cent of those who have been trained have immediately left the Department:

- It is therefore recommended that within the next agreement period plans should be made for the phasing out of training abroad and for the greater use of local training institutions such as Copperbelt University School of Technology.
- Cooperation should also be sought with other institutions for TEVT in the region and it is recommended that SIDA make available funds for study tours within the region.
- it is recommended that support be continued to workshops and seminars organized by DTEVT for purposes of staff development.

- TEVT courses for handicapped school leavers have been developed by DTEVT with Swedish support. The first intake of Grade Seven school leavers has now been selected. It is recommended that these courses be evaluated at the end of two years before consideration is given to support for further cooperation in this field.

- The technical assistance for special education at DTEVT is not recommended to be continued beyond the present agreement period, given that a Zambian has now been appointed to the post of Senior Inspector for Special Education.

5.2.6 University of Zambia - UNZA

Finally, there is support to two programmes within the School of Engineering at the University of Zambia. Although higher education is not a priority area for Swedish development aid it has a crucial role to play in the provision of in-country training related to aid-supported programmes. The allocations to UNZA have over the last two years amounted to 14 per cent of the total Education Sector Support Programme.

There is successful institutional cooperation between the UNZA School of Engineering (electrical engineering and land survey) and the Royal Institute of Technology (KTH) in Stockholm.

- It is recommended that support to institutional cooperation between UNZA and KTH should continue.

- It is also recommended that the present system of a general support grant, currently 2 M SEK per annum, be continued but that it should be confined to those areas of support agreed upon with SIDA.

- Within the context of the present institutional cooperation it is further recommended that the School of Engineering should explore the possibility of developing Masters level courses so that the present support to training abroad at this level may be phased out.

- Also in the interests of phasing out training abroad at Masters and diploma levels, it is suggested that consultations be held between the Planning Unit of the Ministry of General Education, Youth and Sport, and the UNZA School of Education's Department of Educational Administration and Policy Studies regarding training courses. It is recommended that SIDA supports the development of courses in the area of educational planning and that this support should include short term consultancy or institutional cooperation for curriculum development, development of educational materials, staff training seminars etc.

- It is similarly recommended that there should be support to a cooperation between the School of Education and the Lusaka Teachers College for the Handicapped.

5.3 Complementary Areas Recommended for Inclusion in the ESSP

5.3.1 Women in Development

In accordance with Zambian and Swedish objectives for women in development, and following our discussions during this mission, the following recommendations are made:

- It is recommended that SIDA commission a comprehensive study on gender issues in education in Zambia. This study should cover primary, secondary, and higher education, as well as nonformal adult education. The study should aim to identify ways and means of facilitating women's active participation in education and thereby national development. It is recommended that terms of reference for such a study should be prepared and submitted to SIDA by a committee drawn from the two education ministries, UNZA, the Womens League and other interested organizations.

- On the basis of the gender study, a feasibility study should be made concerning ways and means of supporting female participation in education and integrating such support into the ESSP.

- It is further recommended that SIDA consider support to one or two of the investment projects identified in the Fourth National Development Plan which are of direct concern for the education sector and for which the education ministries are responsible for implementation:

- i. FNDP/WID Project 13: training in Family Life Education, curriculum development and teacher education,
- ii. FNDP/WID Project 17: Integration of Women and Young Girls in Development, with the objective of guaranteeing young women and girls appropriate training and employment.
- iii. FNDP/WID Project 29: National Literacy Programme, in particular those aspects of this ongoing project concerned with women and female school dropouts.

It is recommended that a feasibility study concerning possible Swedish-support to these projects should be carried out.

5.3.2 Literacy and Post-Literacy

Until such time as there is universal primary education, there will continue to be a need for adult literacy and post-literacy programmes. These will give access to education not only to adults without any formal schooling but also to young people who have dropped out of the school system without consolidating their literacy and numeracy skills. Post-literacy programmes can also provide skills-training to adults who work in the nonformal sector where there are few possibilities for further training.

- As in 5.3.1 it is recommended that there should be a feasibility study on Swedish-support to literacy and post-literacy programmes in Zambia. This study could be carried out in conjunction with that suggested for the literacy aspects of support to the FNDP Women in Development projects.

5.3.3 Distance Education

Distance education is a means of providing educational support to both teachers and learners. Distance education courses can be followed individually or by people working in study groups.

Swedish support to education in Zambia is directed towards the primary schools. In a situation of shortages in the supply of educational materials, and the isolation of rural schools, the team considers that distance education should be given consideration as a means of support to the schools and to Swedish-supported programmes and projects in particular. For primary school pupils, the main target group of the ESSP, it is likely that distance education is most effective within the framework of ordinary schooling i.e. as an additional input rather than a replacement for schooling.

- It is recommended that a feasibility study be carried out regarding the utilization of distance education in ESSP programmes.

- It is recommended in the first instance that such support should be directed towards SHAPE (including programmes for the PTAs), Special Education, and WID projects.

ANNEXES

Table One Zambia - Statistical Summary

Area	753,000 km ²			
Demography	1980 (actual)	1985 (est.)	1988 (est.)	1993 (projected)
Population	5.66m	6.72m	7.5m	9.0m
Growth Rate	1980-1985	1985-1990 (est.)		
	3.6 per cent	3.7 per cent		

Crude Birth Rate	1989-1993	49 per 1000 population (est.)
Crude Death Rate	1989-1993	13 per 1000 population (est.)

Structure	Under 15 years of age - 49 per cent (1980)	
Dependency	107 (1980)	
Urbanization	48 per cent (1984)	

<u>Aggregate GDP in constant (1977) prices (million Kwacha)</u>				
	1984	1985	1986	1987
	2011.5	2044.5	2059.3	2105.6
				2161.6
<u>Per capita</u>	<u>(Kwacha in 1977 prices)</u>			
	322	317	306	305
				302

Government Expenditure

	1986	1987	1988
% of GDP	42	33.5	43.3
capital expenditure, as % of total	16	17	27

Performance of Minerals

	1986	1987	1988
as % of GDP	8.6	6.7	6.6
as % of exports	97	85	85
as % of govt. revenue	13	14	-

Foreign Trade (in Zambian Kwacha)

	1984	1985	1986	1987	1988
Exports	1231.1	2473.5	3743	8056.4	9791
Imports	1107.7	1610.1	4023	5557.0	6043

Domestic Inflation

	1986	1987	1988
Low Income Group	51.6	43.0	55.6
High Income Group	58.3	54.5	45.1
(note: CSO, Zambia)			

Zambia's External Debt (in US\$ millions)

	1985	1986	1987	1988
Total External Debt	4,641	5,625	6,400	6,971
of which:				
Long Term	3,203	3,782	4,354	4,771
IMF	762	825	957	1,100
Short Term	676	1,018	1,089	1,100

(Note: Source: IBRD: DRS. Estimates for 1988 based on data provided by BoZ and internal reports of the international institutions. All figures for 1988 in table are estimates.)

Sources:

IMF: International Financial Statistics (various years).
Govt. of Zambia: Fourth National Development Plan, Lusaka 1989.
Bank of Zambia: Report and Statement of Accounts (various years).
Kayizzi-Mugerwa, S.: "External Shocks and Adjustment in a Mineral Dependent Economy: A Short-run Model for Zambia" forthcoming in World Development 1989.

Macroeconomic performance 1960-88 (period averages)

Period	60-65	65-70	70-75	75-80	80-85	85	86	87	88
GDP	7.7	9.5	-0.1	-0.5	1.5	2.5	0.8	-0.1	2.7
MN	4.8	2	-0	-2.3	-2.8	-7.8	-5	4.4	2
P ^c	13.6	8.4	2.3	4.4	-4.6	2.9	-2.5	30	36
I	17.8	24.2	31	23.2	85	9.7	8.2	7.8	10.2
ER	1.4	1.4	1.5	1.3	0.79	0.18	0.11	0.12	0.128
M1	-	20	19.8	20.8	17.2	41.7	87.2	40	7
P	2	6.5	6.4	14.2	17.8	22	58	24	68
GF	-5.7	0.4	4.4	9.8	14.2	14.4	17	15.2	11.1
CA	31	11.13	-10.6	-15.2	-9.7	6.4	-16.5	-7.4	-9

Legend:

*note that except for ER, I, GF, and CA, which are ratios, the rest of the variables are expressed in % annual growth rates

GDP = real gross domestic product (1977 prices)

MN = real mining output

I = gross fixed capital formation (% of GDP)

ER = exchange rate (US dollars per Kwacha)

M1 = money supply (currency outside banks plus demand deposits)

P^c = copper prices (US cents/pound) at the London Metal Exchange

P = consumer prices (urban high income)

GF = government's budgetary deficit (% of GDP)

CA = current account balance (% of GDP)

Sources:

1. Bank of Zambia: Bank of Zambia Reports (various issues)
2. Government of Zambia: Economic Report (various years)
3. Government of Zambia: Fourth National Development Plan (Lusaka, 1989)
4. Central Statistical Office: Monthly Bulletin of Statistics (Lusaka, various issues)

(Note: table compiled by S. Kayizzi-Mugerwa)

Statistical Summary - 1978-88 % growth

Year	1978	1979	1980	1981	1982	1983	1984	1985	86	1987	1988
GDP	1.9	-7.7	3.5	4.7	-2	1.7	-1.3	2.5	0.5	-0.1	2.7
MN	0.8	-9.7	3.6	-6.1	5.9	-1.8	-9.8	-7.1	-5	1.3	7
GFC	19	17	18.2	17.5	17.2	15	12.8	9.7	8.3	7.8	10.2
ER	0.97	0.97	0.97	0.97	0.97	0.78	0.33	0.25	0.11	0.12	0.125
M1	1.3	31	-0.7	10.5	21.2	39	11	41.7	87.3	40	7
P1	11.5	12.3	11.5	10.4	13	18	21	32	58	54	40
P2	16	9.8	11.7	14	12.5	20	20	37.5	52	43	50
GD	5.2	8.8	25.2	15.3	15.5	7.8	7.4	14.4	17	15.2	11.1
F	-32	-33	-37	-33	-43	-47	-34	-53	-112	-60	-48

Legend:

*note that except for ER, GFC, GD, and F, which are ratios, the rest of the variables are expressed in % annual growth rates

GDP = real gross domestic product (1977 prices)

MN = real mining output

GFC = gross fixed capital formation (% of GDP)

ER = exchange rate (US\$ per Kwacha)

M1 = money supply (currency outside banks plus demand deposits)

P1 = consumer prices (urban high income)

P2 = consumer prices (urban low income)

GD = government's budgetary deficit (% of GDP)

F = net foreign assets (% of GDP)

Source:

1. Bank of Zambia Reports (various issues)
2. Government of Zambia, Economic Report (various years)
3. Government of Zambia, Fourth National Development Plan (1989)
4. Central Statistical Office (CSO), Monthly Bulletin of Statistics (various issues)

(Note: table compiled by S. Kayizzi-Mugerwa)

Table 2 Primary School Classes & Enrolment, 1983 & 1988

Year	No. of Classes			Enrolment		
	Gr.1	Gr.5	Gr.1-7	Gr.1	Gr.5	Gr.1-7
1983:						
planned	4,755	3,916	28,854	190,200	156,640	1,154,160
actual	4,670	3,853	28,286	193,380	152,076	1,194,070
1988:						
planned	5,343	4,824	33,663	240,448	217,080	1,358,100
actual	5,355	4,568	34,628	222,858	187,514	1,409,842

Source: MGEYS, FNDP

Table 3A Government and Aided Secondary School Classes,
Planned and Actual, 1983 and 1988

Grades	Classes					
	Planned		Actual		Actual as % of Planned	
	1983	1988	1983	1988	1983	1988
Junior Secondary:						
Grade 8	685	3997	743	974	108	24.37
Grade 9	685	3810	675	814	98	21.36
Grade 10	-	-	634	-	-	-
Senior Secondary:						
Grade 10	322	1833	-	408	-	22.30
Grade 11	322	1735	346	405	107	23.23
Grade 12	322	1677	336	388	104	23.14

Table 3B Government and Aided Secondary School Enrolment,
Planned and Actual, 1983 and 1988

Grades	Enrolment					
	Planned		Actual		Actual as % of Planned	
	1983	1988	1983	1988	1983	1988
Junior Secondary:						
Grade 8	27400	159880	30906	38960	113	24.37
Grade 9	27400	152400	29910	32560	109	21.36
Grade 10	-	-	28786	-	-	-
Senior Secondary:						
Grade 10	11270	64050	-	14280	-	22.30
Grade 11	11270	60725	13052	14280	116	23.23
Grade 12	11270	58695	12434	13584	110	23.14

Source: Ministry of General Education, Youth and Sport

Table 4 Secondary School Teachers' Subject Areas, by level of qualification, 1988

Subject Area	Zambian		non-Zambian	
	non-graduate	graduate	non-graduate	graduate
Science	429	142	6	197
Mathematics	562	94	7	113
Agric. Science	153	5	3	5
English	571	259	18	86
Geography	251	213	8	28
History	235	129	2	34
Civics	158	5	0	0
Commerce	404	0	10	0
Industrial Arts	296	6	10	0
Home Economics	300	0	0	0
Religious Ed.	228	1	0	62
French	209	0	12	0

Source: UNZA, 1986

Table 5 Technical and Vocational Training Enrolments, 1984-1988

Subject Area	Year				
	1984	1985	1986	1987	1988
Trades or Craft	1562	1446	1658	1030	864
Technical/Technologist	832	1012	442	1045	982
Science & Paramedical	272	235	257	210	236
Business Studies	640	403	308	625	711
Secretarial	671	854	946	456	482
Air Services	120	126	61	56	-
Applied Arts	197	109	317	179	211
Teacher Training	364	230	270	330	401
Academic	250	274	308	299	294
TOTAL	4,908	4,689	4,567	4,230	4,181

Source: MHEST, FNDP

Table 6 Teacher Training Colleges Enrolment and Output,
1979 - 1988

Year	Enrolment	Output
1979	4,406	2,478
1980	4,445	2,194
1981	4,485	2,237
1982	3,843	2,173
1983	4,304	1,849
1984	4,653	1,866
1985	4,549	3,798
1986	4,545	2,189
1987	4,164	1,929
1988	4,605	2,212

Source: NCDP, FNDF

Table 7 Enrolments in Critical Grades for the Cohort
which started Grade 1 in 1974, by sex

Enrolment	Grade 1 1974	Grade 5 1978	Grade 7 1980

Number:			
Boys	75,571	64,712	76,903
Girls	70,984	54,084	52,457
Total	146,555	118,796	129,360
Index:			
Boys	100	85.6	101.8
Girls	100	76.2	73.9
Total	100	81.0	88.3

Table 7 cont.d

Enrolment	Grade 8 1981	Grade 11 1984	Grade 12 1985

Number:			
Boys	16,224	8,908	9,176
Girls	9,867	4,563	4,399
Total	26,091	13,471	13,575
Index:			
Boys	21.5	11.8	12.1
Girls	13.9	6.4	6.2
Total	17.8	9.2	9.3

Source: Silanda, 1988.

Table 8 Gross Domestic Product (GDP), Public Expenditure, and Public Expenditure on Education, 1970, 1980, 1985, 1986 (at Current Prices)

GDP and Expenditures	1970	1980	1985	1986
<hr/>				
<u>GDP:</u>				
GDP (K'million)	1185.0	3063.6	6332.1	12953.5
GDP per capita (Kwacha)	278.8	539.4	942.3	1863.8
Population (million)	4.25	5.68	6.72	6.95
<u>Govt. Expenditures</u>				
(K'million):				
Total Expenditure of which:	620.32	1657.57	2184.33	5383.60
Recurrent Expenditure of which:	380.99	1081.97	1906.47	4390.90
Routine Running Costs	n.a.	449.63	994.36	1527.21
Constitutional & Statutory Expend.	71.11	396.53	692.33	2252.24
Servicing of Public Debt	42.14	234.17	489.77	n.a.
Capital Expenditure	239.33	575.60	277.86	992.70
<u>Education Expenditures</u>				
(K'million)				
Total Expenditure of which:	55.95	128.25	293.19	432.84
Recurrent Expenditure	44.39	119.91	272.40	405.45
Capital Expenditure	11.56	8.34	20.79	27.39

n.a. not available

Sources: Financial Reports, 1970-1986
Monthly Digest of Statistics (various issues)
World Debt Tables (World Bank)

Table 9 Public Recurrent Expenditure by Level of Education
and Type of Expenditure, 1970, 1980, 1985, 1986
(expenditures in constant 1970 Kwacha ('million))

Expenditure	1970	1980	1985	1986
Administration:				
Personal emoluments	1.60	1.61	2.11	2.03
Duty travel	0.64	0.28	0.25	0.19
General & other expenses	1.18	0.75	0.32	0.56
sub-total	3.42	2.64	2.68	2.78
Primary Schools:				
Personal emoluments	15.33	18.59	17.92	15.28
Teaching materials	4.53	0.56	0.33	0.00
General expenses		1.00	0.50	0.54
sub-total	19.66	20.15	18.75	15.62
Secondary Schools:				
Personal emoluments	6.73	6.46	4.15	4.41
Teaching materials	5.40	0.46	0.72	0.00
Boarding costs		2.24	2.85	2.93
General expenses		0.82	0.41	0.41
sub-total	12.03	9.98	8.12	7.75
Teacher Training:				
Personal emoluments	0.56	0.74	0.37	0.60
Teaching materials	)	0.06	0.04	0.04
Transfers to students	) 0.76	0.41	0.42	0.48
General Expenses	)	0.17	0.09	0.18
sub-total	1.32	1.38	0.92	1.30
Technical Education:				
Personal emoluments	n.a.	1.52	1.43	1.25
Teaching materials	n.a.	0.19	0.07	0.09
Transfers to students	n.a.	0.60	0.49	0.44
General expenses	n.a.	0.93	0.44	0.50
sub-total	2.25	3.24	2.43	2.28
University				
Operating grant	3.54	4.77	5.46	5.67
Bursaries for students	0.62	0.87	2.33	2.44
sub-total	4.16	5.64	7.79	8.11
TOTAL	42.84	43.03	40.69	37.84

n.a. not available

Source: Financial Reports, 1970-1986

Table 10 Parental Payments for Primary and Secondary Pupils.
1985 (in Kwacha)

Expenditures	Level	
	Primary	Secondary
Learning materials	20	54
School funds	12	41
Boarding supplement	--	38
Examinations	--	43
Transport and lunch	124	258
School uniforms	78	145
TOTAL	168	418

Source: UNZA, 1986

Table 11 Zambian-Swedish Cooperation in the Field of Education
Allocations by sub-sector and total disbursements,
1984-89 (in '000 SEK)

	1984		1985		1986	
	SEK	%	SEK	%	SEK	%
Education Materials:						
- books, paper, printing	6000		5800		4000	
- desks	8200		17207		15150	
sub-total	14200	54	23007	67	19150	56
Planning Unit	1524	5.8	2645	7.7	3135	9.1
Teacher Training/SHAPE	655	2.5	92	0.3	2000	5.8
DTEVT	720	2.7	1911	5.6	2600	7.6
Special Education	3484	13.3	3294	9.6	4169	12
UNZA:						
- electrical eng.	1560		1812		1140	
- land survey	1920		1540		1922	
sub-total	3480	13.3	3352	9.8	3062	8.9
unallocated	2137	8.2	--	--	226	0.7
Total Allocations	26200		34301		34342	
Total Disbursements	30105		28229		12764	
% of allocations disbursed	115%		82%		37%	

* includes 2 MSEK general support to UNZA

n.a. = not available

est. = estimate

Source: Joint Annual Sector Review Reports

Table 11 cont.d /

Table 11 cont.d

	1987		1988		1989	
	SEK	%	SEK	%	SEK	%
-----	-----	-----	-----	-----	-----	-----
Education Materials:						
- books, paper,	9200		17800		13300	
printing						
- desks	2500		3000		4000	
- - - - -	-----	-----	-----	-----	-----	-----
sub-total	11700	44	20800	51	17300	38
- - - - -	-----	-----	-----	-----	-----	-----
Planning Unit	3000	11.3	3369	8.3	5450	12
- - - - -	-----	-----	-----	-----	-----	-----
Teacher Training/ SHAPE	2500	9.4	4097	10	5375	11.7
- - - - -	-----	-----	-----	-----	-----	-----
DTEVT	2564	9.7	3600	8.8	6500	14
- - - - -	-----	-----	-----	-----	-----	-----
Special Education	3112	11.8	3180	7.8	4500	9.8
- - - - -	-----	-----	-----	-----	-----	-----
UNZA:						
- electrical eng.	1356		2000		2400	
- land survey	2258		1700		2300	
- - - - -	-----	-----	-----	-----	-----	-----
sub-total	3614	13.6	5700*	14	6700*	14.4
- - - - -	-----	-----	-----	-----	-----	-----
unallocated	---		---		---	
- - - - -	-----	-----	-----	-----	-----	-----
Total	26490		40746		45825	
-----	-----	-----	-----	-----	-----	-----
Total Disbursements	13986		32055		n.a.	
- - - - -	-----	-----	-----	-----	-----	-----
% of allocations disbursed	52.8%		78.7%		n.a.	

Table 12 **Zambian-Swedish Cooperation in the Field of Education**
Allocations by sub-sector, sub-divided into local
currency and foreign exchange ('000 SEK)

	1984			1985			1986		
	L	F	Total	L	F	Total	L	F	Total
Ed. Materials:									
- books, paper, printing	-	6000	6000	1800	4000	5800	3000	1000	4000
- desks	8200	-	8200	17207	-	17207	15000	150	15150
Planning Unit	400	1124	1524	1385	1260	2645	1285	1850	3135
Teacher Training/SHAPE	-	655	655	10	82	92	-	2000	2000
DTEVT	320	400	720	423	1488	1911	600	2000	2600
Special Education	1260	2224	3484	1269	2025	3294	1051	3118	4169
UNZA:									
- electrical eng.	-	1560	1560	-	1812	1812	-	1140	1140
- land survey	-	1920	1920	-	1540	1540	-	1922	1922
unallocated	-	2137	2137	-	-	-	-	226	226
Total	10180	16020	26200	22094	12207	34301	20936	13406	34342
% local/forex	38.1	61.1	100	64.4	35.6	100	61.0	39.0	100

L = local currency
 F = foreign exchange

Source: Joint Annual Sector Review Reports

Table 12 cont.d /

Table 12 cont.d

	1987			1988			1989		
	L	F	Total	L	F	Total	L	F	Total
Ed. Materials:									
- books, paper, printing	8450	750	9200	16830	970	17800	13300	-	13300
- desks	2000	500	2500	2000	1000	3000	4000	-	4000
Planning Unit	990	2010	3000	1530	1839	3369	3400	2050	5450
Teacher Training/SHAPE	1400	1100	2500	1590	2507	4097	2650	2725	5375
DTEVT	504	2060	2564	600	3000	3600	3000	3500	6500
Special Education	804	2308	3112	1428	1752	3180	3800	700	4500
UNZA:									
- electrical eng.	-	1356	1356	26	1974	2000	300	2100	2400
- land survey	-	2258	2258	-	1700	1700	-	2300	2300
unallocated	-	-	-	1000	1000	2000	1000	1000	2000
Total	14148	12342	26490	25004	15742	40746	31450	14375	45825
% of ESSF	53.4	46.6	100	61.4	38.6	100	68.6	31.4	100

Table Thirteen Planning Unit: Allocations by item, and
total Disbursements, 1984-1989 ('000 SEK)

Items	Year					
	1984	1985	1986	1987	1988	1989
Allocations:						
Mobile Training	120	580	520	400	400	650
Multigrade	-	562	520	315	150	400
Courses:						
- district	-	-	80	45	130	300
- regional	390	-	25	30	1	
- Uni.level	-	225	240	350	500	500
scholarship	90	90	100	60	40	-
study tours	-	-	-	40	-	-
self-help	-	-	-	200	600	900
Swedish planners	864	648	1200	1050	n.a.	n.a.
vehicles	-	-	-	170	60	800
office equipment	60	-	-	40	25	100
contingency	-	540	450	300	600	600
personnel	-	-	-	-	864	1200
Total allocations	1524	2645	3135	3000	3369	5450
% ESSP allocation	5.8	7.7	9.1	11.3	8.3	12.0
Disbursements:						
sum	1040	2363	1813	2323	2790*	n.a.
% of allocation	68.0	89.0	58.0	77.0	83.0*	n.a.

* estimates only
n.a. not available

Source: Joint Annual Sector Review Reports

Table Fourteen Education Materials: Allocations by item, and total Disbursements, 1984-1989 ('000 SEK)

Items	Year					
	1984	1985	1986	1987	1988	1989
Allocations:						
Ed. materials:	6000	5800				
textbooks			2000*	4000	10000	8000
exercise books			2000	4000	4000	5000
teachers' handbooks				200	600	300
atlases					2600	
maps				1000	600	
Desks	8200	17207	15150	2500	3000	4000
Total allocations	14200	23007	19150	11700	20800	17300
% ESSP allocation	54.0	67.0	56.0	44.0	51.0	38.0
Disbursements:						
sum	20472	17934	1736	3686	13350**	n.a.
% of allocation	144.0	78.0	9.0	31.0	64.0**	n.a.

* includes teachers' handbooks

** estimates only

n.a. not available

Source: Joint Annual Sector Review Reports

Table Fifteen Teacher Training: Allocations by item, and
total Disbursements, 1984-1989 ('000 SEK)

Items	Year					
	1984	1985	1986	1987	1988	1989
Allocations:						
Resource Centres	655	92	1000			
Production Units			1000			
SHAPE:						
training				1000	500	750
materials, equip.				1080	700	1300
vehicles					1150	1400
personnel				420	432	600
workshops					600	700
research					300	150
evaluation					75	75
Secretariat					340	400
Total allocations	655	92	2000	2500	4097	5375
% ESSP allocation	2.5	0.3	5.8	9.4	10.0	11.7
Disbursements:						
sum	942	154	166	1712	57640*	n.a.
% of allocation	143.0	167.0	8.0	68.0	140.0*	n.a.

* estimates only

n.a. not available

Source: Joint Annual Sector Review Reports

Table Sixteen Special Education: Allocations by item and total Disbursements, 1984-1989 ('000 SEK)

Items	Year					
	1984	1985	1986	1987	1988	1989
Inspect. MGEC/SECC		810	446	408	450)
- - - - -	-	-	-	-	-) - -
LCTM		693	830	940	250)
- - - - -	-	-	-	-	-) - -
Inspect. SE, MHE		324	480	-	300)
- - - - -	-	-	-	-	-) - -
CDC		702	1104	549	200	) 4200*
- - - - -	-	-	-	-	-) - -
DTEVT		765	1309	765	1128)
- - - - -	-	-	-	-	-) - -
Braille Press		-	-	450	-)
- - - - -	-	-	-	-	-) - -
Braille DTEVT		-	-	-	500)
- - - - -	-	-	-	-	-) - -
contingency		-	-	-	100)
- - - - -	-	-	-	-	-) - -
personnel		-	-	-	252	) 300
- - - - -	-	-	-	-	-) - -
Total allocations	3484*	3294	4169	3112	3180	4500
% ESSP allocation	13.3	9.6	12.0	11.7	7.8	9.8
- - - - -	-	-	-	-	-	-
Disbursements:						
sum	2913	2552	2888	1676	2676**	n.a.
% of allocation	84.0	77.0	69.0	53.8	84.0**	n.a.

* breakdown by sub-sector not available

** estimates only

n.a. not available

Source: Joint Annual Sector Review Reports

Table Seventeen DTEVT Staff Development, Allocations and Disbursements, 1984-1989 ('000 SEK)

	Year					
	1984	1985	1986	1987	1988	1989
Total allocations	720	1911	2600	2564	3600	6500
% ESSP allocation	2.7	5.6	7.6	9.7	8.8	14.0
Disbursements:						
sum	195	1776	2311	2085	4087*	n.a.
% of allocation	27.0	93.0	89.0	81.0	114.0*	n.a.

* estimates only

n.a. not available

Source: Joint Annual Sector Review Reports

Table Eighteen UNZA: Allocations by item, and Disbursements, 1984-1989 ('000 SEK)

Items	Year					
	1984	1985	1986	1987	1988	1989
Elec. Eng.	1920	1540	1922	1356	2000	2400
Land Survey	1560	1812	1140	2258	1700	2300
General Support	-	-	-	-	2000	2000
Total allocations	3480	3352	3062	3614	5700	6700
% ESSP allocation	13.3	9.8	8.9	13.6	14.0	14.4
Disbursements:						
sum	4510	3450	3850	2504	3388*	n.a.
% of allocation	130.0	103.0	126.0	69.0	59.0*	n.a.

* estimates only

n.a. not available

Source: Joint Annual Sector Review Reports

**Table Nineteen Technical Cooperation Projects and Activities
in the Education Sector, 1987**
(disbursements in '000 US Dollars)

SOURCE OF ASSISTANCE	PROJECT	1987 DISBURSEMENT	NATURE OF ASSISTANCE
FAO	Assistance to fish production units in schools 1987	11	One consultant
Belgium	University of Zambia Soil Science 1982-92	285	Provision of 2 Professors and lecturers and supply of books, laboratory equipment and vehicles
Canada	University of Zambia School of Agriculture 1982-89	574	Provision of 4 Professors equipment and training fellowships
Japan	University of Zambia School of Veterinary Medicine 1986-90	1783	Establishment of Vet. School and provision of personnel and equipment
UNESCO	Upgrading of Science teaching. Production of low-cost science equipment 1986-91	70	Provision of 2 experts, materials and in-service teaching
UNFPA	University of Zambia Demographic training 1986-89	83	1 lecturer, equipment and training fellowships
UNPSSTD	University of Zambia Upgrading science and mathematics teaching 1982-87	21	In-service training of secondary teachers and upgrading of pre-university science students
Canada	General Human Resources Development 1985-92	14	Provision of training in various sectors including DTEVT and Primary Teacher training in science and mathematics
Finland	Practical Subjects 1986-91	732	Promotion of practical skills through training, establishment of workshops and production of traditional crafts handbook

SOURCE OF ASSISTANCE	PROJECT	DISBURSEMENT	NATURE OF ASSISTANCE
Finland	Zambia Educational Materials Project 1982-90	1187	Production of primary books and rehabilitation of the K.K. Foundation printing plant
Ireland	DTEVT (Technical Colleges) 1981-89	519	Support for business studies through provision of personnel and equipment
Ireland	University of Zambia School of Veterinary Medicine	137	Provision of personnel and equipment
Ireland	General support to USZA and NIPA ongoing	147	
Netherlands	University of Zambia Schools of Mines and Engineering ongoing	1052	Personnel and equipment
Norway	Zambia Education Projects, Implementation Unit 1986-89	1483	Rehabilitation and preventive maintenance of secondary schools
SIDA	SHAPE 1985-89	347	Support for self-help activities in schools
SIDA	Special Education 1985-89	432	
SIDA	DTEVT Staff Development 1985-89	356	
SIDA	University of Zambia Depts of Civil and Electrical Engineering 1985-89	501	
UK	Manpower Assistance to secondary education sector, ongoing	1627	63 Secondary teachers
UK	Localisation of examinations 1984-88	129	1 Expert for computerization of Grade 12 examinations

SOURCE OF ASSISTANCE	PROJECT	DISBURSEMENT	NATURE OF ASSISTANCE
UK	Manpower assistance to tertiary education, ongoing	495	25 Experts assisting in the Ministry of Higher Education and University of Zambia
UK	Manpower assistance to technical education, ongoing	601	25 Experts assisting DTEVT
UK	Assistance to the Zambia Institute of Technology 1984-89	206	4 Experts running a Higher Diploma Studies Programme for engineers and public works support programme for District Council works staff
USSR (loans)	Education support programme 1984-87	7	3 Professors provided to University of Zambia
USSR	USSR participation in the Africa Fund 1988-90	0	10 Professors provided to University of Zambia
EEC	Multinational Training Programme 1982-89	386	Scholarships and technical assistance personnel
EEC	ZAMSTEP 1987-91	590	Upgrading of science and mathematics teaching at secondary school
OXFAM	Education Projects ongoing	15	Various educational training programmes

Source: UNDP Development Cooperation Zambia: 1987 Report
Published by UNDP June 1988.

1989-04-19

TERMS OF REFERENCE

Joint Zambian-Swedish Evaluation of the Education Sector Support Programme in Zambia

1. BACKGROUND

The New Economic Recovery Programme the Fourth Development Plan 1989-1993 was published in January 1989. The general policy for education is described in The Provision of Education for All. Towards the implementation of Zambia's Educational Reforms under Demographic and Economic Constraints, 1989 - 2000.

The general policy objectives for the Swedish support to the Education Sector has been :

- to ensure improved performance of all educational institutions
- to provide pre-school education through community efforts
- to provide more wide-spread and equitable education opportunities at the basic level giving priority to expansion of primary education
- to widen access to primary and secondary education through distance education, night-schools and parttime courses.

Swedish support to educational development in Zambia was initiated shortly after Independence 1964. In 1980 there was a change from project support to sector support. The first agreement covered 1980-83 with MSEK 56 and the second from 1984-85 with MSEK 47.5. The current third agreement covers 1986-89 and amounts to SEK 107.5 million, making under a total amount of SEK 203.5 million for the whole period.

Swedish support to educational development in Zambia has its emphasis on qualitative improvements in primary education. There has also been an element of support to vocational training and university education in key areas related to industrial as well as to rural development.

The objectives of the Zambian- Swedish Education Sector Support Programme (ESSP) are:

- to increase the number of children in primary education, particularly in rural areas
- to improve the quality and relevance of primary education
- to improve the quality of training in practical and vocational subjects

The current agreement ending December 31, comprises the following sub-programmes:

a) Planning Unit at the Ministry of General Education, Youth and Sports (MGEYS):

- Mobile Training
- University Planning Course
- Statistics
- Self-help Programme for maintenance and construction of classrooms
- Multigrade School Programme

b) The Education Materials Programme.

This programme is carried out in close collaboration with Finnida on the production of textbooks and exercise books. Teachers' handbooks are printed at the Printing Services Unit. Efforts are being made to decentralize the desk production. The desk programme is closely followed by a locally employed consultant.

c) The Self Help Action Programme for Education (SHAPE).

SHAPE is a nation wide programme with a secretariat attached to the two Ministries of Education. The aim of the programme is to encourage school administrators at all levels to support teachers and pupils to include practical subjects and production in the education.

d) Department of Technical Education and Vocational Training, (DTEVT):

- scholarships
- teaching material
- workshops and study tours
- Technical and Vocational Teacher's College (TVTC) Library

e) Special Education:

- Special Education Co-ordinating Committee
- Inspectorate/MGEYS
- Lusaka College for Teachers of the Handicapped (LCTH) Ministry of Higher Education, Science and Technology (MHEST)
- Vocational and Pre-vocational Training
- Braille Press

f) University of Zambia (UNZA)

Support in the fields of electronics and land surveying through an institutional cooperation arrangement with the Royal Institute of Technology (KTH) in Stockholm.

A number of evaluations and studies on the Swedish support to the Educational Sector have been carried out. The most important are:

- Education in Zambia. Past Achievements and Future Trends. Ingemar Fägerlind, Jan Valdelin, 1983
- Education and Economic Crisis Anten Johnston, Henry Kaluba, Mats Karlsson, Kjell Nyström 1987

Other studies and evaluations of importance for the present Sector Evaluation include:

- Evaluation of two training programmes of the UNZA 1987.
- Study on the institutional cooperation between KTH and UNZA, 1988.
- Evaluation of the Multigrade Programme, 1988.
- SHAPE-programme, January 1989.
- Evaluation of the Special Education Programme, April 1989.

It is envisaged that the cooperation between Zambia and Sweden in the field of education will continue after the expiry of the present agreement, i.e. after December 31, 1989.

2. REASONS FOR THE EVALUATION

In the Agreed Minutes from the annual consultations held in September 1988, it was agreed that a joint evaluation should be undertaken during the second quarter of 1989 with the main purpose of evaluating the impact of SIDA-funded activities during the previous and present agreement. The evaluation should include recommendations on the future. Swedish support to the Education Sector within the framework of national needs and priorities.

The main objective of the evaluation is to summarize the achievements of projects and programmes which have received Swedish assistance during the last two agreement and to provide background information for decisions on a future Swedish support.

3. SCOPE AND FOCUS OF THE EVALUATION

The Evaluation shall focus on the following three main issues:

1. The development of the Education Sector in Zambia. The achievements shall be analysed in relation to the objectives of the sector as expressed in Zambia's Third Development Plan (1979 - 1983) and in the light of the overall economic situation in the country during the period and how this situation has influenced the costs and patterns of financing of education. The analysis shall include an assessment of the structural changes in the sector, the development and strengthening of institution and the development of capability which have taken place.
2. The achievements, effects and impact of the sub-programme in the Education Sector, which have received Swedish support in the period of 1984-89. The analysis shall be made in the light of the objectives of the ESSP and shall discuss, as far as possible the role of Swedish support in the Education sector in Zambia. This includes issues such as institution building and development of local capability. Local capability shall be highlighted.
3. The involvement of women in the education sub-programmes and the potential and actual benefits for women. Summarize changes in curriculum content as well as teacher methodology within primary and secondary education, as well as teacher training, including gender aspects when relevant and possible.

The Evaluation will essentially be based on material readily available in Zambia and Sweden such as plan documents, evaluation reports etcetera.

Specific attention shall be paid to the following issues:

1. To assess the level of coherence between the Swedish support and the goals of the GRZ as expressed in relevant policy documents for the education sector.
2. Analyse achievements in relation to national targets of the programmes supported by Sweden under the specific agreement to ESSP. In this context an assessment of participation based on gender should be made for all levels of the education system.
3. Identify bottlenecks in implementation of the programmes indicated in the foregoing paragraph. Assess the future Zambianisation of posts within Ministries and Institutions related to education currently held by expatriate personnel financed by SIDA.
4. Analyse the proportions of local financing and external resources in the sub-programmes. Estimate the consequences of a substantial reduction of local financing provided by the donors. Give an overall picture of the role of other donors in the sector.
5. Analyse how gender issues are dealt with in-curricula and text books with emphasis on primary school level.

4. METHODOLOGY AND TIME PLAN

The Evaluation study will be undertaken by a team of independent consultants and one SIDA evaluation officer in close cooperation with the Ministry of General Education, Youth and Sports.

The members of the team will consist of an Education Planner and a Macro Economist to be identified by Zambia and two Education Specialists to be identified by Sweden together with a SIDA Evaluation Officer. The SIDA Evaluation Officer will have responsibility for ensuring that gender aspects are sufficiently emphasized. The evaluation will be undertaken during the period March 15 - May 31, 1989 in the following steps:

- 1) A meeting will take place in Lusaka April 6th to form the start of the Evaluation for the team. The draft terms of reference will be discussed

with the Zambian members of the team and Professor Fägerlind.

- 2) A desk study will be undertaken in Sweden by one of the Education Specialists. The study will be based on documents, reports, studies and evaluations relating to the Swedish support to the Education Sector in Zambia, 1984-89. The study will focus on project impact and will take place between March 15 - April 7, 1989. A draft report will be presented April 21, 1989.
- 3) A desk study will be undertaken in Sweden focusing on gender aspects, especially women's participation relative to men's. The report is to be completed by April 27, 1989. The desk study will be followed by a visit to Zambia May 8-13 with the purpose of gaining access to data not available in Sweden.
- 4) A study will be performed in Zambia by the two Zambian consultants, the Education Planner and the Economist, focussing on the macro-economic aspects of the Education Sector. It will include an analysis of the development of the Education Sector during the period 1984-87 with special regard to structural changes, institutional development and the development of planning capability. A report is to be presented by April 28, 1989.
- 5) The whole evaluation team will meet in Zambia May 15-24 to discuss and analyse the various reports mentioned above under items 2), 3) and 4) and to decide on the final conclusions and recommendations.
- 6) The Final Report will be based on the outcome of the meeting in Zambia see 5). *Annex 1

Estimated time plan:

Education Planner and Macro Economist, each:

- 3 weeks desk study, Zambia see item 4)
- 8 days evaluation team meeting, Zambia 5)
- 5 days reading and commenting on desk study reports 2 and 3 and the Draft Final Report

Total: about 6 weeks

Education Specialist 1.

- 8 days evaluation team meeting Zambia see item 5)

- 5 days reading and commenting on desk study reports 2, 3 and 4 and the Draft Final Report

Total: about 3 weeks

Education Specialist 2

- 3 1/2 weeks desk study Sweden see item 2)
- 8 days evaluation Team meeting, Zambia see item 5)
- 3 weeks report writing Sweden (Draft Final Report)
- 5 days reading and commenting on desk study reports 3 and 4 and concluding the Final Report

Total: maximum 9 weeks

SIDA Evaluation officer

- 2 weeks desk study, Sweden see item 3)
 - 1 week Zambia see item 3)
 - 8 days evaluation team meeting Zambia see item 5)
 - 5 days reading and commenting on desk-study reports 2 and 4 and the Draft Final Report 5.
- REPORTING

The reports shall be presented at the dates stated above under Methodology and Time Plan in one copy to SIDA and one copy to each member of the Evaluation Team.

Upon completion of the discussions in Zambia, the Evaluation Team shall present its findings, conclusions and recommendations to the Zambian authorities and the SIDA office in Lusaka.

The Draft Final Report shall be completed by June 15, 1989. Draft Final Report will be reviewed and commented on by all team members in Zambia and Sweden. The Final Report shall be presented to SIDA September 1, 1989. The report shall be typed on a word processor, compatible to the IBM system. The report shall follow the standardized format, (see Annex 2), and comprise an abstract to be submitted to the DAC Expert Group on Aid Evaluation (see annex 3).

As a part of their contract, the consultants shall be prepared to participate in seminars and meetings to discuss the report.

Some SIDA evaluation reports are printed and published. The Final Report shall therefore be of such technical quality that it may be sent for printing without any further rewriting or editing.

6. COSTS

Cost induced by the work of the consultants will be covered by the Swedish Education Sector Support to Zambia. Planning Unit. Contingencies.

APPENDIX 1 to main Terms of Reference for the
Evaluation of ESSP.

Terms of Reference for Professor Ingemar Fägerlind,
Institute of International Education, University of
Stockholm, Sweden.

The evaluation shall be carried out in accordance with the main terms of reference for the evaluation by a team of five members. Professor Fägerlind's main tasks will be:

1 To meet with the Zambian team members and the DCO staff concerned with the ESSP in Lusaka on April 6, 1989, for a preparatory discussion of the evaluation. Dr Fägerlind will explain and discuss the intention of the evaluation, the scope and focus and the methodology and time plan.

2 To read and comment on the three reports to be prepared in April by Dr Christine McNab, Senior Evaluation Officer Annika Idemalm and Professor Benjamin Mwene and Dr Suya Chidumayo, respectively.

3 To act as team leader during the main part of the evaluation May 13 - 14 in Lusaka. During this time the whole evaluation team will be in Zambia to discuss and analyse the reports already produced by the team members, to acquire additional information, discuss with the education authorities and other relevant persons and to decide on the final conclusions and recommendations for the future Swedish support to the education sector in Zambia.

4 To present summary conclusions and recommendations to the DCO and the relevant Zambian authorities before the departure of the team from Lusaka.

5 To read and comment on the main evaluation report to be drafted by Christine McNab after the completion of the evaluation.

6 To participate in the presentation of the evaluation to SIDA and participate in a seminar which may be organized by SIDA to discuss the evaluation and the future Swedish support.

APPENDIX 2 to the main terms of reference for the Evaluation of ESSP.

Terms of reference for Dr Christine McNab,
Institute of International Education, University of
Stockholm, Sweden.

The evaluation shall be carried out in accordance with the main terms of reference for the evaluation. The specific tasks for Dr Christine McNab will be:

1 To undertake a desk study in Sweden of the Swedish support to the Education Sector in Zambia 1984 - 1989 (see 4.4 main terms of reference) and to present a draft report no later than April 21, 1989. One copy of the report should be sent to each one of the team members and one copy to the Education Division, SIDA for comments.

2 To read and comment on draft reports prepared by Pr Dr Mweene and Dr Chidumay and Senior Evaluation Officer Idemalm, respectively, to be produced in April.

3 To participate in the main phase of the evaluation in Zambia May 15 - 25, 1989, together with the whole evaluation team.

4 To draft the main report following the visit to Zambia. This report is to be based on the three previous reports produced by various team members in April, and on the discussions and analysis by the evaluation team during their work in Zambia. The draft main report is to be presented no later than June 15, 1989. One copy should be sent to each one of the team members for comments and five copies to the Education Division at SIDA.

5 To integrate comments received, as appropriate a final report to be presented no later than September 1, 1989, in ten copies, and to participate in any presentation or seminar that may be organized by SIDA in connection herewith.

APPENDIX 3 to main terms of reference for the
Evaluation of ESSP.

Terms of Reference for Senior Evaluation Officer
Annika Idemalm, SIDA, Stockholm.

The evaluation shall be carried out in accordance to the main Terms of Reference for the Evaluation. The specific tasks for Ms Idemalm will be:

- 1 To participate in all relevant stages of the evaluation. To study the report prepared by the team members as well as the special studies carried out previously and comment thereon from the point of view of gender aspects.
- 2 To undertake a desk study in Sweden and to present a draft report no later than April 29, 1989. The study shall include:
 - a) Study relevant GR2 documentation, including the Fourth National Development Plan.
 - b) Study of relevant SIDA documentation, including the Wid Plan of Action
3. To, during a one weeks visit to Zambia, gather data not easily available in Stockholm - through desk study of materials, visits to institutions and through discussions with relevant persons.
4. To ensure that the Evaluation includes:
 - a) Identification of bottlenecks and means of overcoming them
 - c) Clear statement of SIDA's policy with regard to integration of women
 - d) Concrete recommendations as to what can be done in the future to ensure that women are integrated into future programme support.

APPENDIX 4 to the main terms of reference for the Evaluation of ESSP.

TERMS OF REFERENCE FOR PROFESSOR BEN WEENE,
MINISTRY OF HIGHER EDUCATION, SCIENCE AND
TECHNOLOGY.

The evaluation shall be carried out in accordance with the main terms of reference for the evaluation by a team of five members. Professor Mweene's tasks will be the following:

- 1 To meet with Professor Fägerlind, the team leader on April 6, 1989 to discuss the scope and focus and the time plan for the evaluation.
2. To undertake a study together with Dr Chidumayo, focusing on the macro-economic aspects of the Education Sector. It will include an analysis of the development of the Education Sector during the period 1984 - 87 with special regard to structural changes, institutional development and the development of planning capability. The study should also include cultural and social aspects on the Education system.
3. To present the report not later than April 28, 1989 to the team.
4. To participate in the main phase of the evaluation in Zambia May 15 - 24, 1989 together with the whole evaluation team.
5. To read and comment reports undertaken by Christine McNab and Annika Idemalm.

APPENDIX 5 to the main terms of reference for the Evaluation of ESSP.

TERMS OF REFERENCE FOR DR SUYA CHIDUMAYO, NATIONAL COMMISSION FOR DEVELOPMENT PLANNING

The evaluation shall be carried out in accordance with the main terms of reference for the evaluation by a team of five members. Dr Chidumayo's main tasks will be the following.

1. To meet with Professor Fägerlind, the team leader on April 6, 1989 to discuss the scope and focus and the methodology and time plan for the evaluation.
2. To undertake a study together with Professor Ben Mweene, focusing on the macro-economic aspects of the Education sector. It will include an analysis of the development of the Education Sector during the period 1984 - 87 with special regard to structural changes, institutional development and the development of planning capability. The study should also include cultural and social aspects on the Education system.
3. To present the report not later than April 28, 1989 to the team.
4. To participate in the main phase of the evaluation in Zambia May 15 - 24, 1989 together with the whole evaluation team.
5. To read and comment reports undertaken by Christine McNab and Annika Idemalm.

ANNEX THREE

LIST OF PERSONS MET IN ZAMBIA, 14-24 MAY, 1989

C.F. Chiyenu	Deputy Permanent Secretary	MHEST
Mrs. G. Mulapesi	Acting Permanent Secretary	"
D. Chanda		"
K. Kamuwanga		"
R. Maronga	Chief Education Officer	"
S. Chiputa	Inspector of Colleges, Agriculture (SHAPE)	"
J.Y. Mlewa	Acting Permanent Secretary	MGEYS
K.A. Chali	Deputy Permanent Secretary	"
E.N. Phiri	Assistant Secretary	"
M. Sikuyuba	Acting Assistant Director	"
F. Lundström	Senior Planning Officer	"
K.O. Holmberg	Senior Planning Officer	"
W.E. Longwe	Senior Planning Officer	"
B. Kasezya	Senior Building Officer	"
E. Silanda	Senior Statistician	"
L. Hamonga	Senior Inspector of Schools	"
Ms. Sianjibu	Inspector of Schools, Home Economics	"
M. Chowa		"
J.Z. Banda	World Bank Project	"
M. Monde		CDC
W. Hoppers	SHAPE Executive Secretary	MGEYS/MHEST
P. Daus	SHAPE Accountant	"
P.A. Himwilinga	Publishing and Printing Director	KKF
B. Mulota	Production Manager	"
H. Lambe	Chief Editor	"
A.W. Chibale	General Secretary	INUT
L. Chellah	Deputy General Secretary	"
L.C. Kawaya	Financial Secretary	"
J.K. Simutowe	Director	DTEVT
E.L. Phiri	Deputy Director	"
J. Fisher	AD CED	"
F.M. Chitondo	Senior Planning Officer	"
T.Y. Gumaelius	Inspector TEVT Senior Inspector	"
M.S. Kateka	Controller, Adult Upgrading	"
D.S. Mwanambrya	Inspector	"

A.A. Siwela	Deputy Vice Chancellor	UNZA
D. Whittaker	Head, Electrical and Electronic Engineering	"
J. Mwenechanya	Dean, School of Engineering	"
S.K. Jha	Acting Head, Survey Dept.	"
Dr. Mukherjee	Head, Civil Engineering	"
J.M.F. Calder	Special Administrative Assistant to Vice Chancellor	"
M.J. Kelly	Professor, School of Education	"
P.M. Haasujompa	Dean, School of Education	"
K. Nyström	Head of DCO	SIDA
I-L. Colbro	Programme Officer, DCO	"
S. Svensson	Economist, DCO	"
B. Asbrink	Programme Officer, Stockholm	"

LIST OF PERSONS MET IN ZAMBIA, IN CONNECTION WITH GENDER ISSUES, 8 - 12 MAY, 1989,

B. Iulu	Hon.Rev.M.P., Minister of State	MGEYS
S. Katwishi	Inspector, Special Ed.	"
H. Sianjibo	Inspector, Home Economics	"
W. Hoppers	SHAPE Executive Secretary	MGEYS/MHEST
B. Keller	WID, Planning Unit	Ministry of Agriculture
J. Hopwood	Area Representative	UNICEF
A. Manyindo	Programme Officer	"
E. Richards	Programme Officer	"
A. Schuler	Evaluation Consultant	EEC
I-L. Colbro	Programme Officer, DCO	SIDA

ANNEX FOUR

REFERENCES

- Andersson, P.-Å. & Kayizzi-Mugerwa, S. 1989 "Mineral Dependence, Goal Attainment and Equity: Zambia's Experience with Structural Adjustment in the 1980s". Göteborg: Dept. of Economics, School of Economics and Legal Science, University of Gothenburg.
- Bäckman, O. & Odin, B. 1989 "Evaluation of Special Education in Zambia", Draft Report. Lusaka: SIDA.
- Chinapah, V. 1987 "Educational Planning and Management: A Report from a University-Level Training Course in Zambia". Stockholm: Institute of International Education, Stockholm University.
- Chr. Michelsens Institutt 1986 "Zambia: Landstudie og vurdering av norsk utviklingshjelp". Bergen: Chr. Michelsens Institutt.
- Elliot, C. (ed.) 1971 "Constraints on the Economic Development of Zambia". Nairobi: Oxford University Press.
- FINNIDA 1987a "Report of the Zambia Educational Materials Project (ZEMP), Phase One Evaluation Mission". Report prepared by K. Leimu, B. Sedin, & A. Tuukkanen. Helsinki: FINNIDA.
- FINNIDA 1987b "Zambia Educational Materials Project, Phase Two: Project Plan for 1988-1991", Preliminary Version. Helsinki: FINNIDA.
- Fägerlind, I. & Valdelin, J. 1983 "Education in Zambia: Past Achievements and Future Trends", Education Division Documents No.12. Stockholm: SIDA.
- Gorham, A. 1984 "Staff Development in Technical Education: Evaluation of a SIDA/DTEVT Training Programme in Zambia". Stockholm: InterScience Research.
- Gorham, A. 1985 "The Provision of Primary School Learning Materials in Zambia". Stockholm: InterScience Research.
- GRZ 1979 "Third National Development Plan, 1979-1983". Lusaka: Government of Republic of Zambia.
- GRZ 1987 "New Economic Recovery Plan: Interim National Development Plan", July 1987-Dec.1988. Lusaka: National Commission for Development Planning.
- GRZ 1987 "Labour Force Survey, 1986", draft. Lusaka: Central Statistical Office.
- GRZ 1989a "Fourth National Development Plan: 1989-1993". Lusaka: National Commission for Development Planning.

- GRZ 1989b "Broadcast to the Nation" by His Excellency Dr. Kenneth D. Kaunda, President of the Republic of Zambia, on Friday, 30th June, 1989 at 1930 Hours. Lusaka.
- Herlic, S. 1986 "Women in Zambia" Rural Science and Technology Institute.
- Idemalm, A. 1989 "Evaluation of the Education Sector Support Programme in Zambia: Desk Study on Gender Aspects". Stockholm: SIDA.
- Institute of African Studies 1988 "Analysis of the 1988 Budget of Zambia". Perspectives on the Zambian Economy No.1. Lusaka: University of Zambia.
- Johnston, A., Kaluba, H., Karlsson, M. & Nyström, K. 1987 "Education and Economic Crisis: the Cases of Mozambique and Zambia". Education Division Documents No.38. Stockholm: SIDA.
- Larsson, G., Gustafsson, J-E. & Schylberg, L. 1988 "Institutional Cooperation between the School of Surveying at the Royal Institute of Technology (KTH) and the University of Zambia (UNZA)". Stockholm: KTH International Unit.
- Lubasi, R., Mudenda, G. & Odin, B. 1989 "An Evaluation of Self-Help Action Plan for Education (SHAPE) in Zambia". Lusaka: SIDA.
- Lungwangwa, G. 1989 "Multigrade Schools in Zambian Primary Education: A Report on the Pilot Schools in Mkushi District". Lusaka: UNZA. (Revised version ed. M.J. Kelly).
- Mhone, G.Z. with Andersson, P.K. and Pagaran, E.N. 1988 "Employment and Incomes in Zambia in the Context of Liberalization and Structural Adjustment", Working Paper, first draft. Lusaka.
- MGEC 1977 "Educational Reform: Proposals and Recommendations". Lusaka: Ministry of General Education and Culture.
- MGEC 1984 "A Report on Mobile Training Course in Educational Planning for Lusaka Region". Lusaka: Ministry of General Education and Culture.
- MGEC/MHE 1985 "Self-Help Action Plan for Education (SHAPE). 1986-1988". Lusaka: Ministry of General Education and Culture / Ministry of Higher Education.
- MHEST 1989 "New Policy Measures for the Financing of Higher Education". Lusaka: Ministry of Higher Education, Science and Technology.

- SIDA 1979 "The Zambian Education Sector - Possible Areas for Joint Efforts by Zambia and Sweden". Report of a SIDA Mission. Stockholm: SIDA.
- SIDA 1983, 1984, 1985, 1986, 1987, 1988 "Joint Annual Review of Swedish Support to Education in Zambia". Stockholm: SIDA Education Division.
- SIDA 1985 "The Women's Dimension in Development Assistance: Plan of Action". Stockholm: SIDA.
- SIDA 1986 "Guidelines for Education Assistance". Stockholm: SIDA.
- SIDA 1987 "Landrapport: Zambia". Stockholm: SIDA.
- SIDA / MGEC 1986 "School Desks: A Manual for Primary Schools in Zambia", preliminary edition. Blomstermåla, Sweden: SIDA/MGEC.
- Silanda, E.M. 1988 "Education and Regional Differences: A Study of the Nature and Causes of Educational Disparities in Zambia". Stockholm: Institute of International Education, Stockholm University.
- UNDP 1986 "Restructuring and Development in Zambia. Goals for Technical Cooperation". Report of the National Technical Cooperation Assessment and Programming Mission to Zambia. UNDP.
- UNDP 1988 Development Cooperation Zambia: 1987 Report.
- UNZA 1986 "The Provision of Education for All: Towards the Implementation of Zambia's Educational Reforms under Demographic and Economic Constraints, 1986-2000". Educational Reform Implementation Project, School of Education, University of Zambia. Interim Report.
- von Bahr, E. 1987 "Evaluation of Two Sida-Supported Training Programmes at the University of Zambia". Stockholm.
- Winblad, U. 1986 "School Desks for Zambia: Evaluation of a SIDA-Supported Programme". Blomstermåla, Sweden: Winblad Konsult AB.
- Winblad, U. & Waern, K. 1987 "Community Self-Help in the Construction and Maintenance of Primary Schools: A pre-feasibility report". Blomstermåla, Sweden: Winblad Konsult AB.
- ZARD 1985 "An Annotated Bibliography of Research on Zambian Women". Lusaka: Zambia Association for Research and Development.

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A selection of these studies is published in the series "Education Division Documents". Copies can be ordered from the Scandinavian Institute of African Studies, P O Box 1733, S-751 47 Uppsala, Sweden.

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- No. 4: "Education and Training in Bangladesh" by A. Gorham, J.I. Löfdstedt
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